



UL Component

















#### Draduct Inday

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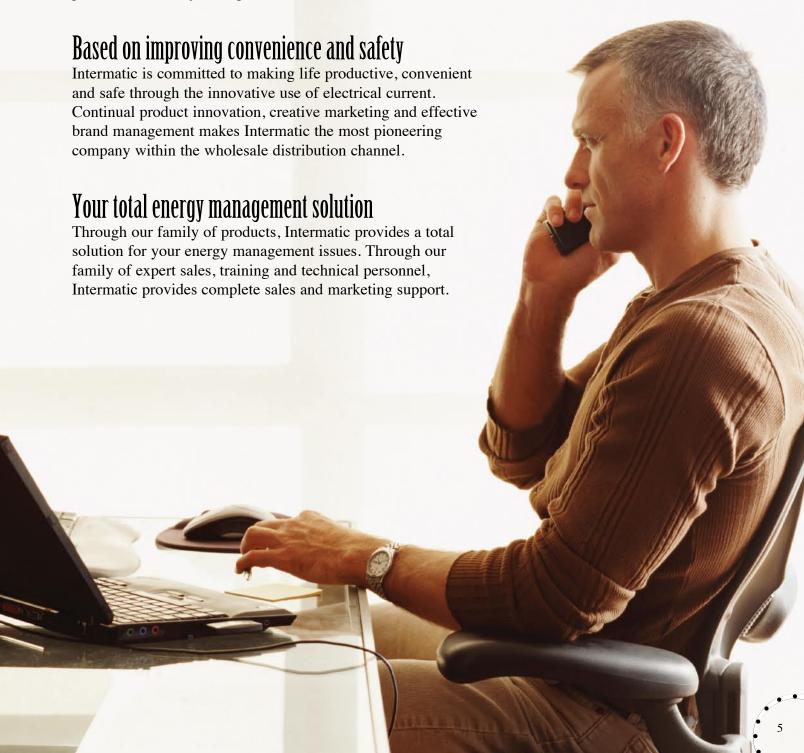
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| WSW-2G               |                | MIL72ASWUZH-24                    | 85       | PF11021                                  | RZ52V 103<br>RZ52V 103<br>RZ52VU 103<br>SG160K-208-3Y 164<br>SG160K-240-3HLD 164<br>SG160K-480-3D 164 | T1975E   | WP1000HC   |
| WU-1G                |                | MIL72ASWUZH-24 MIL72ASWUZH-240    | 85       | PF1103M135                               | SG160K-480-3D 164   | T1975E   | WP1000HRC  |
| 2-12011              | 101            | MIL72EQTUZH-120                   | 85       | PF1103MT135                              | 3G10UN-40U-31104  | T1975R   | WP1000HC WP1000PC WP1000VFIN WP101 WP1010C WP1010HC WP1010HC WP1010MC WP102 WP100 WP |
| JU                   | 24             | MIL72EQTUZH-24                    | 85       | PF1103T                                  | SG240K-208-3Y   | T1976  | WP1000VFIN   |
| 21LA                 |                | MIL72EQWuZH-120<br>MIL72EQWuZH-24 | 85       | PF1202T                                  | SG240K-480-3D   | T20004R  | WP1010C  |
| 23                   |                | MII 72F0Wu7H-240                  | 85       | PF1222TB                                 | SG240K-480-3Y   | T2005  | WP1010HC   |
| 23LA                 |                | MIL72ESTUZ-120                    | 85       | PG1000-208-3Y                            | SG320K-208-3V 162   | T2006  | WP1010HMC  |
| ۲،                   |                | MIL72ESTUZ-24<br>MIL72ESTUZ-240   | გნ<br>გგ | PG1000-240-2S                            | SG320K-240-3HLD 162<br>SG320K-480-3D 162  | T21001B 130  | WP1010IVIC   |
| 351 A                | 23             | MIL72ESTUZH-120                   | 85       | PG1000-4803Y                             | SG320K-480-3Y   | T21004R  | WP1020C  |
| 36C                  | 23             | MIL72ESTUZH-24                    | 85       | PG1000-4803Y                             | SM2200*1  | T21004R 130<br>T30000R 38<br>T30000R5 131<br>T30004R 131 | WP103  |
| 36LAC                |                | MIL72ESTUZH-240                   | 85       | PG100-240-2S                             | SM2200*16   | F30000R5   | WP1030C  |
| -120                 |                | MIL72ESWUZ-120 MIL72ESWUZ-24      | გე<br>გე | PG100-240-3HLD                           | SM2200*2  | T30004R  | WP1030C<br>WP1030MC<br>WP10500.  |
| 0-277                |                | MIL72ESWUZ-240                    |          | PG100-480-3Y149                          | SM2200*455  | T30404R  | WP107  |
| -120                 |                | MIL72ESWUZH-120                   | 85       | PG1500-208-3Y 160                        | SM2200*3 .55<br>SM2200*4 .55<br>SM2200*5 .55<br>SM2200*6 .55  | T30404R  | WP107  |
| 7-120                | 99             | MIL72ESWUZH-24 MIL72ESWUZH-240    | 85       | PG1500-240-2S                            | SM2200*655  | T32404R  | WP1100WC   |
| J-2//                |                | MIL72ESWUZH-240 ML100THB          | 85       | PG1500-480-3D                            | SM2200*7  | T40000R  | WP1110U  |
| JD                   | 186            | ML1001HB                          |          | PG20-208-3Y                              | CM4400*1 55   | T40000R4   | WP1150C  |
| 3                    | 186            | MI 10781                          | 190      | PG20-240-2S                              | SM4400*1055<br>SM4400*1155<br>SM4400*1255<br>SM4400*1355  | T40004R  | WP1110C  |
| 1                    | 189            | ML11183                           | 190      | PG20-240-3HLD 158                        | SM4400*11   | T40004R5   | WP1230C  |
| วิ<br>องเ            |                | ML121RI                           | 190      | PG20-480-3D                              | SM4400*12   | F40004RSS  | WP1250C  |
| 6N                   | 180            | ML200RT                           | 190      | PG20-480-3Y                              | SM4400 1355<br>SM4400*14  | T40004RT1  | WP17<br>WP2000   |
|                      |                | ML200RTW                          | 190      | PG3000-240-2S                            | SM4400*1655   | T40404R 132  | WP213  |
|                      |                | ML44T                             | 190      | PG3000-240-2S                            | SM4400*14   | T40404R5   | WP217  |
| 3                    |                | ML600TW                           | 190      | PG3000-480-3DLL152                       | SM4400*3  | T51211BC   | WP3100C 14-  |
| 8                    |                | ML88T                             |          | PG3000-480-3Y152                         | SM4400*455<br>SM4400*5  | T51311BC   |  |
| 1                    |                | ML900TW                           | 190      | PG3000-600-3D                            | SM4400*5  | T7401BC  |  |
|                      |                | ML90708                           | 190      | PG3500-208-3Y                            | SM4400*7  | T7401BR  |  |
|                      |                | ML91103                           |          | PG3500-240-2S                            | SM4400*855  | T7402B   |  |

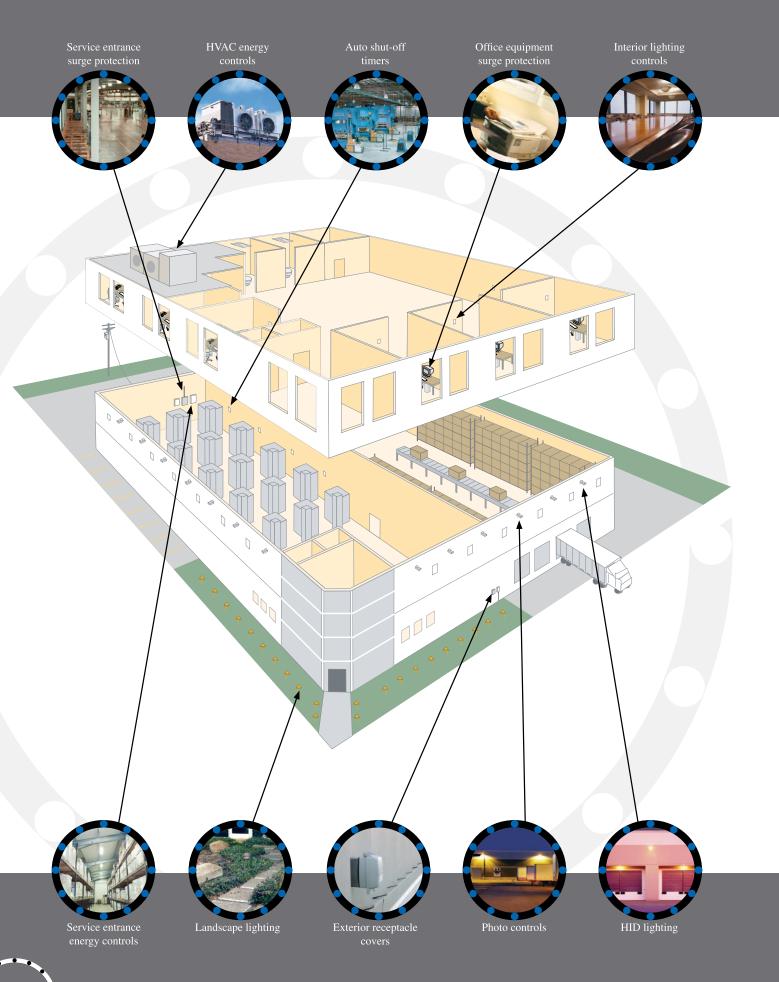
## Grounded in a tradition of innovation and service

In 1891, Intermatic began producing portable fare registers for streetcars. Over the next 115 years, Intermatic developed a huge variety of products that have increased the safety, productivity and convenience of homes and businesses around the world.

## Driven by new technology and the needs of our customers

Today, Intermatic is the leading supplier of high quality energy control products for industrial and commercial markets — moving into the 21st century with an extensive line of technology-driven products backed by an unparalleled level of customer service.





## **Commercial and Industrial Applications**

Intermatic has everything contractors, maintenance personnel and plant or facility managers need to keep their factories, centers and businesses running at their peak.

## Intermatic Commercial and Industrial Applications

- Interior and exterior lighting control
- Parking lot lighting control
- Mechanical time switches
- Electronic time switches
- Service entrance and panelboard surge protection
- Point-of-use surge protection
- Exterior receptacle protection
- Landscape lighting

Intermatic has a full line of commercial and industrial products needed to reduce electricity and labor costs and decrease power quality problems. Small investments in Intermatic energy controls and surge protection can:

- Increase energy savings
- Increase up-time
- Increase productivity
- Increase data retention

Whether it's part of a manufacturing, distribution or office environment, Intermatic offers a broad line of commercially related products for:

- High amperage/voltage machinery
- Heavy duty pumps
- Motors
- Variable frequency drives
- HVAC systems

In addition to a broad range of products, Intermatic provides complete bid specifications and wiring diagrams for every model and each product is backed up by the industry's best sales support and technical assistance team.

Z-WAVE<sup>™</sup> For more than a century, Intermatic has been a premier supplier of commercial and industrial products and has developed a reputation for providing its customers with innovative products that far exceed their expectations. The new InTouch Wireless Controls<sup>™</sup> line of home controls will serve as the primary link to the Intermatic System. Brought to life with Z-Wave<sup>™</sup> technology, InTouch Wireless Controls<sup>™</sup> will help our customers grow their business within the booming home controls industry and will help home and business owners achieve higher levels of convenience, security and safety.

## **Residential Applications**

Whether you're an electrical contractor, homebuilder or homeowner, Intermatic is the only name you need to know for increased levels of convenience, safety, security and electronic protection.

#### Intermatic Residential Applications

- Interior and exterior lighting control
- Whole home energy controls
- Whole home surge protection
- Home office and home theatre surge protection
- Pool and spa controls
- Landscape lighting
- Exterior receptacle protection
- Security floodlighting

With electricity costs on the rise and power quality problems at an all time high, Intermatic has a full line of residential products needed to combat these issues. A minor investment in energy controls and surge protection can prove to have major long-term cost savings and home appliance/electronic preservation. Intermatic residential products provide homeowners with multiple benefits, including:

- Whole home energy savings
- Lighting automation to increase the beauty, Safety and security of your home
- Surge protection for home appliances and electronics
- Landscape lighting to accent your home and property
- Pool and spa controls for improved cost savings and convenience

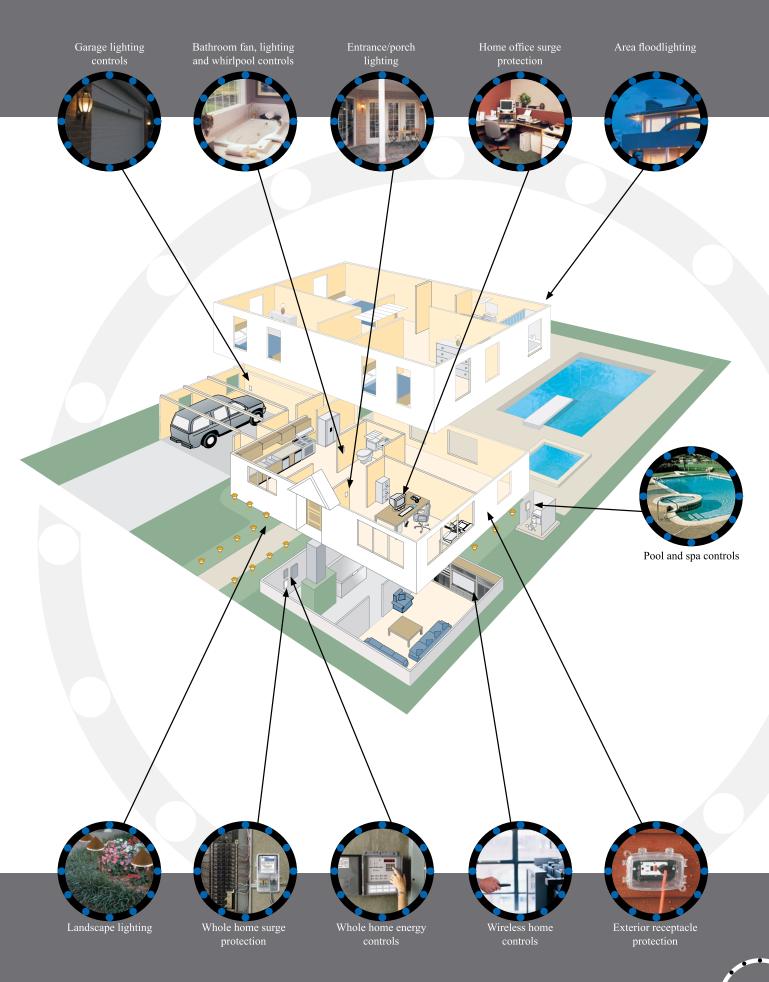
Intermatic provides the home building industry with the most comprehensive offering of residential energy control and surge protection products. Intermatic also offers weatherproof products, pool and spa controls and low voltage landscape lighting. Intermatic products can be used through a home and the surrounding property, including:

- Garages and outbuildings
- Landscaping
- Entrances
- Kitchens and bathrooms
- Home offices and entertainment centers
- Pool and spas

Intermatic has developed two marketing programs to benefit those within the residential market:

- Intermatic Authorized Installer
  Program helps contractors up-sell during
  a service call.
- InGenius Homebuilder Program helps builders of new homes increase their add-on opportunities.

Z-WAVE<sup>TM</sup> The future of the digital home is closer than we realize. Intermatic has a growing list of home control products that work together to enhance the safety, security and convenience of our complex and eventful lives. Intermatic has the knowledge, ability and resources to revolutionize home automation.



# Intermatic provides you with everything you need in order to draw, secure and maintain steady sales growth

Opportunities include:

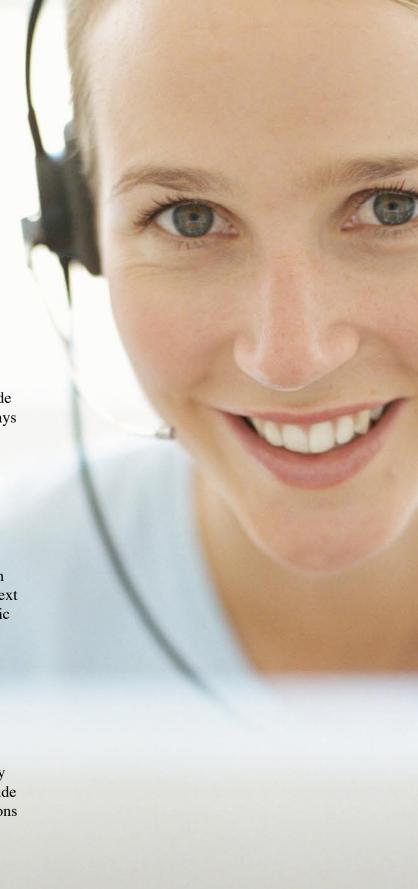
- Advanced Sales Support
- Sales Incentives
- Sales Training
- Sales Programs and Promotions
- Merchandising
- Interactive Web Site

## The Industry's Best Sales Support

Our distributor sales training includes ways to best merchandise and up-sell our wide array of products. Training takes place at local, regional and national trade shows. In addition, Intermatic holds regular counter days and product "lunch and learns," hosted by our direct sales personnel and sales agents, on location at local distributors.

Call 800-391-4555 for toll-free technical support and assistance with programming, installation or application questions. Intermatic also works with engineers and specifiers and holds seminars for them on InTouch Wireless Controls™, surge supression products and Next Generation time switches. Contact your local Intermatic sales representative or visit www.intermatic.com.

Intermatic's order service support is set up to allow distributors and OEM customers to receive product when, where and how they want it. Drop shipments, multi-location shipments, blanket orders, express shipping and ship complete orders are complemented by a variety of other order support services. Our highly trained customer service representatives can also provide you with support for technical questions and applications by calling 815-675-7000 between 8:00 a.m. and 4:30 p.m. CST, Monday through Friday.



## **Intermatic Merchandising/Support**

Customized Sales Incentives Regular sales spiffs for sales and counter personnel are designed to motivate the seller and push product at every level. Customized sales support literature can also be designed for local made-to-order programs.

Comprehensive Sales Training Providing you with the industry's best electrical products is step one. Helping you get those products into the hands of your customer is step two. The best way to make that happen is to supply you with specific information on how to sell and up-sell within our five categories of products. On site or at the counter, Intermatic gives you the answers to frequently asked questions and provides you with good, better and best scenarios and competitive comparisons in order to help you help your customers make the best buying decision.

## Motivational Sales Programs and Promotions

Intermatic is a total business partner and backs the sale of its products with innovative programs and promotions at every level, with support provided to distributors, contractors and home builders.

- The Power-Plus Program for distributors increases their margins and inventory turns while lowering their transaction costs.
- The Authorized Installer Program helps contractors add to their bottom line by up-selling and installing additional products during service calls.
- The InGenius Program helps home builders sell upgrades at model homes and in the sales office.

Intermatic also provides a regular selection of promotions that include shipper/displays, product introductions, contractor bonus packs and Intermatic branded merchandise.

Thought-provoking Merchandising Eighty percent of walk-in customers will buy additional products, if merchandising is done effectively. Sixty-five percent of all purchases are affected by displays and visual graphics. That is why Intermatic has invested heavily in merchandising resources in order to boost your return on investment. Intermatic's Industrial Merchandising program provides you with the support and information you need to achieve maximum results, increase impulse purchases and build effective displays.

#### Merchandising items include:

- Plan-o-grams
- · Header cards
- Floor, wall and counter displays
- Self shipper displays
- P.O.P. displays
- Countermats
- Banners
- Spec and cross reference CDs
- Product demo and literature CDs

Interactive Web Site Marketing Internatic's e-marketing program utilizes the Internet to provide fast, efficient, 24/7 communications with both distributors and end users. Intermatic's Web site includes:

- Authorized distributor locator
- Authorized installer locator
- Downloadable specifications, wiring diagrams and instruction manuals
- E-mail technical support
- General catalog (downloadable PDF)
- Warranty registration

In the future, a variety of enhancements will be implemented that will include improved navigation, product search by category or model number, competitive product search, ordering of product literature and an events/news page. Also, a new secured-access distributor intranet will provide additional product education and sales training, distributor spec sheets, pricing and promotions, a job-quoting tool and a discussion board.

For more information on Intermatic sales support, programs and promotions, contact your local Intermatic sales representative, visit www.intermatic.com or call 815-675-7000 between 8:00 a.m. and 4:30 p.m. CST, Monday through Friday.

## Five reasons to keep your eye on Intermatic

## Superior New Product Developments

Intermatic is able to leverage its global and technological resources to provide its customers with products full of innovative features and benefits and maintain its first-to-market stature.

## World-class Global Manufacturing

The Intermatic family is made up of a global workforce, who through lean manufacturing methods, produce the world's finest energy control products.

## **Excellent Supply Chain Management**

Regardless of its substantial growth, Intermatic has remained flexible and responsive and completely customer focused. At Intermatic, intensive quality control and on-time deliveries are customary.

## Complete Sales and Marketing Support

Over the course of the year, Intermatic helps promote its products through a variety of sales incentives, promotions and merchandising campaigns. We also offer distributor training and technical support at every level.

## Superior Enterprise Information Systems

Flexible, Web-based information gives us a competitive advantage and real-time information keeps us up to date to help take better care of our customers.





## Weatherproof Receptacle Covers with Patented Insert Design











These NEMA 3R receptacle covers ensure compliance with 2005 NEC Article 406.8 (B) (1) which requires that 15 and 20 ampere, 125 and 250 volt receptacles installed in a wet location have an enclosure that is weatherproof whether or not the attachment plug cap is inserted. They also meet the 1999 NEC Article 410-57(b) and are designed to meet the 1999 NEC Article 210-60(b), which requires that receptacles installed behind beds in hotels and motels be protected with a suitable guard.

All covers are shipped with gasket, mounting screws, base and cover assembly and patented inserts. The Flexi-Guard series provides inserts for a variety of applications; 16 for the WP3100/WP1100 single gang series and 70 for the WP1200 two gang series. The single gang Flexi-Guard models are all designed to mount horizontally or vertically. The patented insert design ensures flexibility in the field by simply inserting the proper insert into the base and cover assembly. The two gang Flexi-Guard models utilize six "split" inserts which create virtually any dual device combination, as well as providing additional flexibility because the inserts can be rotated 90, 180 or 270 degrees. This provides coverage for horizontally or vertically mounted devices as well as "left hand" or "right hand" applications without removing and switching the two installed devices.

The "jumbo covers" WP1150C, WP1250C, WP1050 and WP1050G provide protection for a single large cord set (up to 3/4" dia.) for portable spa heaters and other heavy duty applications. A lockable hasp is provided on selected models. The hasp accepts up to .315" (8 mm) diameter shank.

#### NEMA 3R

Meets UL and CSA Cold Impact Testing at -60°F (-51°C)

U.S. Patent #5 280 135 Patented: U.S. Design Pat. #342233

> Canadian Patent #2 073 932 Other Patents Pending

#### Waterproof Cover Applications

- Vending Machines
- RV Connectors
- · Sprinkling Controls
- Car Lot Lighting
- · Car Washes
- Food Preparation

- Hotel Applications
- · Low Voltage Lighting
- Plant Grow Lighting
- · Scoreboard Controls
- Ventilating Fans
- · Remote Power Needs
- Athletic Field Lighting
- · Process Start Up
- · Meat Processing
- Plant Watering
- Landscape Lighting Outdoor Signs
- Portable Spas
- · Score Board Controls
- Equipment
- Engine Block Heaters
- Holiday Lighting Remote Feeders

Bug Zappers

• Portable Marquee

Septic Lift Pumps

Irrigation Pumps

#### **Specifications**

All covers for flushmount, surface mount or FS junction box mounting.

Amusement Equipment

Seasonal Lighting

· Drinking Fountains

· Gate Controls

Cover - Clear (gray or white on selected models) UV stabilized polycarbonate with two cord outlets 1/2" (12.7 mm) Wide by 9/16" (14.2 mm) High. Models WP1150C, WP1250C and WP1050 one cord outlet 3/4" (19.1 mm) Wide by 1-5/16" (33.3 mm) High.

Mounting Base and Inserts - Black UV stabilized polycarbonate.

Gasket - Neoprene - 1/8" (4.8 mm) thick with slits for mounting screws.

Shipping Weight - WP3100C - .45 lbs. (0.20 kg)

WP1100C / WP1000HC - .38 lbs. (0.17 kg)

WP1110C / WP1010HC - .41 lbs. (0.19 kg)

WP1150C / WP1230C / WP1030C - .75 lbs. (0.34 kg)

WP1220C / WP1020C - .72 lbs. (0.33 kg)

WP1250C / WP1050 - .9 lbs. (0.41 kg)





## Weatherproof Receptacle Covers with Patented Insert Design



#### WP3100C - Vertical/Horizontal Cover

#### Flexi-Guard Weatherproof While-In-Use Cover

#### **Product Features**

- Complies with 2005 NEC® Article 406.8(B)(1): "15 and 20 Ampere, 125 and 250V receptacles installed in wet locations shall have an enclosure that is weatherproof whether or not the attachment plug cap is inserted"
- · Easy to remove cord set exit ports

#### Applications

Provides an attractive, code compliant solution for protecting while-in-use outdoor receptacles.

#### Specifications

- · Mounts Vertically or Horizontally
- Hidden Hinges
- Three patented inserts for GFCI, Duplex, Toggle and Single Receptacles
- Inserts include keyhole slots for 16 installation configurations
- · Pre-adhered gasket
- · Heavy-duty polycarbonate construction
- · Clear Cover
- Gray Base
- Meets requirements for cold impact testing at -60° F (-51°C)
- Lockable hasp for 1/8" shank lock

Warranty: Limited 1-year warranty





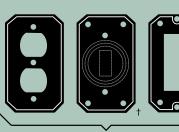
1.00 lbs 0.45 ka







GFCI DEVICE SHOWN NOT INCLUDED

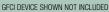


Single Gang Flexi-Guard † Converts to toggle, 1-3/8", 1-5/8", 1-3/4", or 2-1/8" diameter round



## Weatherproof Receptacle Covers with Patented Insert Design



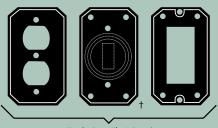




Single Gang Flexi-Guard † Converts to toggle, 1-3/8", 1-5/8", 1-3/4", or 2-1/8" diameter round



GFCI DEVICE SHOWN NOT INCLUDED



Single Gang Flexi-Guard + Converts to toggle, 1-3/8",1-5/8",1-3/4", or 2-1/8" diameter round

#### WP1000RC - Vertical Cover WP1000HRC - Horizontal Cover

## Recessed Weatherproof While-In-Use Cover Product Features

- Complies with 2005 NEC® Article 406.8(B)(1)
- · Heavy duty, polycarbonate cover for long lasting durability

#### Applications

Provides an attractive, code compliant solution for protecting while-in-use outdoor receptacles.

#### Specifications

- Device installs recessed in wall for a flush finish for Siding, Stucco or Brick finishes
- Removable siding flange provides clear finish for all siding types
- Patented single gang inserts for GFCI, duplex, single receptacles, toggle switch and blank
- · Heavy Duty Gasket ensures protection from the elements
- · Recessed Sleeve adjusts to ensure lowest profile installation in every application
- · Outlet box offers mounting options for stud, block, brick or cut-in
- Cord exit easily handles two 12/3 cord sets
- · Handles NmB (Non-Metallic Building Wire) or conduit installations
- Wider access to device for easy cord set installation
- Heavy duty, UV resistant, polycarbonate constructed cover









2.00 lb

Warranty: Limited 1-year warranty

| Item#      | Description  |
|------------|--|
| WP1000RC   | Recessed In-Use Cover Kit: Includes Back Box, Siding Flange, and Vertical Mount Finish Kit   |
| WP1000HRC  | Recessed In-Use Cover Kit: Includes Back Box, Siding Flange, and Horizontal Mount Finish Kit |
| WP1000B0X  | Recessed In-Use Cover Back Box Only  |
| WP1000FLNG | Recessed In-Use Cover Siding Flange Only   |
| WP1000VFIN | Recessed In-Use Cover Vertical Finish Kit Only   |
| WP1000HFIN | Recessed In-Use Cover Horizontal Finish Kit Only   |

#### WP2000 Flexi-Guard Outlet Post

## Weatherproof While-In-Use Cover Product Features

- Complies with 2005 NEC® Article 406.8(B)(1)
- Heavy duty PVC construction for long lasting durability

#### **Applications**

Provides a new, code compliant solution for supplying power to gardens and other out-of-the-way areas. A remotely mounted energy saving photo control and/or timer also available to activate area lighting

#### **Specifications**

- Patented single gang inserts for GFCI, duplex, single receptacles, toggle switch and blank
- Provisions for installing mechanical or digital timers to control area lighting:
- PB912M10R: 24 hour, 120 Volt mechanical timer allows for 2 ON/OFF daily cycles
- PB313EK: 24 hour, 120 Volt electronic timer allows for 8 ON/OFF daily cycles (Timers sold separately)
- Provisions for fixed-position, stem-mounting and stem & swivel mounting photo controls to control area lighting
- All ports accept 1/2",3/4", or 1" PVC conduit (adapters included)
- Base includes mounting holes and template for optional concrete/pavement mounting
- Cover includes lockable hasp

Warranty: Limited-1 year warranty







3.00 lbs



## **Weatherproof Receptacle Covers**



#### Die Cast

These heavy duty die cast receptacle covers ensure compliance with the National Electrical Code (NEC). These models offer the same features as the plastic models but are manufactured of heavy duty cast metal for severe applications such as schools and commercial buildings. The two gang model WP1030MC includes inserts for double gang duplex and GFCI requirements. This patented insert design uses the same inserts as all WP1000 series weatherproof covers and provides flexibility in the field by selecting and inserting the proper insert. For other applications see insert listing below.

All models are recommended for 14 gauge or lighter cord sets. A lockable hasp is provided (lock not included). The hasp accepts up to .315" (8 mm) diameter shank.

#### **Specifications**

Cover - Gray die cast metal

Mounting Base — Gray die cast metal with cord outlets 1" (25.4 mm) Wide by 5/8" (15.9 mm) High; one for models WP1010MC and WP1010HMC and two for model WP1030MC.

Inserts - Black UV stabilized polycarbonate.

Gasket – Neoprene 1/8" (3.2 cm) thick with slits for mounting screws.

Shipping Weight – WP1010MC – 0.8 lbs. (0.36 kg)

WP1010HMC - 0.9 lbs. (0.41 kg)

WP1030MC - 1.1 lbs. (0.5 kg)

All models comply with 2005 NEC Article 250.146 which provides direct mounting of wiring devices to the switch box.





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## Now you can handle even more with less.

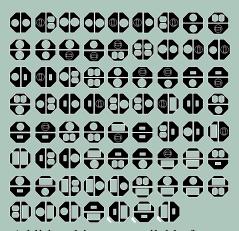
#### Inserts

Inserts fit single gang models and two gang models of clear, gray or die cast design. The 2-gang inserts for models WP1020, WP1030, WP1020GC, WP1030GC, WP1030MC and WP1050 can be mounted at any angle 90, 180 or 270 degrees from that shown. Additional hardware, if required, and special 2-gang gasket is packaged with 2-gang (WP200 series) inserts.

#### 16 Configurations for Single Gang WP1100C Series



70 Configurations for Double Gang WP1200C Series



Additional inserts available for Flexi-Guard or Guardian Series











Gang **Duplex GFCI** 

Gand WP102

Toggle WP103

Gang Gang Round Round WP107 WP213

1-3/8" 2-5/32" 1-5/8" 2-21/32" 1-3/4



Single Gang Flexi-Guard **WP17** 

† Converts to toggle, 1-3/8", 1-5/8", 1-3/4" or 2-1/8 diameter round

Two Gang Flexi-Guard WP217

‡ Converts to toggle, 1-3/8" or 1-5/8"

Intermatic Flexi-Guard Weatherproof Receptacle Covers let you handle even more configurations with fewer units. The unique patented inserts and covers allow you to keep even less inventory than before, and cover more jobs out in the field.

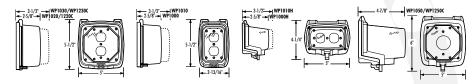
Our single gang models handle both vertical or horizontal applications, just by changing the hinge points. Our two-gang models include snap-together, rotating inserts that create combinations for almost every application.

With these new Flexi-Guard models, now more than ever, Intermatic is the best NEC code solution under the sun.

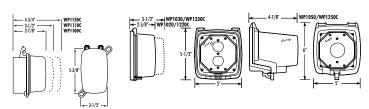
#### New Features

Single gang plastic models feature pre-adhered gaskets and all covers feature keyhole slots on inserts for the guickest installation available

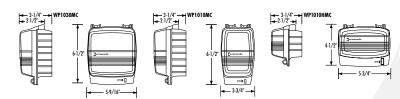
#### Clear & Opaque Gray Models



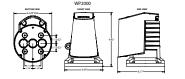
#### Clear & White Models



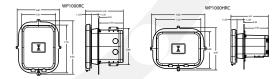
#### Heavy Duty Die Cast Models



#### Outlet Post



#### Recessed



Inset Design US Patent #5 280 135 Canadian Patent #2073932

## Now you can handle even more with less.



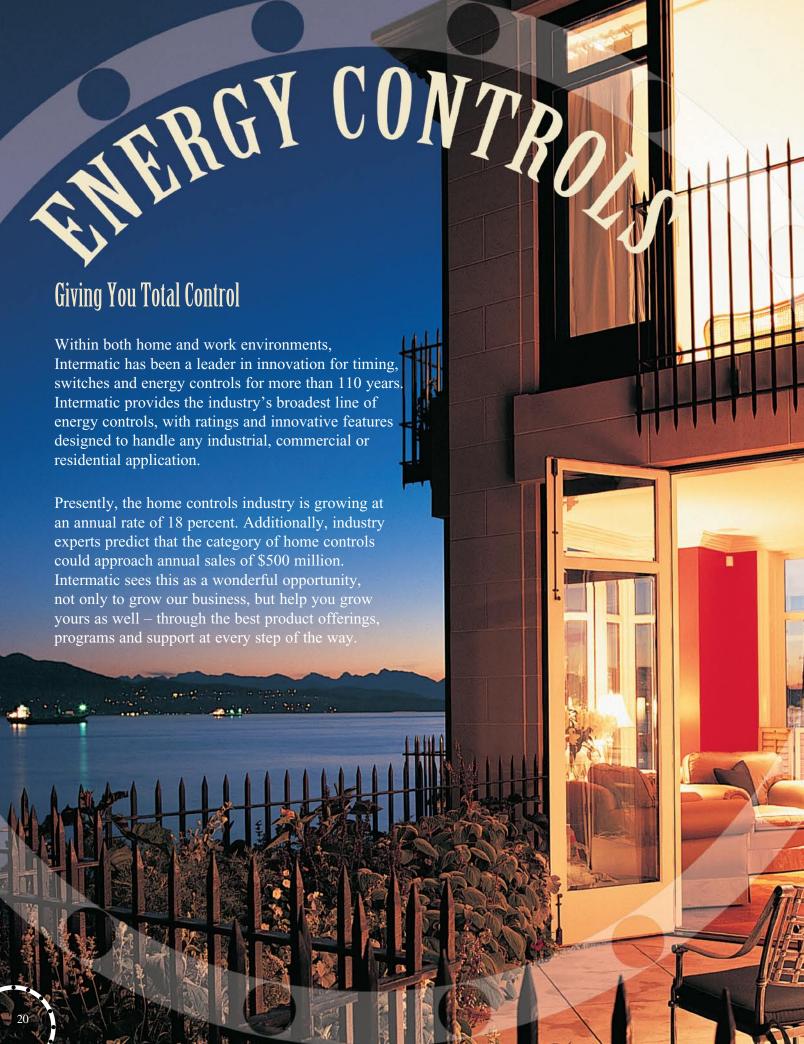
|                             |   | Single Gang<br>r Horizontal  | Two Gang with Patented<br>Snap-Together Inserts               | Patented Die Cast Metal   | Patented Two Gang Fixed                 | Patented Sin  | gle Gang Fixed   |
|-----------------------------|---|------------------------------|---|---|---|---|--|
|                             |   | # n                          |   |   | <b>1</b>                                |   |  |
| 2-1/4"<br>Standard<br>Depth |   |                              | Clear<br>WP1220C  |   | Clear<br>WP1020C                        | Clear<br>WP1000C<br>Vertical<br>WP1000HC<br>Horizontal* | Gray<br>WP1000GC<br>Vertical<br>WP1000HGC<br>Horizontal* |
| 2-3/4"<br>Standard<br>Depth | Clear* White* WP1100C WP3100C WPortical or Horizontal |                              |   |   |   |   |  |
| 3-1/8"<br>Standard<br>Depth |   |                              | Clear<br>WP1230C  | Grey Die Cast<br>WP1010MC Vertical Single<br>Gang<br>WP1030MC Two Gang<br>WP1010HMC Horizontal<br>Single Gang | Clear<br>WP1030C                        | Clear<br>WP1010C<br>Vertical<br>WP1010HC<br>Horizontal* |  |
| 3-5/8"<br>Standard<br>Depth | Clear*<br>WP1110C<br>Vertical o                       | White*<br>WP1110WC           |   |   |   |   |  |
| 4-3/4"<br>Standard<br>Depth | Clear*<br>WP1150C                                     | r Horizontal                 | Clear*<br>WP1250C   |   | Clear*<br>WP1050                        |   |  |
|                             | WP110   | 00 Series<br>atented Inserts | WP1200 Series<br>Includes 6 Snap Together<br>Patented Inserts | WP1000MC Series<br>Includes these Patented<br>Inserts   | WP1000 Series<br>Includes these Inserts |   | 00 Series<br>hese Inserts                                |
|                             |   |                              |   | Two Gang Single Gang  | 80                                      |   | Ţ,   |





- \* With lockable hasp
- † Converts to toggle, 1-3/8", 1-5/8", 1-3/4" or 2-1/8" diameter round
- Converts to toggle, 1-3/8" or 1-5/8" diameter round

Insert Design US Patent #5 280 135 Canadian Patent #2073932



K4021C



A full line of thermal type photo controls and relay type photo controls provide "dusk-to-dawn" lighting control. The thermal type controls feature a cadmium sulfide photocell and sonic welded polycarbonate case and lens to seal out moisture. The design utilizes a dual temperature compensating bimetal and a metal film resistor for reliable long life operation over ambient temperature extremes. The thermal type photo controls provide a delay action which eliminates loads switching OFF due to car headlights, lightning, etc.

· Roadway Lighting

#### **Applications**

· Parking Lot Lighting

Model

UL773A

F42722

- Area Lighting
- · Billboard Lighting
- · Municipal Lighting







K4000 Series UL773A E42722

5 Year

· Car Lot Lighting · Security Lighting

· Street Lighting

#### Fixed Position Mounting, Thermal Type — K4000C Series

Designed to fit into a standard outlet box, a post lamp or wall packs. Model K4321 includes a weatherproof wall plate with neoprene gasket. The UL listing for this model applies to the entire plate assembly when properly mounted to an approved outdoor junction box. All other models are equipped with a 3/8"-18 threaded side mounting, locking nut and washer gasket. All models with 9" leads.

**Size -** Plate - 4-1/2" (11.4 cm) High, 2-3/4" (7.0 cm) Wide;

Mechanism - 1-5/16" (3.3 cm) W, 1-13/16" (4.6 cm) L, 13/16" (2.1 cm) D.

| Model #  | watts lungsten | VA Ballast | Amps Tungsten | Amps Ballast | VOITS   |  |
|----------|----------------|------------|---------------|--------------|---------|--|
| K4021C   | 1800           | 1000       | 15            | 8.3          | 120     |  |
| K4023C   | 3100-4150      | 1700-2300  | 15            | 8.3          | 208-277 |  |
| K4022    | 3600           | 2000       | 15            | 8.3          | 240     |  |
| K4033    | 4150           | 2300       | 15            | 8.3          | 277     |  |
| K4027*** | 5205           | 2880       | 15            | 8.3          | 347     |  |
| K4035*   | 7200           | 4000       | 15            | 8.3          | 480     |  |
| K4321C** | 1800           | 1000       | 15            | 8.3          | 120     |  |

Note: Wall plate with gasket available for other models: order No. K4001.

#### **Specifications**

Unless noted otherwise, the specifications listed below apply to K4000, K4100, K4200, K4300 & K4500 Series. Size - See individual models. Most hard wired models supplied with 6" leads. K4000 fixed position models have 9" leads.

Switch Rating - See chart for each series. Note that the ballast wattage rating is based upon a 50% power factor. Activation - 1 - 5 FC "ON"; 3 - 15 FC "OFF" (without shield on models with shield.)

Color - Grav

Shipping Weight - See individual models





LR38068







5 Year

Warranty

#### K4321C



Light Shield for K4000 Part Number 6LV1352











<sup>\*</sup> Not UL listed or CSA certified.

<sup>\*\*</sup> Wall plate included.

<sup>\*\*\*</sup> Certified by CSA to US and Canadian Standards.





## Stem Mounting, Thermal Type - K4100 Series

This series features single and multivolt models in both stem mount and stem mount with a swivel. All models are equipped with a light level slide adjustment and provide a 1/2"-14 threaded stem. A washer gasket and locking nut are packaged with each photo control. Models with "M" suffix have heavy duty die cast housings. Model K4251 and K4253 have photo eye located on top and are designed for spot/flood type fixtures.

**Size -** K4100 Series - 1-9/16" (4.0 cm) Square, 3" (7.6 cm) Long;

K4200 Series - 1/2"-14 threaded swivel, 1-9/16" (4.0 cm) Square, 5-1/2" (14.0 cm) Long;

Model K4236 - 5-3/4" (14.6 cm) High, 3" (7.6 cm) Diameter.

| Model #   | Watts Tungsten | VA Ballast | Amps Tungsten | Amps Ballast | Volts      |
|-----------|----------------|------------|---------------|--------------|------------|
| K4121C    | 1800           | 1000       | 15            | 8.3          | 120        |
| K4121M    | 2000           | 1800       | 16.7          | 15           | 120        |
| K4421M    | 1800           | 1000       | 15            | 8.3          | 120        |
| K4124     | 3100           | 1700       | 15            | 8.3          | 208        |
| K4122     | 3600           | 2000       | 15            | 8.3          | 240        |
| K4123C    | 3100-4150      | 1700-2300  | 15            | 8.3          | 208-277    |
| K4423M*** | 3100-4150      | 1700-2300  | 15            | 8.3          | 208-277    |
| K4133     | 4150           | 2300       | 15            | 8.3          | 277        |
| K4127**** | 5205           | 2880       | 15            | 8.3          | 347        |
| K4135*    | 7200           | 4000       | 15            | 8.3          | 480        |
| K4136M    | 2000-4625      | 1800       | 16.7          | 8.6          | 120 or 277 |
| **K4141C* | 3000           | 3000       | 25            | 25           | 120        |

<sup>\*</sup> Not UL listed or CSA certified.

<sup>\*\*\*</sup> Model K4423M replaces K4123M









Standards.

LR38068

Warranty

## Stem & Swivel Mounting, Thermal Type - K4200 Series

| Model #  | Watts Tungsten | VA Ballast | Amps Tungsten | Amps Ballast | Volts          |
|----------|----------------|------------|---------------|--------------|----------------|
| K4221C   | 1800           | 1000       | 15            | 8.3          | 120            |
| K4224    | 3100           | 1700       | 15            | 8.3          | 208            |
| K4222    | 3600           | 2000       | 15            | 8.3          | 240            |
| K4223C   | 3100-4150      | 1700-2300  | 15            | 8.3          | 208-277        |
| K4233    | 4100           | 2300       | 15            | 8.3          | 277            |
| K4227*** | 5205           | 2880       | 15            | 8.3          | 347            |
| K4235*   | 7200           | 4000       | 15            | 8.3          | 480            |
| K4236C   | 1800-4150      | 1000-2300  | 15            | 8.3          | 120 or 208-277 |
| K4251*** | 1800           | 1000       | 15            | 8.3          | 120            |
| K4253*** | 3100-4150      | 1700-2300  | 15            | 8.3          | 208-277        |

Not UL listed or CSA certified.

















K4236C

C22.2-55

<sup>\*\* 1</sup> year warranty



## Locking-Type Mounting, Thermal Type — K4500 Series

Easy to install; just plug in and twist. This series is equipped with standard 3-prong NEMA locking-type plug connections. Incorporates K4000 style thermal switch for reliable long life performance. Complies with ANSI C136.10.

Size - 3-3/4" (9.5 cm) High, 3" (7.6 cm) Diameter.

| Model # | Watts Tungsten | VA Ballast | Amps Tungsten | Amps Ballast | Volts |  |
|---------|----------------|------------|---------------|--------------|-------|--|
| K4521   | 1800           | 1000       | 15            | 8.3          | 120   |  |
| K4524** | 3100           | 1700       | 15            | 8.3          | 208   |  |
| K4522   | 3600           | 2000       | 15            | 8.3          | 240   |  |
| K4533** | 4100           | 2300       | 15            | 8.3          | 277   |  |
| K4535** | 7200           | 4000       | 15            | 8.3          | 480   |  |

<sup>\*</sup> Ballast rating meets UL testing at 50% power factor.

<sup>\*\*</sup> Not CSA certified.









5 Year

#### Accessories for Locking-Type Controls

Pole Bracket Adapter - Model K122 - 105 to 480 Volts; for use with K1200, K4500 or LC4500 Series locking-type controls. K121 - receptacle only, K121-30 receptacle with 30 inch leads.

Shorting Cap - Model K4500 - 105 to 480 Volts; replaces locking-type photo control to complete circuit.





## Low Cost Locking-Type, Thermal Type —— LC4500 Series

The LC4500 Series provides low cost reliable control for street lighting and other applications requiring a NEMA twist and lock type plug connection. An integral housing and lens, with UV protection, keeps moisture out and ensures long life. Complies with ANSI C136.10.

Activation - .5 FC minimum "ON"; 15 FC maximum "OFF".

**Size** - 2-3/4" (7.0 cm) High, 3" (7.6 cm.) Diameter.

**Color** – Translucent with color coded band for voltage identification.

| Model #    | Watts Tungsten | VA Ballast | Volts          |  |
|------------|----------------|------------|----------------|--|
| LC4521C    | 1000           | 1000       | 120            |  |
| LC4523     | 1700-2300      | 1700-2300  | 208-277        |  |
| LC4527     | 5205           | 2880       | 347            |  |
| LC4535**   | 7200           | 4000       | 480            |  |
| LC4536C    | 1000-2300      | 1000-2300  | 120 or 208-277 |  |
| LC4521LA   | 1000           | 1000       | 120            |  |
| LC4523LA   | 1700-2300      | 1700-2300  | 208-277        |  |
| LC4535LA** | 7200           | 4000       | 480            |  |
| LC4536LAC  | 1000-2300      | 1000-2300  | 120 or 208-277 |  |

LA Models equipped with 2400 volt open type spark gap arrester.

<sup>\*\*</sup> Not CSA certified.

















K121-30



LC4521C

<sup>\*</sup> Ballast rating meets UL testing at 50% power factor



## Relay Type Photo Controls With Adjustable Stem or Locking-Type Mounting — K1100, K1200 Series

This series features "instant ON/OFF switching" in two mounting types. Complies with ANSI C136.10.

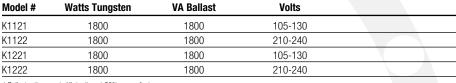
Series K1100 - Equipped with an adjustable stem for mounting at almost any angle up to 80 degrees. Models equipped with three 6" color coded leads.

Series K1200 - Easy to install using NEMA plug-in locking type connection. Models are equipped with 2400 Volt open type spark gap arrester and standard 3-prong connector.

Size - K1100 Series - 5-3/4" (14.6 cm) High, 3" (7.6 cm) Diameter; 1/2"-14 NPT Stem;

**K1200 Series –** 3-3/4" (9.5 cm) High, 3" (7.6 cm) Diameter.

Activation - 1 FC "ON"; 3 - 10 FC "OFF"



<sup>\*</sup> Ballast rating meets UL testing at 50% power factor.











## Low Cost Relay Type Photo Control with Locking-Type Mounting — LC2000

Features "Instant ON/OFF Switching". Complies with ANSI C136.10

Size - 2-3/16" (5.6 cm) High, 3-3/16" (8.1 cm) Diameter Activation - 1 to 3 FC "ON". Turn OFF to turn ON ratio is 4.

| Model # | Watts Tungsten | VA Ballast | Volts   |  |
|---------|----------------|------------|---------|--|
| LC2000  | 1000           | 1800       | 110-277 |  |

Includes 110 Joule MOV Surge Arrester.









3 Year

# LC2000

K1200



## Solid State Photo Controls - Locking Type

The K4536SS Photo Control is electronically calibrated and provides reliable control of street lighting and other applications requiring a NEMA plug-in locking type connection. Complies with ANSI C136.10.

The K4536SST is the same as above, but provides a fixed "OFF" time adjustable in half hour increments from 6:00 PM to 2:00 AM and a fixed "ON" time adjustable in half hour increments from 4:00 AM to 8:00 AM. The fixed times are based on a real-time clock that sets itself based on the occurrence of sunrise and sunset.

Operation - Instant "ON", 10 Second Delay "OFF"

**Size** – same as LC4500 Series **Color** – same as LC4500 Series

| Model #  | <b>Watts Tungsten</b> | VA Ballast | Volts   |  |
|----------|-----------------------|------------|---------|--|
| K4536SS  | 1000                  | 1800       | 105-305 |  |
| K4536SST | 1000                  | 1800       | 105-305 |  |

Includes 430 Joule MOV Surge Arrestor.





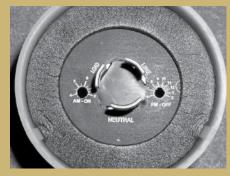


UL773A 3/4 lbs E42722 .34 kg

5 Year Warranty



K4536SS



K4536SST















#### 24 Hour Dial

T100 Series – Designed for industrial, commercial and residential applications. Highest HP ratings in the industry for loads up to 40 amps, providing direct 24 hr. control of most loads. Provides 1 to 12 "ON/OFF" operations each day with minimum ON/OFF times of 1 hour. All models equipped with one "ON" and one "OFF" tripper.

#### **Applications**

- Indoor/Outdoor Lighting
- Signs
- Filters
- Air Conditioning
- Electric Fences
- · Heating/Ventilating Systems
- Fans
- · Conveyers

- Post Lanterns
- Pool Heaters
- Hydrochlorinators
- Blowers
- Pumps
- Music and Signal Systems
- · Poultry Foggers

#### **Specifications**

**Case** – Drawn steel 7-3/4" (19.7 cm) H, 5" (12.7 cm) W, 3" (7.6 cm) D in gray finish. Spring hasp, with hole for lock, holds permanently attached, side hinged door closed. Three mounting holes on back plus handy box mounting holes. **Knockouts** – Combination 1/2"–3/4" nominal knockouts, one on back and each side of case and two on bottom. **Optional Enclosures** – See Time Switch Cases page for optional enclosures.

**Special Voltages and Cycles –** See Time Switch Motors page for available motors.

**Switch Rating** – Each Pole; 40 Amp Resistive, 120-480 VAC; 40 Amp Tungsten, inductive or 1000 VA pilot duty, 120-277 VAC; 2 HP (24 FLA) 120 VAC; 5 HP (28 FLA) 240 VAC single phase; 7-1/2 HP (28 FLA) 208 VAC three phase; 10 HP (28 FLA) 240 VAC three phase.

| Model # | Model #<br>w/See-Thru Cover | Model #<br>Plastic Case | Model # Steel<br>NEMA 3R Case | Switch      | Clock Motor<br>Volts 60 Hz | AMPS<br>(per pole) | HP Rating |
|---------|-----------------------------|-------------------------|-------------------------------|-------------|----------------------------|--------------------|-----------|
| T101    | T101PCD82                   | T101P                   | T101R                         | SPST        | 125                        | 40                 | 2         |
| T102    | _                           | T102P                   | T102R                         | SPST        | 208-277                    | 40                 | 5         |
| T103    | T103PCD82                   | T103P                   | T103R                         | DPST        | 125                        | 40                 | 2         |
| T104    | T104PCD82                   | T104P                   | T104R                         | DPST        | 208-277                    | 40                 | 5         |
| T101B*  | _                           | _                       |                               | SPST        | 125                        | 40                 | 2         |
| T105    | _                           | _                       |                               | 1NO / 1NC** | 125                        | 40                 | 2         |
| T106R†  | _                           | _                       |                               | 1NO / 1NC** | 208-277                    | 40                 | 5         |

<sup>\*</sup> Separate clock motor terminals for switching circuits not on line voltage

For additional trippers (1 ON / 1 OFF per pack), order No. 156T1978A.

<sup>\*\*</sup> Can be wired as SPDT.

<sup>†</sup> Only available in NEMA 3R case.



## 24 Hr. w/Skipper, Optional Carryover

T170 Series – Same features as the T100 Series plus a skipper option to omit operation on selected days. Cutout screws are inserted in the dial for days which operation is to be skipped. Provides up to 10 ON/OFF operations each day with min. ON/OFF operations of 1 hour and max. ON time of 20 hours. Includes one CUTOUT tripper (also serves as an "ON" tripper), one "OFF" tripper and three skipping screws.

T170CR Series - Same features as the T170 Series Skipper models plus a min. of 16 hours carryover for maintaining preset schedules during power failures. Carryover automatically rewinds when power resumes; only one hour of rewinding time required for every two hours of power outage. 4PST models are ideal for 3-phase load control.

#### Specifications

Case - T170 Series same as T100 except as noted under Optional Enclosures. T170CR only in NEMA 3R drawn steel 9-3/8" (23.8 cm) H, 5-1/2" (14.0 cm) W, 3-5/8" (9.2 cm) in gray finish. Hasp, with hole for lock, holds permanently attached, side-hinged door closed. Bracket plus two holes on back below switch for mounting. Separate grounding

Optional Enclosures - 4 pole and 2 NO/ 2 NC models not available in standard or plastic case; only in NEMA 3R steel case. T170CR only available in steel NEMA 3R enclosure.

Special Voltages and Cycles - See Time Switch Motors for available motors. Contact factory for availability of time switch with 50 cycle or other voltages.

Special Voltages and Cycles - Same as T100 Series.

Switch Rating - Same as T100 Series.

| Model #   | Model # Steel<br>NEMA 3R Case | Switch       | Clock Motor<br>Volts 60 Hz | AMPS<br>(per pole) | HP<br>Rating |
|-----------|-------------------------------|--------------|----------------------------|--------------------|--------------|
| T171      |                               | SPST         | 125                        | 40                 | 2            |
| T172      |                               | SPST         | 208-277                    | 40                 | 5            |
| T173      | T173R                         | DPST         | 125                        | 40                 | 2            |
| T174      | T174R                         | DPST         | 208-277                    | 40                 | 5            |
| T175      |                               | 1NO / 1NC**  | 125                        | 40                 | 2            |
| T176      |                               | 1NO / 1NC**  | 208-277                    | 40                 | 5            |
| T1471BR*  |                               | 4PST         | 125                        | 40                 | 2            |
| T1472BR*  |                               | 4PST         | 208-277                    | 40                 | 5            |
| T1475BR*  |                               | 4PST         | 480                        | 40                 | 5            |
| T1871BR*  |                               | 2NO / 2NC*** | 125                        | 40                 | 2            |
| T171CR    |                               | SPST         | 125                        | 40                 | 2            |
| T173CR    |                               | DPST         | 125                        | 40                 | 2            |
| T174CR    |                               | DPST         | 208-277                    | 40                 | 5            |
| T1471BCR* |                               | 4PST         | 125                        | 40                 | 2            |

<sup>\*</sup> Separate clock motor terminals for switching circuits not on line voltage.

For additional trippers (1 ON / 1 OFF / 1 CUTOUT per pack), order No. 156T1948A.

For additional skipper screws (3 skipper screws per pack), order No. 156T3085A.







130°F (54°C)







<sup>\*\*</sup> Can be wired as SPDT.

<sup>\*\*\*</sup> Can be wired as DPDT.











## 24 Hour Dial w/Skipper

The T1900 Supervisor Series provides up to 96 operations (48 ON /48 OFF) every 24 hours. This series provides operations with minimum ON / OFF times of 15 minutes. Trippers slide in and out of dial for fast accurate setting. The skipper models provide for operations to be omitted on selected day(s) of the week. Model with carryover provides a minimum of 16 hours of carryover to maintain preset schedules within +/- 2% accuracy during power failures. The carryover automatically rewinds when power resumes. Only one hour is required to rewind the carryover for each two hours of power outage.

#### **Applications**

- Oil Well Pumps
- Poultry Feeders
- Recorded Music
- Silo Unloaders

- Filters
- Heaters
- Dairy Equipment
- Poultry Foggers

- Blowers
- Fans
- Process Equipment

#### Specifications

Case - Drawn steel 7-3/4" (19.7 cm) High, 5" (12.7 cm) Wide, 3" (7.6 cm) Deep in gray finish. Spring hasp, with hole for lock, holds permanently attached, side hinged door closed. Three mounting holes on back plus handy box mounting

Knockouts - Combination 1/2"-3/4" nominal knockouts, one on back and each side of case and two on bottom.

**Optional Enclosures – See Time Switch Cases for optional enclosures.** 

Special Voltages and Cycles - See Time Switch Motors for available motors.

Switch Rating - 20 Amp maximum 125, 208-277 and 480 VAC; 1/2 HP, 125 VAC; 1 HP, 250 VAC

Power Input - 5 Watts maximum.

| Model # | MODEL # STEEL<br>NEMA 3R CASE | Switch | Clock Motor<br>Volts 60 Hz | Spring Wound<br>Carryover | Amps | Skipper<br>Wheel |
|---------|-------------------------------|--------|----------------------------|---------------------------|------|------------------|
| T1905   |                               | SPDT   | 125                        | No                        | 20   | No               |
| T1905E  |                               | SPDT   | 480                        | No                        | 20   | No               |
| T1906   |                               | SPDT   | 208-277                    | No                        | 20   | No               |
| T1975   | T1975R                        | SPDT   | 125                        | No                        | 20   | Yes              |
| T1976   | T1976R                        | SPDT   | 208-277                    | No                        | 20   | Yes              |
| T1975E  | T1975ER                       | SPDT   | 480                        | No                        | 20   | Yes              |

For additional trippers (12 per pack), order No. 156T1950A

Replacement Snap Switch 133T701A.



## **Short Range Cycle Timer**

Short Range Cycle Timers provide repeat cycling for "ON" times. Ten combination "ON/OFF" trippers supplied with each switch.

#### Applications

- · Ventilating Fans
- Spraying Equipment Livestock Feeders
- · Poultry Fans

- Fogging Equipment Poultry Feeders
- Pumps
- Bulk Milk Coolers

#### • Process Equipment Specifications

Case - Same as T100 Series.

Knockouts - Same as T100 Series.

Optional Enclosures - Same as T100 Series.

Switch Rating - 20 Amp Resistive 125, 208-277 VAC; 1/2 HP, 125 VAC; 1 HP, 250 VAC

| Model # | Switch | Clock Motor Volts 60 Hz | Dial Cycle | Tripper Actuating Time | Amps |
|---------|--------|-------------------------|------------|------------------------|------|
| C8815   | SPDT   | 125                     | 10 Min.    | 5 Sec.                 | 20   |
| C8835   | SPDT   | 125                     | 30 Min.    | 15 Sec.                | 20   |
| C8865   | SPDT   | 125                     | 1 Hr.      | 30 Sec.                | 20   |
| C8845   | SPDT   | 125                     | 4 Hr.      | 120 Sec.               | 20   |
| C8866   | SPDT   | 250                     | 1 Hr.      | 30 Sec.                | 20   |

Note: The life of the switch contacts is affected by the size and type of the controlled load. The expected minimum life at 20 amps (resistive) load is 100,000 cycles.

Replacement Snap Switch 133T773A.

For additional trippers (12 trippers per pack), order No. 156T1950A.









to 130°F











3.75 1.7 l

-40°F (-40°C) to 130°F

## Sprinkler/Irrigation Timer with 14-Day Skipper

These irrigation timers permit 1 to 60 "ON" operations every 24 hours. This series is designed for water metering in increments of 12 minutes to 20 hours and 45 minutes for maximum conservation of precious water resources. The 14-day skipper feature permits irrigation to be omitted on selected day(s) and also provides for "every other" day operation. The "ON/OFF/AUTOMATIC" switch allows shutdown during rainy days or extended watering during dry periods without disturbing the automatic cycle set on dial.

#### Applications

- Multi-Station Hydro Indexing Valves
- Irrigation Control
- Greenhouses La
  - Lawn Sprinkling
- Pumps

- Feeders
- Drip Irrigation Systems

#### Specifications

**Case** – Plastic NEMA 3R case. Cases include hanging bracket plus two mounting holes on back below switch for mounting.

Knockouts - Combination 1/2"-3/4" nominal knockouts, one on back and each side of case, and two on bottom.

Switch Rating -

**T8805P101C** - 15 Amps, 125 VAC, 1/2 HP, SPST.

**R8806P101C** - 25 Amps, 208-277 VAC, 2 HP, DPST relay.

R8815P101C - 25 Amps, 120 VAC, 1-1/2 HP, DPST relay.

R8816P101C - 25 Amps, 208-277 VAC, 3 HP, DPST relay.

T8845PV - 125 VAC, SPST, output 24 Volts - 20VA

| Model #     | Switch | Motor Voltage 60 Hz | Output Voltage 60 Hz | AMPS (per pole) | <b>HP Rating</b> |
|-------------|--------|---------------------|----------------------|-----------------|------------------|
| T8805P101C  | SPST   | 125                 | _                    | 15              | 1/2              |
| R8806P101C  | DPST   | 208-277             | _                    | 25              | 2                |
| R8815P101C* | DPST   | 120                 | _                    | 25              | 1-1/2            |
| R8816P101C* | DPST   | 208-277             | _                    | 25              | 3                |
| T8845PV**   | SPST   | 125                 | 24                   | 20VA            | _                |

<sup>\*</sup> Includes rain sensor input terminals- rain sensor not supplied.

For additional trippers (12 per pack), order No. 156T1950A. For additional skipper pins (14 per pack), order No. 156T1954A

<sup>\*\*</sup> Includes 24 volt - 20 VA transformer.



## Timing Control Center, 7-Day Dial with Carryover

This series provides photo control initiated / time switch terminated control. These time switches provide a different "ON/OFF" program each day of the week and a spring wound carryover. These time switches are recommended for applications where you need to turn a load "ON" at dusk and "OFF" at a preset time. The spring wound carryover provides a carryover of 16 hours minimum to maintain accurate load control even during power failure. When power resumes, the carryover automatically rewinds itself. Only 1 hour is required to rewind the carryover for each 2 hours of outage. The three models provide control of 1, 2 or 3 circuits. A light level adjustment is provided on the photo control. All models have single pole double throw switches and manual circuit by-pass switches.

Unit is designed to control the contactor control circuit only. It is not recommended for direct switching of tungsten, mercury vapor or similar loads.

#### **Applications**

- Parking Lot Lighting Landscape Lighting
- · Billboard Lighting
- · Entryway Lighting

- Storefront Lighting Stairway Lighting
- · Car Lot Lighting
- · Security Lighting

#### Specifications

Case - Steel in gray finish 12-1/2" (31.7 cm) high, 8-1/4" (21.0 cm) wide, 4" (10.2 cm) deep. Indoor type with toggle action drawbolt and locking feature. Four mounting holes on back. Separate grounding terminal.

Knockouts - Combination 1/2"-3/4" nominal knockouts, two on back one on each side and two on bottom. Also one 1" nominal on bottom center.

Optional Enclosures - None available.

Contact Rating - 15 Amp, 1/2 HP, 125/250 VAC; 420 VA pilot duty; 150 Watts Tungsten, 125 VAC (May also be used with 24 volt systems if wired in accordance with National Electrical Code Regulations.)

| Model #  | Description  | Clock Motor Volts 60 Hz |
|----------|--|-------------------------|
| T51211BC | Circuit A - Sunset, Photo Control ON - Preset Time Switch OFF    | 120                     |
|          | Circuit B - Sunset, Photo Control ON - Sunrise, Photo Control OF | F —                     |
| T51311BC | Circuit A - Sunset, Photo Control ON - Preset Time Switch OFF    | 120                     |
|          | Circuit B - Sunset, Photo Control ON - Sunrise, Photo Control OF | F —                     |
|          | Circuit C - Preset Time Switch ON - Preset Time Switch OFF       | _                       |

All models have separate clock motor terminals for switching circuits not on line voltage. For additional trippers (7 ON / 7 Off per pack), order No. 156T2548A.

#### See Next Generation Electronic Time Switches with Astro Feature







UI 917















75 lbs -40 25 kg (-40 ti

-40°F (-40°C) to 130°F (54°C)

## Compact, 7-Day

The T2000 Series provides up to 84 (42 "ON/OFF") operations each week. Minimum "ON/OFF" times for this series are 2 hours each providing up to 6 "ON/OFF" operations each day.

#### **Applications**

- Heating
- Air Conditioning
- Ventilating
- Defrost Control

- Lights
- Pumps
- Motors
- Fans

#### Specifications

Case – Drawn steel 7-3/4" (19.7 cm) high, 5" (12.7 cm) wide, 3" (7.6 cm) deep in gray finish. Spring hasp, with hole for lock, holds permanently attached, side hinged door closed. Three mounting holes on back plus handy box mounting holes.

Knockouts - Combination 1/2"-3/4" nominal knockouts, one on back and each side of case and two on bottom.

**Optional Enclosures – See Time Switch Cases for optional enclosures.** 

**Special Voltages and Cycles –** See Time Switch Motors for available motors.

Switch Rating - 20 Amp Resistive, 125 and 208-277 VAC; 1/2 HP 125 VAC; 1 HP 250 VAC

| Model # | Switch | Clock Motor Volts 60 Hz | Amps |
|---------|--------|-------------------------|------|
| T2005   | SPDT   | 125                     | 20   |
| T2006   | SPDT   | 208-277                 | 20   |

For additional trippers (12 per pack), order No. 156T1950A. Replacement Snap Switch 133T701A.



## 7-Day Dial With & Without Carryover

These time switches provide a different "ON/OFF" program each day of the week. They also provide for 4 pole single throw and 4 pole (2NO/2NC) switching. This series provides true 7-day load control with minimum ON and minimum OFF times of 3-1/2 hours. The "BC" models with carryover provide a carryover of 16 hours minimum to maintain accurate load control even during power failure. When power resumes, the carryover automatically rewinds itself. Only 1 hour is required to rewind the carryover for each 2 hours of outage.

#### Applications

- · Heating
- · Air Conditioning
- Outdoor Lighting Ventilating Systems
   Fans
- Motors
- Pumps Signs Filters
- · Indoor Lighting
- · Billboards
- · 3 Phase Loads

#### Specifications

Case - Steel in gray finish 12-1/2" (31.7 cm) high, 8-1/4" (21.0 cm) wide, 4" (10.2 cm) deep. Indoor type with toggle action drawbolt and locking feature. Four mounting holes on back. Separate grounding terminal.

Knockouts - Combination 1/2"-3/4" nominal knockouts, two on back, one on each side and two on bottom. Also one 1" nominal on bottom center.

Optional Enclosures - See Time Switch Cases for optional enclosures.

Special Voltages and Cycles - See Time Switch Motors for available motors. Contact factory for availability of time switch with 50 cycle or other voltages.

Switch Rating - Each Pole 40 amp resistive, 120-480 VAC; 40 amp tungsten, inductive or 1000 VA pilot duty, 120-277 VAC; 2 HP (24 FLA) 120 VAC; 5 HP (28 FLA) 240 VAC single phase; 7-1/2 HP (28 FLA) 208 VAC three phase; 10 HP (28 FLA) 240 VAC three phase.

Carryover - Minimum time - mechanical operation: 16 hours. Carryover accuracy +/-2%.

| Model I# | Model #<br>Steel NEMA 3R Case | Model with<br>CarryOver | Switch  | Clock Motor<br>Volts 60 Hz | Amps<br>(per pole) |
|----------|-------------------------------|-------------------------|---------|----------------------------|--------------------|
| T7401B   | T7401BR                       | T7401BC                 | 4PST    | 125                        | 40                 |
| T7402B   |                               | T7402BC                 | 4PST    | 208-277                    | 40                 |
| T7801B   |                               | T7801BC                 | 2NO/2NC | 125                        | 40                 |
| T7802B   |                               |                         | 2NO/2NC | 208-277                    | 40                 |

<sup>\*</sup> All models (B or BC suffix) have separate clock motor terminals for switching circuits not on line voltage. For additional trippers (7 ON / 7 OFF per pack), order No. 156T2548A.





UL917













E10694











Astro Dial With Skipper & Carryover

This time switch self adjusts for seasonal changes. The astronomic dial automatically adjusts itself as the days grow shorter or longer. A skipper provides lighting control to be omitted on selected day(s) of the week. The carryover is designed to maintain preset schedule during power outages for a minimum of 16 hours. Only 1 hour is required to rewind the carryover for each 2 hours of outage. The 3PST switch configuration provides for control of 3-phase lighting. Three skipper screws are furnished.

#### Lighting Applications

- · Parking Lots
- · Landscape Lights
- Stairways
- Billboards

- Entryways
- Security
- · Storefronts
- · Car Lots

#### **Specifications**

Case - NEMA 3R drawn steel 11-1/2" (29.2 cm) high, 8-1/4" (20.9 cm) wide, 4-1/2" (11.4 cm) deep in gray finish. Hasp, with hole for lock, holds permanently attached, side hinged door closed. Mounting bracket plus two holes below switch on back for mounting. Separate grounding terminal.

Knockouts - Combination 1/2"-3/4" nominal knockouts, one on back and each side of case and two on bottom. Optional Enclosures - None.

Switch Rating - Each pole: 40 amp tungsten up to 277 VAC; 1 HP, 120 VAC; 690 VA pilot duty.

| Model #   | Switch | Clock Motor Volts 60 Hz | Amps |
|-----------|--------|-------------------------|------|
| V45471CR* | 3PST   | 125                     | 40   |
| V45472CR* | 3PST   | 208-277                 | 40   |
| V45471R   | 3PST   | 125                     | 40   |
| V45472R   | 3PST   | 208-277                 | 40   |

<sup>#</sup> Indicate City and State nearest installation when ordering

For Electronic Time Switches which offer Astro Feature please see pages 42-44

<sup>\*</sup> Includes spring wound carryover.

For additional skipper screws (3 per pack), order No. 156T1953A.



#### **Water Heater Time Switches**

The WH40 provides a convenient external override switch. Utilities in many areas of the country offer two electric rates for residential or commercial customers. One rate has the regular daytime electrical rate, the other is "off peak" rate. The off peak rate provides customers with "lower-priced" electricity during the nighttime and weekend periods. These time switches allow the customer to shift electricity use into these off-peak time periods in an attempt to save utility costs.

#### Applications

Water Heater Control for:

• Residential • Commercial • Industrial • Institutional / Schools • Military Facilities

#### **Specifications**

Case – Drawn steel 7-3/4" (19.7 cm) High, 5" (12.7 cm) Wide, 3" (7.6 cm) Deep in gray finish. Spring hasp, with hole for lock, holds permanently attached, side hinged door closed. Three mounting holes on back plus handy box mounting holes.

**Knockouts** – Combination 1/2"-3/4" nominal knockouts, one on back and each side of case and two on bottom. **Special Voltages and Cycles** – See Time Switch Motors for available motors.

Switch Rating – 40 Amp Resistive, Inductive or Tungsten 120-277 VAC; 1000 VA pilot duty 120-277 VAC; 2 HP (24 FLA) 125 VAC; 5 HP (28 FLA) 240 VAC.

| Model # | Switch | Clock Supply Volts 60 Hz | Watts | External Switch | Amps/Pole |
|---------|--------|--------------------------|-------|-----------------|-----------|
| T104-20 | DPST   | 208-240                  | 10000 | No              | 40        |
| WH40    | DPST   | 250                      | 10000 | Yes             | 40        |

For additional trippers (1 ON / 1 OFF per pack), order No. 156T1978A.











22.2-177 2.75 lbs LR3730 1.25 kg UL917

-40°F (-40°C) to 130°F (54°C)





With Manual External Override and Load Indicator

#### 50/60 Hz Operation











#### **Electronic Water Heater Timers**

These time switches provide automatic control for electric water heaters. They provide to-the-minute accuracy in programming and time keeping. The time switches can be programmed for repeat daily scheduling, 5-day working week scheduling, weekend scheduling or any individual day scheduling. Timers can be scheduled for operation during the lowest time-of-day rates or to switch off the electric heater during period of utilities peak power usage. The time switch can be set to operate for up to 6 ON/OFF operations daily for a maximum of 42 on/off operations weekly. Both models provide a convenient external override switch and LED load indicator for ease in scheduling hot water as required for extra hot water demands. The timers include a "AA" alkaline battery carryover which protects both time keeping and program information for a minimum of 3 years.

#### **Applications**

Water Heater Control for:

- Residential
- Institutional
- Industrial
- Military Facilities Schools
- Commercial

#### Specifications

Case - Drawn steel 7-3/4" (19.7 cm) H x 5" (12.7 cm) W x 3" (7.6 cm) D in gray finish. Spring hasp, with hole for lock, holds permanently attached, side hinged door closed. Three mounting holes on back plus handy box mounting

Knockouts - Combination 1/2"-3/4" nominal knockouts, one on back and each side of case and two on bottom. Switch Rating - 30 Amp Resistive or Inductive 120-240 VAC; 1 HP, 120 VAC; 1-1/2 HP, 240 VAC; 5 Amps Tungsten, 120/240 VAC.

| Model # | Switch | Clock Supply Volts 50/60 Hz | Watts | External Switch | Amps/Pole |
|---------|--------|-----------------------------|-------|-----------------|-----------|
| EH10    | SPST   | 120                         | 3600  | Yes             | 30        |
| EH40    | DPST   | 240                         | 7200  | Yes             | 30        |
|         |        |                             |       |                 |           |

## **Time Switch Cases**



#### A. Plastic Case

#### Ends rusting problems forever.

Made of heavy-duty industrial grade plastic, Intermatic's rainproof all plastic case is perfect for applications where high humidity and/or dust can be a problem. Developed for use with pool and spa equipment, the non-corroding plastic case is useful for applications in other high moisture areas such as car washes, industrial water spray areas, etc; NEMA 3R case.

A hasp with a hole for lock holds the side-hinged door closed. A bracket plus two holes below the switch on the back are for mounting. Has five combination 1/2 - 3/4" nominal knockouts, one on back and each side of case, two on bottom.

| 2T2500GA* | Indoor / Outdoor Plastic Case - 9-3/8" x 5-1/2" x 3-3/4"       | 1.3 lbs |  |
|-----------|--|---------|--|
| 2T2502GA* | Beige Indoor / Outdoor Plastic Case — 9-3/8" x 5-1/2" x 3-3/4" | 1.3 lbs |  |

<sup>\*</sup> Available for SERIES T100, T170, T180, T1100, T1200, T1400, T1900, T2000, C8800, ET100C, ET170C,ET700C and models EH10, EH40, ET279C ET70115, ET70215, and ET8000 series

#### **Standard Case**

Drawn steel with gray powder coat paint finish. Spring hasp (with hole for seal or lock) holds permanently attached hinged door closed. Has combination 1/2" - 3/4" nominal knockouts, one on back and on each side, and two on bottom. (Except "P" Series switches which are equipped with cord-connection and receptacle.) Convenient mounting holes. NEMA Type 1.

| 2T2040GA*  | Standard Indoor Case – 7 3/4" x 5" x 3" | 1.4 lbs |
|------------|---|---------|
| 2T2292GA** | Indoor Case - 12-1/2" x 8-1/4" x 3-7/8" | 7.0 lbs |

Available for SERIES T100, T170, T180, T1100, T1200, T1400, T1900, T2000, C8800, ET100C, ET170C, ET700C and models EH10, EH40, ET279C ET70115, ET70215, and ET8000 series

#### **Indoor-Outdoor Case**

For protecting time switch from rain, sleet, snow and ice. Drawn steel with gray or beige powder coat paint .036" construction with side-hinged door. Hasp provided for lock. Has combination 1/2-3/4" nominal knockouts, one on back and each side of case, and two on bottom. Separate grounding terminal. Convenient mounting holes. NEMA 3R.

| 2T511GA*    | Standard Indoor/Outdoor Case - 9-3/8" x 5-1/2" x 3-5/8"       | 2.5 lbs |
|-------------|---|---------|
| 2T2485GA*   | Beige Standard Indoor/Outdoor Case – 9-3/8" x 5-1/2" x 3-5/8" | 2.5 lbs |
| 2T2331GA**  | Indoor/Outdoor Case - 9-3/8" x 5-1/2" x 3-5/8"                | 2.5 lbs |
| 2T2293GA*** | Indoor/Outdoor Case - 12-1/2" x 8-1/4" x 3-7/8"               | 2.5 lbs |

Available for SERIES T100, T170, T180, T1100, T1200, T1400, T1900, T2000, C8800, ET100C, ET170C, ET700C and models EH10, EH40, ET279C ET70115, ET70215, and ET8000 series

#### Stainless Steel Indoor-Outdoor Case

| TS100RS | Stainless Steel Indoor-Outdoor Case – 9 7/8" x 6 1/2" x 3 1/5" | 3.5 lbs |
|---------|--|---------|
|         |  |         |

<sup>\*</sup> Available for SERIES T100, T170, T1400, T1900, T2000, C8800, ET100C, ET170C, ET700C, EH40, ET279C, ET70115, ET70215 and ET8000.



A. 2T2500GA

Plastic Case NEMA 3R



B. 2T2040GA

Standard Case NEMA 1



Steel Indoor/Outdoor Case NEMA 3R



**D. TS100RS** 

Steel Indoor/Outdoor Case NEMA 3R

UL & CSA apply to all enclosures shown.







<sup>\*</sup> Available for SERIES T7400B, T7800B, T7400BC and T7800BC.

<sup>\*\*</sup> Available for SERIES T100CR, T170CR, T1400BR, T1400BCR, T1800BR and T1800BCR.

<sup>\*\*\*</sup> Available for SERIES T7400B, T7800B, T7400BC and T7800BC.



## **Time Switch Cases**

## 22T713 (Brackets Only)

E. T10000R 2-in-1 Raintight Case



F. 2T2365GA Flushmount Case



G. 22T338GR



22T535GR





UL & CSA apply to all enclosures shown.

## E. 2-in-1 Raintight Case and Panel

For use where 2 time switches are to be mounted side by side. Heavy-duty spot-welded raintight construction with powder coat paint. Hasp (with hole for lock) holds permanently attached hinged door closed. Combination 1/2" - 3/4" nominal knockouts conveniently located (two on back, five on bottom and one on each side). Top mounting brackets plus two holes below switch level on back of case.

| Model Number                 | Description   | Weight   |
|------------------------------|---|----------|
| T10000R (replaces 2T2089GA)* | 2-in-1 Indoor/Outdoor Case - 10-1/2" x 10-1/2" x 4" | 6.5 lbs  |
| T30000R*                     | Indoor/Outdoor Panel - 16-3/4" x 10-1/2" x 4-1/4"   | 11.0 lbs |
| T40000R*                     | Indoor/Outdoor Panel - 20-3/4" x 12-3/4" x 4-1/4"   | 17.0 lbs |

<sup>\*</sup> Available for SERIES T100, T170, T180, T1900, T2000 and C8800. NOT FOR T1400/T1800/T1900 MODELS WITH BCR SUFFIX.

#### Flushmount Case

For concealing mechanism in wall and giving a finished, flushed appearance. Heavy-duty, .063" formed steel construction with hinged door. Gray finish with powder coat paint. Combination 1/2" - 3/4" nominal knockouts one each side, and two on bottom, plus one 1" knockout on top and bottom. Convenient mounting holes. With or without key lock. Cutout 9-1/8" x 6" x 4-1/8" deep; flange 11" x 8"

| Model Number | Description                               | Weight  |
|--------------|---|---------|
| 2T308A*      | Standard Flushmount w/Lock                | 6.5 lbs |
| 2T2365GA**   | Flushmount Case w/Lock                    | 7.0 lbs |
| 6ET1398GA    | Flush Cover for ET70415CR and ET70415CR24 | 2.5 lbs |

<sup>\*</sup> Available for SERIES T100, T170, T180, T1900, T2000 and C8800. NOT FOR T1400/T1800/T1900 MODELS WITH BCR SUFFIX.

## **Mounting Brackets**

Heavy gauge steel mounting bracket mounts to a standard symmetrical rail TS35 according to DIN46277 and EN50022. Ideal for panel mounting of mechanical or electronic time switch controls, along side of other DIN rail mountable electrical devices. This snap-in type bracket accepts a wide range of Intermatic time switches including most T100, T170, T180, T1900, T2000, C8800, ET100, ET170, ET700 and ET70000 time switches.

| Model Number | Description                                  | Weight  |
|--------------|--|---------|
| 22T535GR     | Din Rail Bracket – 6" x 5" x 2"              | 1.0 lbs |
| 22T338GR     | Surface Mount Snap-in Bracket – 6" x 5" x 2" | 1.0 lbs |

<sup>\*\*</sup> Available for SERIES ET100C, ET170C, ET700C and models EH10, EH40, ET279C, ET7115C, ET7215C, ET70215C and ET70115C.

### **DIN Rail Mounted Timers**



### ET050 Series 7-Day Time Switch (Permits Different Operation Each Day)

The ET050 series of electronic DIN Rail mounted 7-day timers provide to-the-minute programming for accurate load control and reduced energy costs. Up to 16 set points or events (8 ON/8 OFF or any combination) can be preset to automatically repeat on a weekly or daily basis. The program can be overridden at any time by pressing the override button.

#### Specifications

Events - 8 ON/OFF operations per day

Mounting - DIN Rail mount - Includes adapter for surface mounting

Special Voltages and Cycles - ALL models 50 or 60 Hz.

Switch Configuration - Single Pole Double Throw (SPDT)

Switch Rating – Contact Configuration – SPDT; 20 Amp Resistive @ 120VAC; 16 Amp P 25 AMP Inductive @ 250VAC; 500 Watt Tungsten

Carry-over – Field replaceable CR 2032 Lithium-Battery maintains program and accommission with the commission of the com

Wiring Terminals - #18 to #10 AWG wire.

Minimum ON/OFF Times - 1 minute.

Maximum ON/OFF Times – 6 days 23 hour inutes

#### Engineering Specification 7 Day Electronic Time SV

The time switch shall be a second electronic control cap and things 8 ON/OFF set points per circuit to be distributed on a weekly only schedule of the points shall be precammable to the nearest minute with a minimum ON duration of 1 minute and a monomore of 6 da. In the points shall be precammable to the nearest minute with a minimum ON duration of 1 minute and a monomore of 6 da. In the time shall have a digital LCD readout to show time-of-day using 12 hour a indicate the time second provide a manual override control for both temporary and permanent override. Time tight of -40°F (-40°C) to 155°F (68°C).

| Mcael#    | Circuits | Switch | Clock Voltage | ating | nting         |
|-----------|----------|--------|---------------|-------|---------------|
| ET051C24  | 1        | SPDT   | 24 VAC        |       | Div / Surface |
| ET051C120 | 1        | SPDT   | 120 VA        | 4     | DIN / Surface |
| ET051C240 | 1        | SPDT   | 240 VA        | 2     | DIN / Surface |
| ET052C24  | 2        |        | VAC           |       | DIN / Surface |
| ET052C120 | 2        |        | 7             | 20    | DIN / Surface |
| ET052C240 | 2        | )      | 240           | 20    | DIN / Surface |





ET052



# 24-Hour Electronic Time Switches



#### **Applications:**

- Schools
- Offices
- Airports
- StoresHotels
- Restaurants
- Parks
- Apartments

#### For Controlling:

- Water Heaters
- · Parking Lot Lighting
- Commercial Ovens
- Interior Lighting
- Air Conditioners
- Fans/Blowers/Pumps
- Livestock Feeders
- Poultry Equipment
- · Process Equipment







-40°F (-40°C) to 155°F

## ET100 Series 24-Hour Time Switch (Same Operation Each Day)

These time switches provide the same dependable and uncomplicated performance as the T101 mechanical time switch...plus to-the-minute programming for accurate load control and reduced energy costs. Up to 8 set points or events (4 ON/4 OFF) can be preset to automatically repeat on a daily basis. The program can be overridden at any time by placing the selector switch in the Manual position. Two industrial grade "AA" Alkaline batteries provide 3 years minimum program and timing protection.

#### Specifications

**Case –** NEMA 1 – Drawn steel 7-3/4" (19.7 cm) High, 5" (12.7 cm) Wide, 3" (7.6 cm) Deep in gray finish.

Note: The electronic mechanism snaps into the standard Intermatic time switch case, replacing mechanical mechanisms, if desired.

**Knockouts** - Combination 1/2"-3/4" nominal knockouts, one on back and each side of case and two on bottom.

**Optional Enclosures – See Time Switch Cases for optional enclosures.** 

Special Voltages and Cycles - ALL models 50 or 60 Hz.

Switch Rating – Except model ET100C. 30 Amp Inductive/Resistive, 24 / 120 / 240 / 277 VAC 60 Hz; 20 Amp Resistive, 28 VDC; 1 HP 120 VAC 60 Hz; 2 HP 240 VAC 60 Hz; 5 Amp Tungsten, 120 / 240 / VAC 60 Hz; 20 Amp ballast, 120-277 VAC 60 Hz. ET100C same ratings for 120 Volt loads only. Models ET105C normally closed contact ratings: 10A Resistive/General purpose, 12 - 277VAC; 10A Resistive/General purpose, 28VDC; 3A Ballast, 120 - 277VAC; 1/4 HP, 120 VAC; 1/2 HP, 240 VAC; 30 LRA; 12 FLA; 275 VA pilot duty, 120 - 240 VAC

**Carry-over** – Field replaceable "AA" batteries maintain program and accurate time keeping for 3 years minimum. Up front replacement does not require removal of mechanism or field wiring.

Wiring Terminals – #18 to #10 AWG wire.

Minimum ON/OFF Times - 1 minute.

Maximum ON/OFF Times - 23 hours 59 minutes.

#### **Engineering Specification**

24 Hour Electronic Time Switch

The time switch shall be a solid state electronic control capable of permitting 8 ON/OFF set points to be distributed on a daily schedule. The time and set points shall be programmable to the nearest minute with a minimum ON duration of 1 minute and a maximum ON duration of 23 hours and 59 minutes. The timer shall have a digital LCD readout to show time-of-day using 12 hour AM/PM indicator. The time switch shall provide a manual override control for both temporary and permanent override. Time switch shall operate over a temperature range of -40°F (-40°C) to 155°F (68°C).

Industrial grade AA alkaline batteries shall protect program information and carryover time-of-day for a minimum of 3 years. Switch configuration to be \_\_\_\_\_\_\_\_(SPST) or (DPST) with an agency listed rating of: 30 amp Inductive/Resistive, 24/120/240 Volts AC, 60 Hz; 20 amps Resistive, 28 VDC; 1 HP, 120 Volts AC, 60 Hz; 2 HP, 240 Volts AC, 60 Hz; 5 amps Tungsten, 120/240 Volts AC, 60 Hz; 20 amps Ballast, 120-277 Volts AC, 60 Hz. The time switch shall be powered by a \_\_\_\_\_\_\_\_(120 volt), (120-277 volts) 50/60 Hz source. The time switch shall be enclosed in a lockable \_\_\_\_\_\_\_\_(NEMA 1) or (NEMA 3R) rated enclosure. The time switch shall be agency listed under UL category 916 Energy Management Equipment and shall be INTERMATIC Model \_\_\_\_\_\_\_\_\_(ET100C), (ET101C), (ET102C), (ET103C), (ET105C).

| Model#               | Circuits | Switch | Clock Voltage   | <b>Amp Rating</b> | <b>HP Rating</b> | Enclosure |
|----------------------|----------|--------|-----------------|-------------------|------------------|-----------|
| ET100C               | 1        | SPST   | 120             | 30                | 1HP              | NEMA1     |
| ET100CM <sup>1</sup> | 1        | SPST   | 120             | 30                | 1HP              | Mech.     |
| ET101C               | 1        | SPST   | 120             | 30                | 1HP / 2HP        | NEMA1     |
| ET102C               | 1        | SPST   | 120/208/240/277 | 30                | 1HP / 2HP        | NEMA1     |
| ET103C               | 1        | DPST   | 120             | 30                | 1HP / 2HP        | NEMA1     |
| ET104C               | 1        | DPST   | 120/208/240/277 | 30                | 1HP / 2HP        | NEMA1     |
| ET104CP <sup>2</sup> | 1        | DPST   | 120/208/240/277 | 30                | 1HP / 2HP        | NEMA3R    |
| ET105C               | 1        | SPDT   | 120             | 10/30             | 1HP / 2HP        | NEMA1     |

<sup>1</sup>Mechanism only no case.

<sup>&</sup>lt;sup>2</sup>NEMA 3R UV resistant polycarbonate plastic case.

## 24-Hour Electronic Time Switches



### ET1100 Series 24-Hour Time Switch (Same Operation Each Day)

Upgrading to an electronic time switch has never been easier than now with the new ET1100 Series. Features include; Automatic Daylight Saving Time adjustment, multi-volt operation from 120 to 277 VAC, and to-the-minute programming for accurate load control and reduced energy costs. Up to 28 set points or events (14 ON/14 OFF per channel) can be preset to automatically repeat on a daily basis. The program can be overridden at any time. Two industrial grade "AAA" Alkaline batteries provide 3 years minimum program and timing protection.

#### Specifications

Case Options - Standard: NEMA 1 Grey Painted Drawn Steel; 'R' Option: NEMA 3R Grey Painted Drawn Steel; 'PD82' Option: NEMA 3R Grey High-Impact UV Resistant Polycarbonate Plastic with Clear Cover

Note: The electronic mechanism snaps into the standard Intermatic time switch case, replacing mechanical mechanisms, if desired.

**Knockouts** - Combination 1/2"-3/4" nominal knockouts, one on back and each side of case and two on bottom.

**Optional Enclosures – See Time Switch Cases for optional enclosures.** 

Special Voltages and Cycles - ALL models 50 or 60 Hz.

Switch Rating - 30 Amp Inductive/Resistive, 24 / 120 / 240 / 277 VAC 60 Hz; 20 Amp Resistive, 28 VDC; 1 HP 120 VAC 60 Hz; 2 HP 240 VAC 60 Hz; 5 Amp Tungsten, 120 / 240 / VAC 60 Hz; 20 Amp ballast,120-277 VAC 60 Hz. ET100C same ratings for 120 Volt loads only. ET1115 models normally closed contact ratings: 10A Resistive/General purpose,

12 - 277VAC; 10A Resistive/General purpose, 28VDC; 3A Ballast, 120 - 277VAC; 1/4 HP, 120 VAC; 1/2 HP, 240 VAC; 30 LRA; 12 FLA; 275 VA pilot duty, 120 - 240 VAC

Pulse Feature - 2-Circuit models feature 2-Second pulse option for contactor and bell ringing applications. Auto DST - Automatic Adjustment for Daylight Saving Time (DST)

Carry-over - Field replaceable "AAA" batteries maintain program and accurate time keeping for 3 years minimum. Up front replacement does not require removal of mechanism.

Wiring Terminals - #18 to #10 AWG wire.

Minimum ON/OFF Times - 1 minute.

Maximum ON/OFF Times - 23 hours 59 minutes.

#### **Engineering Specification**

24 Hour Electronic Time Switch

The time switch shall be a solid state electronic control capable of permitting 28 ON/OFF set points per circuit to be distributed on a daily schedule. The time and set points shall be programmable to the nearest minute with a minimum ON duration of 1 minute and a maximum ON duration of 23 hours and 59 minutes. The timer shall have a digital LCD readout to show time-of-day using 12 hour AM/ PM indicator. The time switch shall provide for automatic adjustment for Daylight Saving Time (DST). The time switch shall provide a manual override control for both temporary and permanent override. Time switch shall operate over a temperature range of -40°F (-40°C) to 155°F (68°C). Industrial grade AAA alkaline batteries shall carryover time-of-day and date for a minimum of 3 years. Program data shall be stored in non-volatile memory. Switch configuration to be \_ \_ (SPST), (DPST) or (SPDT) with an agency listed rating of: 30 amp Inductive/Resistive, 24/120/240 Volts AC, 60 Hz; 20 amps Resistive, 28 VDC; 1 HP, 120 Volts AC, 60 Hz; 2 HP, 240 Volts AC, 60 Hz; 5 amps Tungsten, 120/240 Volts AC, 60 Hz; 20 amps Ballast, 120-277 Volts AC, 60 Hz. The time switch shall be powered by a120-277 volts 50/60 Hz source. The time switch shall be enclosed in a lockable \_

The time switch shall be listed under UL category 916 Energy Management Equipment and shall be INTERMATIC Model (ET1105C/CR/CPD82), (ET1115C/CR/CPD82), or (ET1125C/CR/CPD82).

| Model#                | Circuits | Switch | Clock Voltage   | Amp Rating | HP Rating | Enclosure |
|-----------------------|----------|--------|-----------------|------------|-----------|-----------|
| ET1105C               | 1        | SPST   | 120/208/240/277 | 30         | 1HP / 2HP | NEMA1     |
| ET1105CPD821          | 1        | SPST   | 120/208/240/277 | 30         | 1HP / 2HP | NEMA 3R   |
| ET1105CR              | 1        | SPST   | 120/208/240/277 | 30         | 1HP / 2HP | NEMA 3R   |
| ET1115C               | 1        | SPDT   | 120/208/240/277 | 10/30      | 1HP / 2HP | NEMA1     |
| ET1115CPD821          | 1        | SPDT   | 120/208/240/277 | 10/30      | 1HP / 2HP | NEMA 3R   |
| ET1115CR              | 1        | SPDT   | 120/208/240/277 | 10/30      | 1HP / 2HP | NEMA 3R   |
| ET1125C <sup>2</sup>  | 2        | SPST   | 120/208/240/277 | 30         | 1HP / 2HP | NEMA1     |
| ET1125CPD8212         | 2        | SPST   | 120/208/240/277 | 30         | 1HP / 2HP | NEMA 3R   |
| ET1125CR <sup>2</sup> | 2        | SPST   | 120/208/240/277 | 30         | 1HP / 2HP | NEMA 3R   |

<sup>1</sup> CPD82 Models feature NEMA 3R high impact polycarbonate plastic case with clear cover for easy viewing of time switch mode and current status.



- **✓** Auto Daylight Saving Time Adjustment
- **✓** Multi-Volt 120, 208, 240 & 277 VAC
- **V** Pulsed Contact Feature









CPD82 NEMA 3R with clear cover



# 7-Day Electronic Time Switches



#### **Applications:**

- Schools
- Offices
- Airports
- StoresHotels
- 1101013
- Restaurants
- Parks
- Apartments

#### **For Controlling:**

- Water Heaters
- · Parking Lot Lighting
- Commercial Ovens
- Interior Lighting
- Air Conditioners
- Fans/Blowers/Pumps
- · Livestock Feeders
- Poultry Equipment
- Process Equipment









bs kg

-40°F (-40°C) to 155°F

### ET170 Series 7-Day Time Switch (Permits Different Operation Each Day)

These electronic time switches provide to-the-minute programming for accurate load control and reduced energy costs. Up to 20 set points or events (10 ON/10 OFF or any combination) can be preset to automatically repeat on a weekly or daily basis. The program can be overridden at any time by placing the selector switch in the Manual position. These time switches provide for true 7-day load control with up to 140 operations (70 ON/70 OFF or any combination) each week. Model ET279C provides 20 operations or momentary contact closures of 1 to 8 seconds (ten each or any combination) for two independent circuits.

#### Specifications

**Case** – NEMA 1 – Drawn steel 7-3/4" (19.7 cm) High, 5" (12.7 cm) Wide, 3" (7.6 cm) Deep in gray finish. NEMA 3R – Drawn steel 9-3/8" (23.8 cm) high, 5-1/2" (14.0 cm) wide, 3-5/8" (9.0 cm) deep in gray finish. Both types include permanently attached side hinged door with lockable hasp. Mounting holes and/or mounting bracket included. Separate grounding terminal.

Note: The electronic mechanism snaps into the standard Intermatic time switch case, replacing mechanical mechanisms, if desired.

Knockouts - Combination 1/2"-3/4" nominal knockouts, one on back and each side of case and two on bottom.

**Optional Enclosures –** See Time Switch Cases for optional enclosures.

Special Voltages and Cycles - ALL models 50 or 60 Hz.

Switch Rating – 30 Amp Inductive/Resistive, 24 / 120 / 240 / 277 VAC 60 Hz; 20 Amp Resistive, 28 VDC; 1 HP 120 VAC 60 Hz; 2 HP 240 VAC 60 Hz; 5 Amp Tungsten, 120 / 240 / VAC 60 Hz; 20 Amp ballast, 120-277 VAC 60 Hz. ET100C same ratings for 120 Volt loads only. Model ET175C normally closed contact ratings: 10A Resistive/General purpose, 12 - 277VAC; 10A Resistive/General purpose, 28VDC; 3A Ballast, 120 - 277VAC; 1/4 HP, 120 VAC; 1/2 HP, 240 VAC; 30 LRA; 12 FLA; 275 VA pilot duty, 120 - 240 VAC

**Carry-over** – Field replaceable "AA" batteries maintain program and accurate time keeping for 3 years minimum. Up front replacement does not require removal of mechanism or field wiring.

Wiring Terminals - #18 to #10 AWG wire.

Minimum ON/OFF Times - 1 minute.

Maximum ON/OFF Times - 6 days 23 hours 59 minutes.

#### **Engineering Specification**

7 Day Electronic Time Switch

The time switch shall be a solid state electronic control capable of permitting 20 ON/OFF set points to be distributed on a daily or weekly schedule. The time and set points shall be programmable to the nearest minute with a minimum ON duration of 1 minute and a maximum ON duration of 6 days, 23 hours and 59 minutes. The timer shall have a digital LCD readout to show time-of-day using 12 hour AM/PM indicator. The time switch shall provide a manual override control for both temporary and permanent override. Time switch shall operate over a temperature range of -40°F (-40°C) to 155°F (68°C).

| Model#                | Circuits | Switch | Clock Voltage | Amp Rating | <b>HP Rating</b> | Enclosure |
|-----------------------|----------|--------|---------------|------------|------------------|-----------|
| ET171C                | 1        | SPST   | 120           | 30         | 1HP / 2HP        | NEMA1     |
| ET171CR <sup>1</sup>  | 1        | SPST   | 120           | 30         | 1HP / 2HP        | NEMA3R    |
| ET173C                | 1        | DPST   | 120           | 30         | 1HP / 2HP        | NEMA1     |
| ET174C                | 1        | DPST   | 240           | 30         | 1HP / 2HP        | NEMA1     |
| ET175C                | 1        | SPDT   | 120           | 10/30      | 1HP / 2HP        | NEMA1     |
| ET279C <sup>2,3</sup> | 2        | SPST   | 120           | 30         | 1HP / 2HP        | NEMA1     |

<sup>&</sup>lt;sup>1</sup>NEMA 3R drawn steel enclosure.

<sup>&</sup>lt;sup>2</sup>User selectable contacts independent 2xSPST, simultaneous DPST, or pulsed for mechanically held contactor operation.

<sup>&</sup>lt;sup>3</sup>Complies with California Title 24 requirements for multi-level outdoor lighting control.

# 7-Day Electronic Time Switches



### ET1700 Series 7-Day Time Switch (Permits Different Operation Each Day)

Upgrading to an electronic time switch has never been easier than now with the new ET1700 Series. Features include; Automatic Daylight Saving Time adjustment, multi-volt operation from 120 to 277 VAC, and to-the-minute programming for accurate load control and reduced energy costs. Up to 28 set points or events (14 ON/14 OFF per channel) can be distributed throughout the days of the week. The program can be overridden at any time. Two industrial grade "AAA" Alkaline batteries provide 3 years minimum program and timing protection.

#### Specifications

Case Options - Standard: NEMA 1 Grey Painted Drawn Steel; 'R' Option: NEMA 3R Grey Painted Drawn Steel; 'PD82' Option: NEMA 3R Grey High-Impact UV Resistant Polycarbonate Plastic with Clear Cover

Note: The electronic mechanism snaps into the standard Intermatic time switch case, replacing mechanical mechanisms, if desired.

**Knockouts** - Combination 1/2"-3/4" nominal knockouts, one on back and each side of case and two on bottom.

Optional Enclosures - See Time Switch Cases for optional enclosures.

Special Voltages and Cycles - ALL models 50 or 60 Hz.

Switch Rating - 30 Amp Inductive/Resistive, 24 / 120 / 240 / 277 VAC 60 Hz; 20 Amp Resistive, 28 VDC; 1 HP 120 VAC 60 Hz; 2 HP 240 VAC 60 Hz; 5 Amp Tungsten, 120 / 240 / VAC 60 Hz; 20 Amp ballast,120-277 VAC 60 Hz. ET100C same ratings for 120 Volt loads only. ET1115 models normally closed contact ratings: 10A Resistive/General purpose,

12 - 277VAC; 10A Resistive/General purpose, 28VDC; 3A Ballast, 120 - 277VAC; 1/4 HP, 120 VAC; 1/2 HP, 240 VAC; 30 LRA; 12 FLA; 275 VA pilot duty, 120 - 240 VAC

Pulse Feature - 2-Circuit models feature 2-Second pulse option for contactor and bell ringing applications. Auto DST - Automatic Adjustment for Daylight Saving Time (DST)

Carry-over - Field replaceable "AAA" batteries maintain program and accurate time keeping for 3 years minimum. Up front replacement does not require removal of mechanism.

Wiring Terminals - #18 to #10 AWG wire.

Minimum ON/OFF Times - 1 minute.

Maximum ON/OFF Times - 6 days 23 hours 59 minutes.

#### **Engineering Specification**

7 Day Electronic Time Switch

The time switch shall be a solid state electronic control capable of permitting 28 ON/OFF set points per circuit to be distributed on a weekly or daily schedule. The time and set points shall be programmable to the nearest minute with a minimum ON duration of 1 minute and a maximum ON duration of 6 days, 23 hours and 59 minutes. The timer shall have a digital LCD readout to show time-of-day using 12 hour AM/PM indicator. The time switch shall provide for automatic adjustment for Daylight Saving Time (DST). The time switch shall provide a manual override control for both temporary and permanent override. Time switch shall operate over a temperature range of -40°F (-40°C) to 155°F (68°C). Industrial grade AAA alkaline batteries shall carryover time-of-day and date for a minimum of 3 years. Program data shall be stored in non-volatile memory. Switch configuration to be (SPST), (DPST) or (SPDT) with an agency

30 amp Inductive/Resistive, 24/120/240 Volts AC, 60 Hz; 20 amps Resistive, 28 VDC; 1 HP, 120 Volts AC, 60 Hz; 2 HP, 240 Volts AC, 60 Hz; 5 amps Tungsten, 120/240 Volts AC, 60 Hz; 20 amps Ballast, 120-277 Volts AC, 60 Hz. The time switch shall be powered by a 120-277 volts 50/60 Hz source. The time switch shall be enclosed in a lockable (NEMA 1) or (NEMA 3R) rated enclosure. The time switch shall be listed under UL category 916 Energy Management Equipment and shall be INTERMATIC Model \_(ET1705C/CR/CPD82), (ET1715C/CR/CPD82), or (ET1725C/CR/CPD82).

| Model#                | Circuits | Switch | Clock Voltage   | Amp Rating | <b>HP Rating</b> | Enclosure |
|-----------------------|----------|--------|-----------------|------------|------------------|-----------|
| ET1705C               | 1        | SPST   | 120/208/240/277 | 30         | 1HP / 2HP        | NEMA1     |
| ET1705CPD821          | 1        | SPST   | 120/208/240/277 | 30         | 1HP / 2HP        | NEMA 3R   |
| ET1705CR              | 1        | SPST   | 120/208/240/277 | 30         | 1HP / 2HP        | NEMA 3R   |
| ET1715C               | 1        | SPDT   | 120/208/240/277 | 10/30      | 1HP / 2HP        | NEMA1     |
| ET1715CPD821          | 1        | SPDT   | 120/208/240/277 | 10/30      | 1HP / 2HP        | NEMA 3R   |
| ET1715CR              | 1        | SPDT   | 120/208/240/277 | 10/30      | 1HP / 2HP        | NEMA 3R   |
| ET1725C <sup>2</sup>  | 2        | STST   | 120/208/240/277 | 30         | 1HP / 2HP        | NEMA1     |
| ET1725CPD8212         | 2 2      | SPST   | 120/208/240/277 | 30         | 1HP / 2HP        | NEMA 3R   |
| ET1725CR <sup>2</sup> | 2        | SPST   | 120/208/240/277 | 30         | 1HP / 2HP        | NEMA 3R   |

CPD82 Models feature NEMA 3R high impact polycarbonate plastic case with clear cover for easy viewing of time switch mode and current status.



- ✓ Auto Daylight Saving Time Adjustment
- **✓** Multi-Volt 120, 208, 240 & 277 VAC
- **✓** Pulsed Contact Feature
- ✓ California Title 24 Approved









CPD82 NEMA 3R with clear cover



<sup>&</sup>lt;sup>2</sup> ET8725 Models feature contacts that can be field configured to act as two independently operated SPST, one simultaneous operated DPST, or independently



# 7-Day Electronic Astronomic Time Switches



- Auto Daylight Saving
  Time Adjustment
- Multi-Volt 120, 208, 240 & 277 VAC
- **▼** Pulsed Contact Feature
- ✓ California Title 24
  Approved







UL917 222.2-177

2.5 lbs 1.1 kg

-40°C) to 155°F (68°C)



CPD82
NEMA 3R with clear cover

### ET8000 Series 7-Day Astronomic Time Switch (Tracks Sunrise & Sunset)

Intermatic's Electronic Astronomic 7-Day Time Switch automatically switches loads according to a preset weekly schedule with to-the-minute accuracy. The astronomic feature provides sunset ON and sunrise OFF settings to eliminate the need for separate photo control devices. The independent 7-day programming provides complete flexibility for applications where load switching differs each day of the week. Astronomic programming can be combined with independent programs to provide a sunset ON and timed OFF program.

#### Specifications

Case Options – Standard: NEMA 1 Grey Painted Drawn Steel; 'R' Option: NEMA 3R Grey Painted Drawn Steel; 'PD82' Option: NEMA 3R Grey High-Impact UV Resistant Polycarbonate Plastic with Clear Cover

Note: The electronic mechanism snaps into the standard Intermatic time switch case, replacing mechanical mechanisms, if desired.

**Knockouts** – Combination 1/2"-3/4" nominal knockouts, one on back and each side of case and two on bottom.

**Optional Enclosures – See Time Switch Cases for optional enclosures.** 

Special Voltages and Cycles - ALL models 50 or 60 Hz.

**Switch Rating** – 30 Amp Inductive/Resistive, 24 / 120 / 240 / 277 VAC 60 Hz; 20 Amp Resistive, 28 VDC; 1 HP 120 VAC 60 Hz; 2 HP 240 VAC 60 Hz; 5 Amp Tungsten, 120 / 240 / VAC 60 Hz; 20 Amp ballast,120-277 VAC 60 Hz. ET100C same ratings for 120 Volt loads only. ET1115 models normally closed contact ratings: 10A Resistive/General purpose.

12 - 277VAC; 10A Resistive/General purpose, 28VDC; 3A Ballast, 120 - 277VAC; 1/4 HP, 120 VAC; 1/2 HP, 240 VAC; 30 LRA; 12 FLA; 275 VA pilot duty, 120 - 240 VAC

Pulse Feature – 2-Circuit models feature 2-Second pulse option for contactor and bell ringing applications.

Auto DST – Automatic Adjustment for Daylight Saving Time (DST)

**Carry-over** – Field replaceable "AAA" batteries maintain program and accurate time keeping for 3 years minimum. Up front replacement does not require removal of mechanism.

Wiring Terminals - #18 to #10 AWG wire.

Minimum ON/OFF Times - 1 minute.

**Maximum ON/OFF Times –** 6 days 23 hours 59 minutes.

#### **Engineering Specification**

7 Day Electronic Time Switch

The time switch shall be a solid state electronic control capable of permitting 28 ON/OFF set points per circuit to be distributed on a weekly or daily schedule with 1 astro ON and 1 astro OFF set point per circuit. The time and set points shall be programmable to the nearest minute with a minimum ON duration of 1 minute and a maximum ON duration of 6 days, 23 hours and 59 minutes. The timer shall have a digital LCD readout to show time-of-day using 12 hour AM/PM indicator. The time switch shall provide for automatic adjustment for Daylight Saving Time (DST). The time switch shall provide a manual override control for both temporary and permanent override.

Time switch shall operate over a temperature range of -40°F (-40°C) to 155°F (68°C).

(ET1705C/CR/CPD82), (ET1715C/CR/CPD82), or (ET1725C/CR/CPD82).

| Model#                | Circuits | Switch | Clock Voltage   | <b>Amp Rating</b> | <b>HP Rating</b> | Enclosure |
|-----------------------|----------|--------|-----------------|-------------------|------------------|-----------|
| ET8015C               | 1        | SPST   | 120/208/240/277 | 30                | 1HP / 2HP        | NEMA1     |
| ET8015CPD821          | 1        | SPST   | 120/208/240/277 | 30                | 1HP / 2HP        | NEMA3R    |
| ET8015CR              | 1        | SPST   | 120/208/240/277 | 30                | 1HP / 2HP        | NEMA3R    |
| ET8115C               | 1        | SPDT   | 120/208/240/277 | 10/30             | 1HP / 2HP        | NEMA1     |
| ET8115CPD821          | 1        | SPDT   | 120/208/240/277 | 10/30             | 1HP / 2HP        | NEMA3R    |
| ET8115CR              | 1        | SPDT   | 120/208/240/277 | 10/30             | 1HP / 2HP        | NEMA3R    |
| ET8215C2              | 2        | SPST   | 120/208/240/277 | 30                | 1HP / 2HP        | NEMA1     |
| ET8215CPD821,2        | 2 2      | SPST   | 120/208/240/277 | 30                | 1HP / 2HP        | NEMA3R    |
| ET8215CR <sup>2</sup> | 2        | SPST   | 120/208/240/277 | 30                | 1HP / 2HP        | NEMA3R    |

# 365-Day Electronic Astronomic Time Switches



### ET70000 Series 365-Day Time Switch (1, 2, & 4 Circuit Models)

These electronic time switches provide to-the-minute programming for 7-day or full year load control. Features: 12/24 Hr clock format, 1,000 + 0N/OFF events, 99 holiday schedules, and auto daylight savings time adjustment. Flexible load control is enhanced by Astro, Variable Pulse, and Interval options as required for outdoor lighting control, bell ringing and after hour temporary override respectively. Non-volatile memory maintains all programmed switching times for the life of the time switch. A factory installed field replaceable lithium battery maintains accurate time keeping and calendar information for a minimum of 8 years.

#### Specifications

Case - ET70115 & ET70215 Models: NEMA 1 - Drawn steel 7-3/4" (19.7 cm) High, 5" (12.7 cm) Wide, 3" (7.6 cm) Deep in gray finish. NEMA 3R - Drawn steel 9-3/8" (23.8 cm) high, 5-1/2" (14.0 cm) wide, 3-5/8" (9.0 cm) deep in gray finish. ET70415 Model: NEMA 3R - Heavy duty .047" 18 gauge steel in gray finish; 12-1/2" (31.7 cm) High,

(21.0 cm) Wide, 4" (10.2 cm) Deep,

ON/OFF Events - 1,000+ Events.

Knockouts - Combination 1/2"-3/4" nominal knockouts, one on back and each side of case and two on bottom. Optional Enclosures - See Time Switch Cases for optional enclosures.

Special Voltages and Cycles - Line voltage models 50 or 60 Hz; Low voltage models 60 Hz 24 Volts.

Switch Rating - Each Pole; 20 amp resistive/general purpose, 12-277 Volts AC; 20 amp resistive/general purpose, 28 Volts DC; 20 amp ballast, 120-277 VAC; 1 HP, 120 VAC 60 Hz; 98 LRA; 22 FLA; 2 HP, 240 VAC 60 Hz; 80 LRA; 30 FLA; 5 amp tungsten, 120-240 VAC; 470 VA pilot duty, 12-240 VAC; TV-5, 120-240 VAC

Carry-over - Non-volatile memory requires no backup. Time keeping and calendar data maintained within 0.01% accuracy for minimum of 8 years with one factory installed, field replaceable lithium coin cell.

Wiring Terminals - #18 to #10 AWG wire.

Minimum ON/OFF Times - 1 minute.

Maximum ON/OFF Times - 6 days 23 hours 59 minutes.

#### **Engineering Specification**

365 Day 1, 2, & 4 Circuit Electronic Astronomic Time Switches

The time switch shall be a solid state electronic control capable of permitting 1000 ON/OFF set points to be distributed on independent daily schedules through a 7-day time period and across 99 separate holiday schedules. The time switch shall include a 7-day repeat feature for simplifying programming of identical set points. The time and set points shall be programmable to the nearest minute with a minimum ON duration of 1 minute and a maximum ON duration of 6 days, 23 hours, 59 minutes. The timer shall have a digital LED readout to show day-of-week and time-of-day using 12/24 hour time format. The time switch shall provide a manual override control for both temporary and permanent override. Time switch shall operate over a temperature range of -40°F (-40°C) to 155°F (68°C). A non-volatile memory shall maintain all program data for the life of the time switch without the need for battery backup. The time switch shall include a factory installed lithium battery backup which shall maintain clock time and calendar data for 8 years minimum. Switch configuration to be SPDT for each circuit with a UL 916 Energy Management Equipment listed rating of: Normally Open Contacts Each Pole; 20 amp resistive/general purpose, 12-277 Volts AC; 20 amp resistive/general purpose, 28 Volts DC; 20 amp ballast, 120-277 VAC; 1 HP, 120 VAC 60 Hz; 98 LRA; 22 FLA; 2 HP, 240 VAC 60 Hz; 80 LRA; 30 FLA; 5 amp tungsten, 120-240 VAC; 470 VA pilot duty, 12-240 VAC; TV-5, 120-240 VAC Normally Closed Contacts 10 Amp Resistive/general purpose, 12-277 VAC; 10 Amp Resistive/ general purpose, 28 Volts DC; 3 Amp ballast, 120-277 VAC; 1/4 HP, 120 VAC 60 Hz; 1/2 HP, 240 VAC 60 Hz; 30 LRA; 12 FLA; 275 \_\_ (NEMA 1) (NEMA 3R) enclosure. The time VA pilot duty, 12-240 VAC. The time switch shall be enclosed in a lockable steel \_\_ switch shall be powered by a

(user selectable 120, 208, 240 or 277 VAC 50 or 60 Hz) (24 VAC 60 Hz) source. The time switch shall be INTERMATIC Model (ET70115C, ET70115CR or ET70115CR24 1-circuit) (ET70215C, ET70215CR or ET70215CR24 2-circuits) (ET70415CR, or ET70415CR24 4-circuits)

| Model#                     | Circuits | Switch | Clock Voltage   | Amp Rating | HP Rating | Enclosure |
|----------------------------|----------|--------|-----------------|------------|-----------|-----------|
| ET70115C                   | 1        | SPDT   | 120/208/240/277 | 20         | 1HP / 2HP | NEMA1     |
| ET70115CR                  | 1        | SPDT   | 120/208/240/277 | 20         | 1HP / 2HP | NEMA3R    |
| ET70115CR24                | 1        | SPDT   | 24              | 20         | 1HP / 2HP | NEMA3R    |
| ET70215C1,2                | 2        | SPDT   | 120/208/240/277 | 20         | 1HP / 2HP | NEMA1     |
| ET70215CR1,2               | 2        | SPDT   | 120/208/240/277 | 20         | 1HP / 2HP | NEMA3R    |
| ET70215CR241,2             | 2        | SPDT   | 24              | 20         | 1HP / 2HP | NEMA3R    |
| ET70415CR1,2               | 4        | SPDT   | 120/208/240/277 | 20         | 1HP / 2HP | NEMA3R    |
| ET70415CR24 <sup>1,2</sup> | 4        | SPDT   | 24              | 20         | 1HP / 2HP | NEMA3R    |

<sup>1</sup> Multi-Circuit Models feature contacts that can be field configured to act independently operated SPDT, or simultaneously operated, or independently pulsed SPDT for contactor and bell ringing applications.







#### California Title 24 Approved







UI 917







# 365-Day Electronic Astronomic Time Switches



#### **Applications:**

- Schools
- Offices
- Airports
- Stores
- Hotels
- Restaurants
- Factories
- Parks
- Apartments

#### For Controlling:

- Water Heaters
- Parking Lot Lighting
- Commercial Ovens
- Interior Lighting
- Bells & Signals
- HVAC Equipment
- Fans/Blowers/Pumps
- Livestock Feeders
- · Poultry Equipment
- Process Equipment

### California Title 24 Approved







UL916 E76987

UL917 -40°F 22.2-177 (-40°C) LR3730 to 155°F

### ET70000 Series 365-Day Time Switch (8 & 16 Circuit Models)

These electronic time switches provide to-the-minute programming for 7-day or full year load control. Features: 12/24 Hr Clock Format, 4,000+ ON/OFF Events, 99 Holiday Schedules, and Auto Daylight Savings Time Adjustment. Flexible load control is enhanced by Astro, Variable Pulse, and Interval options as required for outdoor lighting control, bell ringing and after-hour temporary override respectively. Non-volatile memory maintains all programmed switching times for the life of the time switch. A factory installed field replaceable lithium battery maintains accurate time keeping and calendar information for a minimum of 8 years.

#### Specifications

Case – 8-Circuit NEMA 3R - Heavy duty .048" steel in gray finish; 10-3/4" (27.3 cm) High, 11-1/2" (29.2 cm) Wide, 4-3/4" (12.1 cm) deep with lockable hasp. 16-Circuit NEMA 3R - Heavy duty .060" steel in gray finish; 20-5/8" (52.4 cm) High, 13-1/4" (33.7 cm) Wide, 5-1/8" (13.0 cm) Deep with lockable hasp.

**ON/OFF Events –** 8 & 16-Circuit - 4,000+ Events.

Special Voltages and Cycles - Line voltage models 50 or 60 Hz; Low voltage models 60 Hz 24 Volts.

**Switch Rating** – Each Pole; 20 amp resistive/general purpose, 12–277 Volts AC; 20 amp resistive/general purpose, 28 Volts DC; 20 amp ballast, 120–277 VAC; 1 HP, 120 VAC 60 Hz; 98 LRA; 22 FLA; 2 HP, 240 VAC 60 Hz; 80 LRA; 30 FLA; 5 amp tungsten, 120–240 VAC; 470 VA pilot duty, 12–240 VAC; TV-5, 120–240 VAC

**Carry-over** – Non-volatile memory requires no backup. Time keeping and calendar data maintained within 0.01% accuracy for minimum of 8 years with one factory installed, field replaceable lithium coin cell.

Wiring Terminals - #18 to #10 AWG wire.

Minimum ON/OFF Times - 1 minute.

Maximum ON/OFF Times - 6 days 23 hours 59 minutes.

#### **Engineering Specification**

365 Day 8 & 16 Circuit Electronic Astronomic Time Switches

The time switch shall be a solid state electronic control capable of permitting 4000+ ON/OFF set points to be distributed on independent daily schedules through a 7-day time period and across 99 separate holiday schedules. The time switch shall include a 7-day repeat feature for simplifying programming of identical set points. The time and set points shall be programmable to the nearest minute with a minimum ON duration of 1 minute and a maximum ON duration of 6 days, 23 hours, 59 minutes. The timer shall have a digital LED readout to show day-of week and time-of-day using 12/24 hour time format. The time switch shall provide a manual override control for both temporary and permanent override. Time switch shall operate over a temperature range of -40°F (-40°C) to 155°F (68°C). A non-volatile memory shall maintain all program data for the life of the time switch without the need for battery backup. The time switch shall include a factory installed lithium battery backup which shall maintain clock time and calendar data for 8 years minimum. Switch configuration to be SPDT for each circuit with a UL 916 Energy Management Equipment listed rating of: Normally Open Contacts Each Pole; 20 amp resistive/general purpose, 12-277 Volts AC; 20 amp resistive/general purpose, 28 Volts DC; 20 amp ballast, 120-277 VAC; 1 HP, 120 VAC 60 Hz; 98 LRA; 22 FLA; 2 HP, 240 VAC 60 Hz; 80 LRA; 30 FLA; 5 amp tungsten, 120-240 VAC; 470 VA pilot duty, 12-240 VAC; TV-5, 120240 VACI Normally Closed Contacts 10 Amp Resistive/general purpose, 12-277 VAC; 10 Amp Resistive/ general purpose, 28 Volts DC; 3 Amp ballast, 120-277 VAC; 1/4 HP, 120 VAC 60 Hz; 1/2 HP, 240 VAC 60 Hz; 30 LRA; 12 FLA; 275 VA pilot duty, 12-240 VAC. The time switch shall be enclosed in a lockable steel \_ (NEMA 1) (NEMA 3R) enclosure. The time switch (user selectable 120, 208, 240 or 277 VAC 50 or 60 Hz) (24 VAC 60 Hz) source. The time switch shall be powered by a \_ shall be INTERMATIC Model \_(ET70815CR or ET70815CR24 8-circuit) (ET71615CR or ET71615CR24 16-circuits).

| Model#                    | Circuits | Switch | Clock Voltage   | Amp Rating | <b>HP Rating</b> | Enclosure |
|---------------------------|----------|--------|-----------------|------------|------------------|-----------|
| ET70815CR12               | 8        | SPDT   | 120/208/240/277 | 20         | 1HP / 2HP        | NEMA3R    |
| ET70815CR24 <sup>12</sup> | 8        | SPDT   | 24              | 20         | 1HP / 2HP        | NEMA3R    |
| ET71615CR <sup>12</sup>   | 16       | SPDT   | 120/208/240/277 | 20         | 1HP / 2HP        | NEMA3R    |
| ET71615CR2412             | 16       | SPDT   | 24              | 20         | 1HP / 2HP        | NEMA3R    |

<sup>&</sup>lt;sup>1</sup> Multi-Circuit Models feature contacts that can be field configured to act independently operated SPDT, or simultaneously operated, or independently pulsed SPDT for contactor and bell ringing applications.

<sup>&</sup>lt;sup>2</sup> Complies with California Title 24 for multi-level outdoor lighting control

# **Next Generation Programming Software**





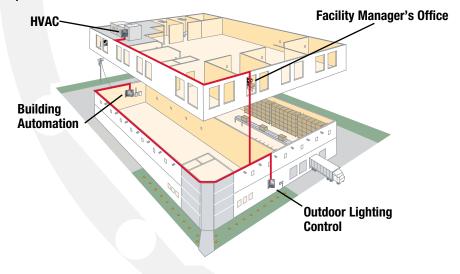
### Unleash the Power of the Next Generation Time Switch!

The NextGen programming software written specifically for installing contractors and maintenance personnel is the fastest and easiest way to program the Intermatic Next Generation series of electronic time switches.

#### **Features**

- Programming of all current Next Generation models (1, 2, 4, 8, & 16 circuits)
- · Easy point-n-click programming of holiday and daily event schedules
- File save function for archiving event schedules for future editing and use
- On-line help manual gives easy to follow directions
- One-button time and date programming synchronizes the time switch with your PC's date and time

#### Request Item# 300ET10018



Networking capabilities allow programming of the Next Generation time switches allowing facility managers to make schedule changes from across the building or campus through an intranet or even across country through the Internet.

#### NEXT GENERATION ACCESSORIES



#### ET7232M / ET7232M1

RS232 Serial Interface for all Next Generation Time switches. Also used as remote override for 1 & 2 circuit models.



#### 156ET9402A

8-Circuit remote override input header. (Not Pictured) 156ET9403A

16-Circuit remote override input header.

#### LAN Connection to a PC

Office computers are typically connected through a local area networks (LANs) which provides an in-place backbone to allow control of Next Generation time switches from any linked PC. This applies to office buildings as well as distributed facilities such as university or corporate campuses.

#### **NextGen Distributed Control**

By linking distributed Next Generation time switches together with the facility manager's PC the time and associated cost of making periodic schedule changes is greatly reduced and all timing throughout the network can be synchronized to the second with the PC's internal clock.







### **Energy Master Panels**

The Energy Master Control System provides 100% digital replacement for traditional time clocks, twist timers and contactor packages. Panels and switches daisy-chain together using category 5 patch cables with RJ45 connectors. The digital timing control (DTC) of the EM1400 Energy Master Series includes many advance features and provides for complete control of up to 256 circuits. Control options are enhanced by the ability of the EM1400 series to accept inputs from a variety of accessory devices including; digital photo sensors, dry contact closures, keypads & switches, as well as peripheral devices such as serial and Ethernet interfaces.

#### DTC Features:

- 32 independent 365-day schedules
- · Astronomical timing of Sunrise and Sunset events
- · Large LCD user interface display
- Ten-year battery backup of time-of-day
- Non-volatile system memory stores all programming
- · Manual override of each circuit
- On-Board digital contact closure inputs
- On-Board photo sensor input

#### **MASTER PANELS**

Enclosure dimensions: 12" w x 18" h x 6" d (8 or 16 relays)

Enclosure type: Surface mount, hinged cover enclosure with friction catch, NEMA 1

Bus specifications: Devices: 16 Maximum Length: 4000 feet Maximum

Listings: UL/CUL 916 listed, ETL listed to UL 924 (for emergency circuit use)
Programming: Via EM1400 clock or via PC with EM I-Manager Software

Max. humidity: 10% - 90% non-condensing

Ambient temperature: 0° - 105° F
Power supply voltage: 120v/277v
Bus protocol: RS 485 (EM1400 bus)
Bus connector: RJ45 connectors

System Inputs: 10 Digital contact closure inputs

1 Photo sensor input (Use EM14PS photo sensor)

#### **SLAVE PANELS**

Enclosure dimensions: 12" w x 18" h x 6" d (8 or 16 relays)

Enclosure type: Surface mount, hinged cover enclosure with friction catch, NEMA 1 Listings: UL/CUL 916 listed, ETL listed to UL 924 (for emergency circuit use)

Max. humidity: 10% - 90% non-condensing

Ambient temperature: 0° - 105° F
Power supply voltage: 120v/277v
Bus protocol: RS 485 (EM1400 bus)
Bus connector: RJ45 connectors

| Model#   | Circuits | Switch | Clock Voltage | Amp Rating | DTC | Enclosure |
|----------|----------|--------|---------------|------------|-----|-----------|
| EM1408MC | 8        | SPST   | 120/277       | 30         | Yes | NEMA1     |
| EM1416MC | 16       | SPST   | 120/277       | 30         | Yes | NEMA1     |
| EM1408SC | 8        | SPST   | 120/277       | 30         | No  | NEMA1     |
| EM1416SC | 16       | SPST   | 120/277       | 30         | No  | NEMA1     |

Contacts can be field configured to independently operated SPDT, or simultaneously operated, or independently pulsed SPDT for contactor and bell ringing applications.

Complies with California Title 24 for multi-level outdoor lighting control.





















### **Energy Master Control Stations**

These 100% digital momentary switches control partitions, groups or scenes of lighting. A single button can be set up to control up to 240 circuits. Programming also allows keypad inputs to be configured for momentary, toggle, bypass timing, as well as many other popular switching functions. Control stations may be ordered with up to six buttons per gang.

| Model# | Buttons | Style     | Color |  |
|--------|---------|-----------|-------|--|
| EMKB1  | 1       | Decorator | White |  |
| EMKB2  | 2       | Decorator | White |  |
| EMKB3  | 3       | Decorator | White |  |
| EMKB4  | 4       | Decorator | White |  |
| EMKB5  | 5       | Decorator | White |  |
| EMKB6  | 6       | Decorator | White |  |

### **Energy Master Rocker Stations**

Since they look like traditional wall switches, rocker switches provide a familiar interface to a modern lighting control system and can be mounted in standard switch boxes. Both digital and contact closure rocker switches can be programmed to control any relay in any panel in the system.

### **Model EMDS**

The Momentary Rocker Switch interfaces with lighting control system through digital contact input on the master control panel or through connection to photo sensor input module (EMPS3IN).

### Model EMRS-W-D

The Digital Rocker Switch interfaces directly with the lighting control system communication bus using standard category 5 patch cables with RJ45 connectors.





### **Energy Master 120-347 Volt Relay Modules**

Intermatic offers a variety of relay configurations for different applications including the demands of today's high-efficiency ballast loads. Each relay is individually removable from the insulating track, where it is mounted within the relay panel. All relays are UL and CUL 916 listed as well as ETL Listed to UL Standard 924.

**Model EMSLNC -** Normally Closed Latching Relay **Model EMSLNO -** Normally Open Latching Relay

#### Load Ratings

 Ballast:
 30A @ 277VAC

 Tungsten:
 20A @ 120VAC

 Ballast:
 20A @ 347VAC

#### Performance Ratings

Maximum conductors:2 each # 8AWG per lugShort circuit current rating:18,000 Amps @ 277VACCycle rating:250,000 Cycles

### **Energy Master 120-347 Volt Relay Modules**

The 600 volt double-pole relay occupies the footprint of two standard single-pole relays when mounted in a EM1400 Series panel. The 600 volt relay is ideal for 277/480v (347/600 in Canada) HID loads and eliminates the need to have relays controlling lighting contactors.

**Model EMSL600NC -** Normally Closed Double-Pole 600 Volt Relay **Model EMSL600NO -** Normally Open Double-Pole 600 Volt Relay

#### Load Ratings

**Ballast:** 20A @ 600VAC

**Motor:** 1HP @ 120/208 or 120/240VAC, 2HP @ 277/480VAC

(or 347/600VAC in Canada)

#### Performance Ratings

**Maximum conductors:** 2 each # 8AWG per lug **Short circuit current rating:** 5,000\* Amps @ 600VAC

\* Implied SCCR for all UL 50 or UL 916 products is 5000 amps. This relay has not been tested to any specific SCCR.



**EMSLNC & EMSLNO** 



**EMSL600NC & EMSL600NO** 



# **Energy Master Photo Sensors & Accessories**

Intermatic has a complete line of photo sensors to optimize your lighting control system for both simple and complex site lighting applications and can even stagger ON lighting as outdoor light levels decrease. When using the photo sensor input module in conjunction with digital photo sensors the system becomes capable of delivering up to 14 different levels of lighting in reaction to sensed ambient light.

#### Model EM14PS - Outdoor Local Photo Sensor

- May be used as part of a single time schedule for outdoor lighting schedules (Photo sensor ON, time clock OFF)
- · Designed for single zone or multi-zone lighting applications
- Suitable for wet locations
- Standard 1/2" 14 threaded mounting

#### Model EMOPS1 - Outdoor Digital Global Photo Sensor

- When combined with a photo sensor input module this sensor provides up to 14 different trigger points, each controlling a unique relay group in as many as 15 relay panels
- Designed for single zone or multi-zone lighting applications
- Suitable for wet locations
- Standard 1/2" 14 threaded mounting

#### Model EMPS3IN - Photo Sensor Input Module

- Accepts input from up to 3 connected indoor or outdoor Digital Photo Sensors or contact closure inputs
- Up to 14 switch-trigger points
- Inputs may be digitally enabled or disabled via time clock or other controllers such as digital switch, building automation or occupancy sensors
- Triggers act as global ON and OFF commands; each programmed at a unique light level and controlling a unique group of relays
- · Advanced daylight harvesting features

#### Model EM-MOD - Modem Module

- Mounts directly into the EM1408MC or EM1416MC master panel
- Allows the EM1400 series to be programmed remotely over standard telephone lines
- Requires EM I-Manager Software



EM14PS & EM0PS1



EMPS3IN



**EM-MOD** 

# **SiteMaster Lighting Panels**





### **SiteMaster**

Intermatic's site lighting control includes mechanical, electronic or astronomic time switch control of high current loads. Relay, breaker and multi-circuit options allow for electrical configurations up to 120 Amp.

- Pre-wired for easy installation
- Heavy duty mounting bracket for secure panel mounting
- Option of mechanical, 24-hour or 7-day electronic or astronomic controls
- Captive screws for added convenience while panel is being serviced
- NEMA 3R lockable enclosure
- Main disconnect lock for added safety during maintenance
- Stainless steel enclosure option for long life in severe conditions



SM2200 Series



SM4400 Series



SM6600 Series



# **SiteMaster Lighting Panels**



#### **Applications:**

- Schools
- Offices
- Airports
- Stores
- Hotels
- RestaurantsFactories
- Apartments
- Electrical Utilities
- Municipalities

#### **For Controlling:**

- Roadway Lighting
- Parking Structures
- Parking Lots
- Billboards
- Entertainment Venues
- Ball Fields
- Driving Ranges
- Parks
- Outdoor Area Lighting





C22.2-177

-40°F (-40°C) to 130°F (54°C)

### SiteMaster Site Lighting Control Panels

These heavy duty lighting control panels are designed for harsh environmental and lighting load conditions. Features include; Pre-wiring for quick installation, heavy-duty NEMA 3R enclosures, mercury or "Ice Cube" relays, agency approved disconnect, 40, 80, 120 Amp design, locking hasps, and dead-front storage. Mechanical or electronic timing, lightning arrester, photo control, and stainless steel options.

#### SM2200 Series Specifications

Gasketless panel with two 20 Amp DPST Relays. Pre-wired with one 20 Amp double-pole Square D Homeline<sup>™</sup> main breaker. 120 V output: one twin 20 Amp breaker & one single-pole 20 Amp breaker (for 240 V output- quad breaker with common trip on outside and inside). Capable of controlling 40 Amps @ 120 V and 20 Amps @ 240 V or 12- 400 Watt HID fixtures.

#### **SM4400 Series Specifications**

Gasketless panel with two 20 Amp DPST Relays. Pre-wired with one 40 Amp double-pole Square D Homeline™ main breaker. 120 V output: Six single-pole 20 Amp breakers (240 V output: three double-pole 20 Amp breakers). Capable of controlling 80 Amps @ 120 V and 40 Amps @ 240 V or 24- 400 Watt HID fixtures.

#### **SM6600 Series Specifications**

Gasketless panel with one 60 Amp DPST mercury relay. Split buss service- Upper buss. 120 V output: Pre-wired with one 60 Amp double-pole Square D Homeline™ main breaker and one-single pole 20 Amp breaker (240 V output: one 60 Amp double-pole and one 20 Amp double-pole breaker) Lower Buss - for load connections. Eight single-pole 20 Amp breakers (for 240 V output - four double-pole breakers). Capable of controlling 120 Amp @ 120 V and 60 Amps @ 240 V or 36- 400 Watt HID fixtures.

#### SM6240D0T & SM6277D0T Series Specifications

Gasketless 14 AWG stainless-steel panel with 3-point locking system. SM6240DOT: 60 Amp DPST mercury relay. Split buss service- Upper buss. 120 V output: Pre-wired with one 60 Amp double-pole Square D Homeline<sup>™</sup> main breaker and one single-pole 20 Amp breaker. Lower Buss - for load connections: Four double-pole 20 Amp breakers. Capable of controlling 60 Amps @ 240 V or 36- 400 Watt HID fixtures. Pre-installed 15 Amp GFCl duplex convenience receptacle. SM6277DOT: 60 Amp 3PST mercury relay. Input power 480/277 V 3-Phase: Pre-wired with one 60 Amp 3-Phase main breaker and one single-phase 20 Amp breaker. Load Output: Six 20 Amp 277 V Single-Phase breakers. Capable of controlling 180 Amps @ 277 V or 54- 400 Watt HID fixtures.

#### **Engineering Specification**

Site Lighting Control Panel

The site lighting control panel shall incorporate agency approved disconnect means with lockout capability, branch circuit breakers for feeding connected lighting loads, electrically held contactor suitable for switching attached loads, and timing mechanism for control of said contactor. The control panel shall be pre-wired for installation convenience and reliability. The control panel shall be designed to accept a variety of timing mechanisms including mechanical and electronic. The control panel and all related components shall operate over a temperature range of -31°F (-35°C) to 130°F (54°C). The capacity of each branch circuit within the control panel shall be 20 amps minimum. The control panel shall be a lockable steel NEMA 3R enclosure. The control panel shall be INTERMATIC Model

\_\_\_\_\_\_(SM2200x-x 2-branch; 4,800 Watt HID) (SM4400x-x 6-branch; 9,600 Watt HID) (SM6600x-x 8-branch; 14,400 Watt HID) (SM6240DOT) (SM6277DOT).

# **SiteMaster Lighting Panels**

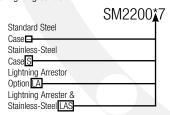


| Model#    | Time Switch/Description         | # Outputs | Output VAC | Photo Control |
|-----------|---------------------------------|-----------|------------|---------------|
| SM2200*1  | T103M Mechanical Time Switch    | 2         | 120 VAC    | No            |
| SM2200*2  | T103M Mechanical Time Switch    | 2         | 120 VAC    | Yes           |
| SM2200*3  | ET101CM Electronic Time Switch  | 2         | 120 VAC    | No            |
| SM2200*4  | ET101CM Electronic Time Switch  | 2         | 120 VAC    | Yes           |
| SM2200*5  | ET279C Electronic Time Switch   | 2         | 120 VAC    | No            |
| SM2200*6  | ET279C Electronic Time Switch   | 2         | 120 VAC    | Yes           |
| SM2200*7  | ET104CM Electronic Time Switch  | 1         | 240 VAC    | No            |
| SM2200*8  | ET104CM Electronic Time Switch  | 1         | 240 VAC    | Yes           |
| SM2200*16 | ET8215CM Astronomic Time Switch | 2         | 120 VAC    | No            |

| Model#                 | Time Switch/Description               | # Outputs | Output VAC | Photo Control |
|------------------------|---------------------------------------|-----------|------------|---------------|
| SM4400*1               | T103M Mechanical Time Switch          | 4         | 120 VAC    | No            |
| SM4400*2               | T103M Mechanical Time Switch          | 4         | 120 VAC    | Yes           |
| SM4400*3               | ET101CM Electronic Time Switch        | 4         | 120 VAC    | No            |
| SM4400*4               | ET101CM Electronic Time Switch        | 4         | 120 VAC    | Yes           |
| SM4400*51              | ET279C Electronic Time Switch         | 4         | 120 VAC    | No            |
| SM4400*6 <sup>1</sup>  | ET279C Electronic Time Switch         | 4         | 120 VAC    | Yes           |
| SM4400*7               | ET70115C Electronic Astro Time Switch | 4         | 120 VAC    | No            |
| SM4400*8 <sup>1</sup>  | ET70215C Electronic Astro Time Switch | 4         | 120 VAC    | No            |
| SM4400*91              | ET70215C Electronic Astro Time Switch | 4         | 120 VAC    | Yes           |
| SM4400*10              | T104M Mechanical Time Switch          | 2         | 240 VAC    | No            |
| SM4400*11              | T104M Mechanical Time Switch          | 2         | 240 VAC    | Yes           |
| SM4400*12              | ET104CM Electronic Time Switch        | 2         | 240 VAC    | No            |
| SM4400*13              | ET104CM Electronic Time Switch        | 2         | 240 VAC    | Yes           |
| SM4400*14 <sup>1</sup> | ET70215C Electronic Astro Time Switch | 2         | 240 VAC    | No            |
| SM4400*16              | ET8215CM Astronomic Time Switch       | 4         | 120 VAC    | No            |

| Model#                 | Time Switch/Description               | # Outputs | Output VAC | Photo Control |
|------------------------|---------------------------------------|-----------|------------|---------------|
| SM6600*1               | T103M Mechanical Time Switch          | 8         | 120 VAC    | No            |
| SM6600*2               | T103M Mechanical Time Switch          | 8         | 120 VAC    | Yes           |
| SM6600*3               | ET101CM Electronic Time Switch        | 8         | 120 VAC    | No            |
| SM6600*4               | ET101CM Electronic Time Switch        | 8         | 120 VAC    | Yes           |
| SM6600*5               | ET104CM Electronic Time Switch        | 4         | 240 VAC    | No            |
| SM6600*6               | ET104CM Electronic Time Switch        | 4         | 240 VAC    | Yes           |
| SM6600*71              | ET279CM Electronic Time Switch        | 8         | 120 VAC    | No            |
| SM6600*8 <sup>1</sup>  | ET279CM Electronic Time Switch        | 8         | 120 VAC    | Yes           |
| SM6600*9               | ET70115C Electronic Astro Time Switch | 8         | 120 VAC    | No            |
| SM6600*10 <sup>1</sup> | ET70215C Electronic Astro Time Switch | 8         | 120 VAC    | No            |
| SM6600*16              | ET8215CM Astronomic Time Switch       | 8         | 120 VAC    | No            |

<sup>1</sup>Two independent circuits for bi-level or 2-sided control. Complies with California Title 24 requirements for multi-level outdoor lighting control



| Standard Steel                           | SM4400* |
|--|---------|
| Case Stainless-Steel                     |         |
| Lightning Arrestor Option LA             |         |
| Lightning Arrester & Stainless-Steel LAS |         |

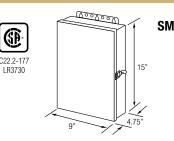
|                      | SM66002 | 7 |
|----------------------|---------|---|
| Standard Steel       |         | • |
| Case                 |         |   |
| Stainless-Steel      |         |   |
| Case S               |         |   |
| Lightning Arrestor   |         |   |
| Option LA            |         |   |
| Lightning Arrester & |         |   |
| Stainless-Steel I AS |         |   |



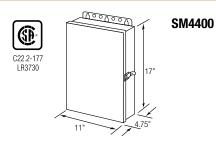
#### SITE LIGHTING PANEL TIME SWITCH OPTIONS

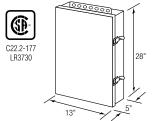
Mechanical, Electronic, & Astronomic Field Changeable Mechanisms

#### **Panel Dimensions**









SM6600



# **Decorator Spring Wound Timers**



#### **Applications:**

- Indoor Lighting
- Outdoor Lighting
- Lighting Overrides
- Exhaust Fans
- Whole House Fans
- Ventilating Fans
- Tennis Court Lighting
- Pumps
- Air Conditioners
- Steam Rooms
- · Bathroom Fans
- Whirlpools
- Porch Lights
- Broom Closets
- · Carriage Lights · Television Sets
- Self Storage Units
- · Engine Block Heaters
- Process Controls













155°F

### FD Decorator Series Auto-Off Timers

These energy saving timers use no electricity to operate. These timers are designed to replace any standard wall switch, single or multi-gang, and automatically limit the "ON" time of fans, lights, motors, heaters and other energy consuming loads. Time limits of 5, 15, 30 and 60 minutes and 2, 4, 6 and 12 hours are available. The "hold feature" allows the user to override the automatic shut-off function for extended use of the load as required. Supplied with a molded white, ivory or almond time dial plate designed to fit either toggle or decorator style switch plates; single or multi-gang with no field modifications required to fit either style switch plate. Time saving "up front" terminal connection with teeter type terminals and an easy "press-on" knob design ensure quick and easy installation.

#### Specifications

#### Switch Rating -

Inductive: 20 Amp 125 VAC 50/60 Hz; 10 Amp 250 VAC 50/60 Hz; 10 Amp 277 VAC 50/60 Hz,

Tungsten: 7 Amp 125 VAC,

Motor: 1 HP 125 VAC 50/60 Hz; 2 HP 250 VAC 50/60Hz

Caution: Do not use for sunlamps, sauna, etc... Colors - Available in White, Ivory, and Almond

Style - Decorator Styling - Can be used with decorator or toggle type switch plates.

#### **Engineering Specification**

Spring Wound Auto Shut-Off Timer (a.k.a. Interval Timer).

Provide and install as indicated a mechanical spring wound timer that requires no electricity to operate the timing mechanism. The timer shall be supplied with a threaded shaft. The timer must be able to fit a standard 2-1/2 inch deep wall box and accept a rectangular decorator wall plate, standard toggle switch plate or be capable of mounting easily in a panel board. Timer contacts shall break current at the end of timed cycle. Various timing ranges and switch contact arrangements shall be available up to 12 hours, with or without "HOLD" feature for constant ON. Timer shall be Intermatic Model FD\_ \_ (Fill in for required time range, contact arrangement and

| Time Switch Hold |        |      | IVORY      |          | WHITE      |           | ALMOND     |          |
|------------------|--------|------|------------|----------|------------|-----------|------------|----------|
| Cycle            | SWITCH | Hold | Intermatic | Grasslin | Intermatic | Grasslin  | Intermatic | Grasslin |
| 5 Min            | SPST   | No   | FD5M       | KLT5M    | FD5MW      | KLT5M-W   |            |          |
| 15 Min           | SPST   | No   | FD15MC     | KLT15M   | FD15MWC    | KLT15M-W  | FD15MAC    |          |
| 15 Min           | SPST   | Yes  | FD15MH     | KLT15MH  | FD15MWH    | KLT15MH-W |            |          |
| 30 Min           | SPST   | No   | FD30MC     | KLT30M   | FD30MWC    | KLT30M-W  | FD30MAC    |          |
| 30 Min           | SPST   | Yes  | FD30MH     | KLT30MH  | FD30MWH    | KLT30MH-W |            | /        |
| 60 Min           | SPST   | No   | FD60MC     | KLT60M   | FD60MWC    | KLT60M-W  | FD60MAC    |          |
| 60 Min           | SPST   | Yes  | FD60MH     | KLT60MH  | FD60MWH    | KLT60MH-W |            |          |
| 2 Hr             | SPST   | No   | FD2H       | KLT2H    | FD2HW      | KLT2H-W   |            |          |
| 4 Hr             | SPST   | No   | FD4H       | KLT4H    | FD4HW      | KLT4H-W   |            |          |
| 6 Hr             | SPST   | No   | FD6H       | KLT6H    | FD6HW      | KLT6H-W   |            |          |
| 6 Hr             | SPST   | Yes  | FD6HH      | KLT6HH   | FD6HHW     | KLT6HH-W  |            |          |
| 12 Hr            | SPST   | No   | FD12HC     | KLT12H   | FD12HWC    | KLT12H-W  | -          |          |
| 12 Hr            | SPST   | Yes  | FD12HH     | KLT12HH  | FD12HHW    | KLT12HH-W |            |          |
| 2 Hr             | SPDT   | No   | FD32H      | KLT2H    | FD32HW     | KLT2H-W   |            |          |
| 4 Hr             | SPDT   | No   | FD34H      | KLT4H    | FD34HW     | KLT4H-W   |            |          |
| 6 Hr             | SPDT   | No   | FD36H      | KLT6H    | FD36HW     | KLT6H-W   |            |          |
| 12 Hr            | SPDT   | No   |            |          | FD312HW    | KLT12H-W  |            |          |
| 15 Min           | DPST   | No   | FD415M     |          |            |           |            |          |
| 30 Min           | DPST   | No   | FD430M     |          | FD430MW    |           |            |          |
| 60 Min           | DPST   | No   | FD460M     |          | FD460MW    |           |            |          |
| 6 Hr             | DPST   | No   | FD46H      |          | FD36HW     |           |            |          |

# **Commercial Spring Wound Timers**



### FF Commercial Series Auto-Off Timers

These energy saving commercial timers use no electricity to operate. These timers are designed to replace any standard wall switch, single or multi-gang, and automatically limit the "ON" time of fans, lights, motors, heaters and other energy consuming loads. Time limits of 5, 15, 30 and 60 minutes and 2, 4, 6 and 12 hours are available. The "hold feature" allows the user to override the automatic shut-off function for extended use of the load as required. Rugged time-dial plate takes the abuse encountered in commercial environments. Time saving "up front" terminal connection with teeter type terminals and an easy "press-on" knob design ensure quick and easy installation.

#### Specifications

Switch Rating -

Inductive: 20 Amp 125 VAC 50/60 Hz; 10 Amp 250 VAC 50/60 Hz; 10 Amp 277 VAC 50/60 Hz,

Tungsten: 7 Amp 125 VAC,

Motor: 1 HP 125 VAC 50/60 Hz; 2 HP 250 VAC 50/60Hz

Caution: Do not use for sunlamps, sauna, etc... Colors - Commercial "brush metal" look.

Style - New simulated metal finish meets NEC requirements.

#### **Engineering Specification**

Spring Wound Auto Shut-Off Timer (a.k.a. Interval Timer).

Provide and install as indicated a mechanical spring wound timer that requires no electricity to operate the timing mechanism. The timer shall be supplied with a threaded shaft. The timer must be able to fit a standard 2-1/2 inch deep wall box with commercial wall plate or be capable of mounting easily in a panel board. Timer contacts shall break current at the end of timed cycle. Various timing ranges and switch contact arrangements shall be available up to 12 hours, with or without "HOLD" feature for constant ON. Timer shall be Intermatic Model FF\_ \_\_ (Fill in for required time range and contact arrangement).

| Time<br>Cycle | Switch | Hold | Intermatic | Grasslin   |
|---------------|--------|------|------------|------------|
| 5 Min         | SPST   | No   | FF5M       | KLT5M-A    |
| 5 Min         | SPST   | No   | FF5MH      | KLT5MH-A   |
| 15 Min        | SPST   | No   | FF15MC     | KLT15M-A   |
| 15 Min        | SPST   | Yes  | FF15MH     | KLT15MH-A  |
| 30 Min        | SPST   | No   | FF30MC     | KLT30M-A   |
| 30 Min        | SPST   | Yes  | FF30MH     | KLT30MH-A  |
| 60 Min        | SPST   | No   | FF60MC     | KLT60M-A   |
| 60 Min        | SPST   | Yes  | FF60MHC    | KLT60MH-A  |
| 2 Hr          | SPST   | No   | FF2H       | KLT2H-A    |
| 4 Hr          | SPST   | No   | FF4H       | KLT4H-A    |
| 6 Hr          | SPST   | No   | FF6H       | KLT6H-A    |
| 6 Hr          | SPST   | Yes  | FF6HH      | KLT6HH-A   |
| 12 Hr         | SPST   | No   | FF12HC     | KLT12H-A   |
| 12 Hr         | SPST   | Yes  | FF12HHC    | KI T12HH-A |

| Time<br>Cycle | Switch | Hold | Intermatic | Grasslin  |
|---------------|--------|------|------------|-----------|
| 15 Min        | SPDT   | No   | FF315M     | KLT15MH-A |
| 30 Min        | SPDT   | No   | FF330M     | KLT30MH-A |
| 60 Min        | SPDT   | No   | FF360M     | KLT60MH-A |
| 2 Hr          | SPDT   | No   | FF32H      | KLT2H-A   |
| 2 Hr          | SPDT   | Yes  | FF32HH     |           |
| 4 Hr          | SPDT   | No   | FF34H      | KLT4H-A   |
| 4 Hr          | SPDT   | Yes  | FF34HH     |           |
| 6 Hr          | SPDT   | No   | FF36H      | KLT6H-A   |
| 12 Hr         | SPDT   | No   | FF312H     | KLT12H-A  |
| 12 Hr         | SPDT   | Yes  | FF312HH    | KLT12HH-A |
| 15 Min        | DPST   | No   | FF415M     |           |
| 30 Min        | DPST   | No   | FF430M     |           |
| 60 Min        | DPST   | No   | FF460M     |           |
| 6 Hr          | DPST   | No   | FF46H      |           |
| 12 Hr         | DPST   | No   | FF412H     |           |













# **Electronic Auto-Off Timers**



#### **Applications:**

- Indoor Lighting
- Outdoor Lighting
- · Lighting Overrides
- Exhaust Fans
- Whole House Fans
- Ventilating Fans
- Tennis Court Lighting
- Pumps
- Air Conditioners
- Steam Rooms
- Bathroom Fans
- Whirlpools
- · Porch Lights
- Broom Closets
- · Carriage Lights
- Television Sets
- Self Storage Units
- Engine Block Heaters
- Process Controls



E76987





2°F 2.5 °C) 1.°

### EI200 Series Decorator Electronic Auto-Off Timer

The El200 series timers provide silent operation in time ranges from 30 minutes up to 12 hours. Four basic models available in three colors reduce the need to stock as many timers, freeing up shelf space and providing more specification flexibility. Replaces single-pole switches in a variety of applications.

#### Specifications

**Switch** – Single-pole **Switch Rating** –

Resistive (heater): 15 Amp, 120 VAC 1800 Watts; Tungsten (incandescent): 8.3 Amp, 120 VAC 1000 Watts;

Ballast (Fluorescent): 8 Amp, 120 VAC;

Motor: 1/4 H.P., 120 VAC;

Caution: Do not use for sunlamps, sauna, etc... Colors – Available in White, Ivory, and Light Almond

Style - Decorator Styling.

Special Voltages and Cycles - 50 or 60 Hz.

#### **Engineering Specification**

Electronic Auto Shut-Off Timer (a.k.a. Interval Timer).

Provide and install as indicated an electronic timing mechanism. The timer shall be supplied with an LED display and single-button operation. The timer must be able to fit a standard wall box and accept a rectangular decorator wall plate. Timer contacts shall break current at the end of timed cycle. Timer shall be capable of single-pole operation. Various user selectable timing ranges shall be available up to 12 hours, with or without "HOLD" feature for constant ON. Timer shall be Intermatic Model \_\_\_\_\_\_\_\_ (For 5/10/15/30 Minute El200 - Ivory, El200W - White, El200LA - Light Almond; For 10/20/30/60 Minute El210 - Ivory, El210W - White, El20LA - Light Almond; For 1/2/4/8 Hour El220 - Ivory, El220W - White, El220LA - Light Almond; For 2/4/8/12 Hour El230 - Ivory, El230W - White, El230LA - Light Almond).

| Model#    | Time Range                | Switch      | Clock Voltage | Max<br>Wattage | Color        | HOLD |
|-----------|---------------------------|-------------|---------------|----------------|--------------|------|
| El200     | 5/10/15/30 Minute         | Single-Pole | 120 VAC       | 1,800          | lvory        | Yes  |
| EI200W    | 5/10/15/30 Minute         | Single-Pole | 120 VAC       | 1,800          | White        | Yes  |
| El200LA   | 5/10/15/30 Minute         | Single-Pole | 120 VAC       | 1,800          | Light Almond | Yes  |
| El205*    | 5/15/30/45/60 Minute      | Single-Pole | 120 VAC       | 1,800          | lvory        | No   |
| EI205W*   | 5/15/30/45/60 Minute      | Single-Pole | 120 VAC       | 1,800          | White        | No   |
| El205LA*  | 5/15/30/45/60 Minute      | Single-Pole | 120 VAC       | 1,800          | Light Almond | No   |
| El210     | 10/20/30/60 Minute        | Single-Pole | 120 VAC       | 1,800          | lvory        | Yes  |
| El210W    | 10/20/30/60 Minute        | Single-Pole | 120 VAC       | 1,800          | White        | Yes  |
| El210LA   | 10/20/30/60 Minute        | Single-Pole | 120 VAC       | 1,800          | Light Almond | Yes  |
| El215**   | 15/30/60 Minute, 2/4 Hour | Single-Pole | 120 VAC       | 1,800          | lvory        | No   |
| EI215W**  | 15/30/60 Minute, 2/4 Hour | Single-Pole | 120 VAC       | 1,800          | White        | No   |
| El215LA** | 15/30/60 Minute, 2/4 Hour | Single-Pole | 120 VAC       | 1,800          | Light Almond | No   |
| El220     | 1/2/4/8 Hour              | Single-Pole | 120 VAC       | 1,800          | lvory        | Yes  |
| El220W    | 1/2/4/8 Hour              | Single-Pole | 120 VAC       | 1,800          | White        | Yes  |
| El220LA   | 1/2/4/8 Hour              | Single-Pole | 120 VAC       | 1,800          | Light Almond | Yes  |
| El230     | 2/4/8/12 Hour             | Single-Pole | 120 VAC       | 1,800          | lvory        | Yes  |
| EI230W    | 2/4/8/12 Hour             | Single-Pole | 120 VAC       | 1,800          | White        | Yes  |
| El230LA   | 2/4/8/12 Hour             | Single-Pole | 120 VAC       | 1,800          | Light Almond | Yes  |
| El235*    | 15/30/45/60/120 Minute    | Single-Pole | 120 VAC       | 1,800          | lvory        | No   |
| EI235W*   | 15/30/45/60/120 Minute    | Single-Pole | 120 VAC       | 1,800          | White        | No   |
| El235LA*  | 15/30/45/60/120 Minute    | Single-Pole | 120 VAC       | 1,800          | Light Almond | No   |

<sup>\*</sup> Meets or exceeds CEC Title 24, ASHRAE 90.1 and IECC requirements for enclosed spaces

<sup>\*\*</sup> Meets or exceeds ASHRAE 90.1 Requirements for enclosed spaces.

# **Digital Auto-Off Timers**



### EI400 Series Decorator Electronic Auto-Off Timer

The EI400 series effectively replaces 16 different spring-wound models, freeing up additional shelf space, providing more specification flexibility, ease of installation and absolutely silent operation. A factory supplied CR2 lithium battery provides up to three years of time keeping without AC power and user program selection is stored in non-volatile memory. A low battery indicator appears in the display when the battery requires replacement. A field selectable warning feature provides an audible and/or visual signal that the load is about to switch off. Functions to control all voltages and frequencies (within the contact ratings) with no adjustments required. Provides "true" 3-way control allowing the load interval to be started and stopped using a standard mechanical switch.

#### **Specifications**

Switch - Single-pole or 3-way (Multi-way) Compatible

Switch Rating -

Resistive (heater): 20 Amp, 120-277 VAC;

Tungsten (incandescent): 15 Amp, 120 VAC; 6 Amp, 208-277 VAC;

Ballast (Fluorescent): 16 Amp, 120-277 VAC; Motor: 1 H.P., 120 VAC; 2 HP, 240 VAC; 4 Amp, Caution: Do not use for sunlamps, sauna, etc... Colors - Available in White, Ivory, and Light Almond

Style - Decorator Styling.

Special Voltages and Cycles - 50 or 60 Hz.

#### **Engineering Specification**

Electronic Auto Shut-Off Timer (a.k.a. Interval Timer).

Provide and install as indicated an electronic timer that requires no neutral to operate the timing mechanism. The timer shall be supplied with an LCD screen and user selectable end-of-interval warning visual or audible warning. The timer must be able to fit a standard wall box and accept a rectangular decorator wall plate. Timer contacts shall break current at the end of timed cycle. Timer shall be capable of single-pole or 3-way (multi-pole) operation and compatible with standard electrical wiring of said. Various user selectable timing ranges shall be available up to 12 hours, with or without "HOLD" feature for constant ON. Timer shall be Intermatic Model (EI400 - Ivory, EI400W - White, EI400LA - Light Almond).

| Model#   | Switch              | Contact Voltage           | Wattage       | Color        |
|----------|---------------------|---------------------------|---------------|--------------|
| EI400C   | Single-Pole / 3-Way | 12 - 277 VAC; 12 - 28 VDC | 1,800 - 4,155 | lvory        |
| EI400WC  | Single-Pole / 3-Way | 12 - 277 VAC; 12 - 28 VDC | 1,800 - 4,155 | White        |
| EI400LAC | Single-Pole / 3-Way | 12 - 277 VAC; 12 - 28 VDC | 1,800 - 4,155 | Light Almond |

### EI15MH Minute Electronic Auto-Off Timer

This energy saving timer is designed to replace any standard wall switch, single or multi-gang, and automatically limits the "ON" time of lighting loads. This compact solid-state design with silent, state-of-the-art technology provides 2-way operation – immediate switch "OFF" or a time-delayed "OFF" after 15 minutes. To restart timer, simply switch to "OFF" for one second then move toggle switch back to TIMER position. A blocking plate, supplied with the timer, may be used to eliminate permanent "ON" mode for timed "ON" use only.

#### **Specifications**

Switch Rating - 40 - 500 Watt incandescent or P-type thermally protected fluorescent ballast.



#### **Applications:**

- Indoor Lighting
- Outdoor Lighting
- Lighting Overrides
- Exhaust Fans
- Whole House Fans
- Ventilating Fans
- Tennis Court Lighting
- Pool Pumps
- Fountain Pumps
- HID Lighting
- Feeding Equipment
- Watering Equipment
- Library Lights
- · Classroom Lights

- · Fluorescent Lighting
- PAR Lights
- Heaters
- Recreational Vehicles
- Air Conditioners
- Steam Rooms
- · Bathroom Fans
- Whirlpools
- Porch Lights
- Broom Closets
- Carriage Lights
- Television Sets
- Self Storage Units





UI 917















# **Digital 7-Day Time Switch**



#### **Applications:**

- Schools
- Offices
- Airports
- Stores
- Hotels
- Restaurants
- Apartments

#### **For Controlling:**

- Hall Lights
- Ceiling Lights
- Whole House Fans
- Paddle Fans
- Porch Lights
- Outdoor Lights
- Air Conditioners
- · Coffee Makers
- Boilers
- Attic Fans
- Industrial Fans
- Automated Control







158°F



# EI500 Series Decorator Digital 7-Day Time Switch

The El500 series compact 7-day timers provides up to 7-ON and 7-OFF operations per week which can be used for 24-hour or 7-day load control of lights, fans, pumps, and other medium-duty loads for energy savings, security, and convenience. Its compact, quiet, low profile design is easy to program for to-the-minute 24-hour or 7-day control. In addition, the display continuously shows time of day, day of the week, timer load and the load status. Available in three colors white, ivory, and light almond. Replaces single-pole switches in a variety of applications.

#### Specifications

Switch - Single-pole Switch Rating -

> Resistive (heater): 15 Amp, 120 VAC 1800 Watts; Tungsten (incandescent): 8.3 Amp, 120 VAC 1000 Watts;

Ballast (fluorescent): 8 Amp, 120 VAC;

Motor: 1/4 H.P., 120 VAC;

Caution: Do not use for sunlamps, sauna, etc...

Events - 7 ON & 7 OFF Events per Day.

Colors - Available in White, Ivory, and Light Almond

Style - Decorator Styling.

Special Voltages and Cycles - 50 or 60 Hz.

#### **Engineering Specification**

Electronic 7-Day Timer.

The timer switch shall be a solid state electronic control capable of permitting 7-0N and 7-0FF set points to be distributed through a 7-day time period. The time and set points shall be programmable to the nearest minute with a minimum ON duration of 1 minute and a maximum ON duration of 6 days, 23 hours, 59 minutes. The timer shall have a backlit digital LCD readout to show day-of-week and time-of-day using 12 hour AM/PM indicator. The time switch shall provide a manual override control for both temporary or permanent

Time switch shall operate over a temperature range of 32°F (0°C) to 158°F (70°C). An internal rechargeable battery shall protect

information and time-of-day for a minimum of 36 hours. Switch configuration to be SPST with a UL listed rating of: 20 amp Resistive, 120 Volts AC, 50/60 Hz; 15 amps Resistive, 120 Volts AC, 50/60 Hz; 1/4 HP, 120 Volts AC, 50/60 Hz; 8.3 amps Tungsten, 120 Volts

50/60 Hz; 10 amps Ballast, 120 Volts AC, 50/60 Hz The timer must be able to fit a standard wall box and accept a rectangular decorator wall plate. Timer contacts shall make or break current according to user adjustable program. Timer shall be Intermatic Model (Ivory - EI500, White - EI500W, Light Almond - EI500LA)

| Model#   | Switch      | Clock Voltage    | Max<br>Wattage | Color        |
|----------|-------------|------------------|----------------|--------------|
| EI500C   | Single-Pole | 120 VAC 50/60 Hz | 1,800          | lvory        |
| EI500WC  | Single-Pole | 120 VAC 50/60 Hz | 1,800          | White        |
| EI500LAC | Single-Pole | 120 VAC 50/60 Hz | 1,800          | Light Almond |

# **Electronic 7-Day Astro Time Switch**



### EI600 Series Decorator Electronic 7-Day Astro Time Switch

This easy to program timer provides up to 40 ON/OFF operations per week which can be used for 24-hour or 7-day load control. The astronomic feature provides sunset ON and sunrise OFF settings and the auto daylight savings adjustment means you can "set-it and forget-it". The independent 7-day programming provides complete flexibility for applications where load switching differs each day of the week. Astronomic programming can be combined with independent programs to provide a sunset ON and timed OFF program. A factory supplied CR2 lithium battery provides up to three years of time keeping without AC power and user program selections are stored in non-volatile memory. A low battery indicator appears in the display when the battery requires replacement. In addition, the display continuously shows time of day, day of the week, timer load and the load status. The timer has an isolated single pole single throw switch which allows the timer to switch any load type, including PAR lamps and motor loads from 12 to 277 volts AC or 12 to 28 volts DC, within the specified ratings. A "3 wire" design allows the timer to replace, or be used as a single-pole or 3-way (multi-way) switch.

#### Specifications

Switch - Single-pole or 3-way (Multi-way) Compatible

Switch Rating -

Resistive (heater): 20 Amp, 120-277 VAC

Tungsten (incandescent): 15 Amp, 120 VAC; 6 Amp, 208-277 VAC

Ballast (fluorescent): 16 Amp, 120-277 VAC

Motor: 1 H.P., 120 VAC; 2 H.P., 240 VAC; 4 Amp, DC Loads:12 VDC; 2 Amp, 28 VDC

Caution: Do not use for sunlamps, sauna, etc...

Events - 40 ON/OFF Events per week.

Colors - Available in White, Ivory, and Light Almond

Style - Decorator Styling.

Special Voltages and Cycles - 50 or 60 Hz.

Warranty - 5 Years

#### **Engineering Specification**

Electronic 7-Day astronomic Timer.

The timer switch shall be a solid state electronic control capable of permitting 40 ON/OFF set points to be distributed through a 7-day time period with 1 astro ON and 1 astro OFF set point per day. The time and set points shall be programmable to the nearest minute with a minimum ON duration of 1 minute and a maximum ON duration of 6 days, 23 hours, 59 minutes. The timer shall have a digital LCD readout to show day-of-week and time-of-day using 12 hour AM/PM indicator. The time switch shall provide a manual override control for both temporary or permanent override.

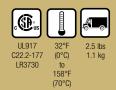
Time switch shall operate over a temperature range of 32°F (0°C) to 104°F (40°C). A lithium battery provides up to three years of time keeping without AC power and user program selections are stored in a non-volatile memory. Switch configuration to be SPST with a UL listed rating of: Resistive (heater): 20 Amp,120-277 VAC; Tungsten (incandescent):15 Amp, 120 VAC; 6 Amp, 208-277 VAC; Ballast (Fluorescent): 16 Amp, 120-277 VAC; Motor: 1 H.P., 120 VAC; 2 H.P., 240 VAC; 4 Amp, DC Loads: 12 VDC; 2 Amp, 28 VDC. The timer must be able to fit a standard wall box and accept a rectangular decorator wall plate. Timer contacts shall make or break current according to user adjustable program. Timer shall be Intermatic Model \_\_\_\_\_\_ (Ivory - El600, White - El600W, Light Almond - El600LA)

| Model#   | Switch              | Contact                   | мах<br>Wattage | Color        |
|----------|---------------------|---------------------------|----------------|--------------|
| EI600C   | Single-Pole / 3-way | 12 - 277 VAC; 12 - 28 VDC | 1,800-4,155    | lvory        |
| El600WC  | Single-Pole / 3-way | 12 - 277 VAC; 12 - 28 VDC | 1,800-4,155    | White        |
| EI600LAC | Single-Pole / 3-way | 12 - 277 VAC; 12 - 28 VDC | 1,800-4,155    | Light Almond |



#### **Energy Code Tip:**

Meet energy codes with a simple wall switch replacement. Manual ON assures lights are used only when needed. The sweep OFF makes sure lights are not left ON all night long with a switch that is set to turn OFF multiple times in the evening. Replace wall switch occupancy sensors to eliminate nuisance turn OFF.





# **24-Hour Mechanical Time Switches**



#### **Applications:**

- Schools
- Offices
- Airports
- Stores
- Hotels
- Restaurants
- Parks
- Apartments

#### **For Controlling:**

- Hall Lights
- Ceiling Lights
- Whole House Fans
- Paddle Fans
- Porch Lights
- Outdoor Lights
- Air Conditioners
- Coffee Makers
- Boilers
- Attic Fans
- Industrial Fans
- Automated Control





UL917 22.2-177

2.5 lbs 1.1 kg

### Heavy Duty In-Wall Time Switches

These heavy duty timers can be used to turn on lights, fans, pumps and other heavy duty loads for energy savings, security and convenience. The timer is designed to mount to any standard junction box for replacing a wall switch. Models are available in single ON / OFF or multiple ON / OFF type. Both models have an easy to use manual override.

Model E1010 equipped with a 24 hour dial divided in half-hour increments with a permanently attached "ON" and "OFF" tripper permitting single "ON / OFF" control every 24 hours. Model E1020 equipped with a multiple program dial. The dial accommodates 12 "ON" and 12 "OFF" trippers. Furnished with two "ON" and two "OFF" trippers. Both timers have three color code leads and require a hot, neutral and one side of the load.

#### Specifications

Size - 4-1/4" (10.8 cm) High, 3-1/4" (9.5 cm) Wide, 1-3/8" (3.5 cm) Deep.

Switch Rating - 120 VAC 60 Hz; 1440 Watts Tungsten; 12 Full load Amps.; 15 Amp max load.

**Timing Cycle –** Minimum "ON" time 1/2 hour, maximum "ON" time 22-1/2 hours; Minimum time between any two "ON" trippers (and any two "OFF" trippers) is 2 hours.

| Model# | Switch | Volts | Amps | Max<br>Wattage | Color                   |
|--------|--------|-------|------|----------------|-------------------------|
| E1010  | SPST   | 120   | 15   | 1800           | Stonedust white housing |
| E1020  | SPST   | 120   | 15   | 1800           | Stonedust white housing |

For additional trippers for E1020 (2 "ON" / 2 "OFF" per pack), order No. 156EB1945A.

# Don't Be Caught in the Dark







# **Power Failure Lighting**



**Power Save Mode** 



**Nightlight Mode** 



**Power Failure Mode** 

### **Decorator Power Failure Lighting**

These power failure lights fit into standard electrical wall boxes and are powered by line voltage. During normal power conditions power failure lights will charge their internal high-capacity Nickel-Metal-Hydride (NiMH) battery. A full charge can take up to 6 days to achieve from a completely discharged state.

When line power fails, power failure light will automatically switch into power failure mode where the three high-intensity white LEDs are driven to full brightness to provide ample lighting for moving around in dark areas. The power failure lights also feature a nightlight mode that can be turned on and off to provide low-level lighting when desired.

Full lens models fit in standard decorator plate and clear lens design blends with any trim plate color. Depressible lens acts as mode select switch as well as battery test switch. While in power failure mode unit can be placed in power save mode to conserve battery power for when it is needed most. Battery life of a fully charged unit is 4 hours minimum from onset of power failure event.

The EL500 also features an emergency input that can be connected to smoke detectors, fire alarm systems or security systems. When a signal is received the EL500 will go into a 1Hz flash mode to alert occupants of the event.

#### Model EL100 & EL500

#### Specifications

Voltage - 120 Volts, 50/60 Hz. (Optional 277 VAC Operation)

Power Consumption - 17.0 Watts Max

**Features** – EL100 & EL500: Power Failure Mode, Night Light Mode, Power Save Mode, Battery Test Mode; EL500: Flash Mode

**Light Source –** 3 High-Intensity White LEDs

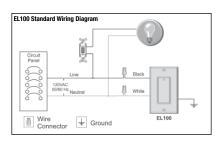
Battery - Rechargeable AA2200mAH NiMH Battery

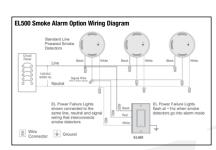
Battery Life - 4-Hours Minimum

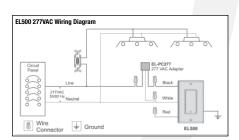
Temperature Operating Range –  $32^{\circ}F$  to  $104^{\circ}F$  /  $0^{\circ}C$  to  $40^{\circ}C$ 

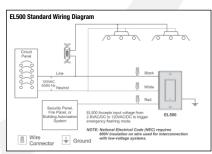
Environmental - 10% to 95% non-condensing relative humidity











# **Power Failure Lighting**



### **Integrated Decorator Power Failure Lighting**

These power failure lights fit into standard electrical wall boxes and are powered by line voltage. During normal power conditions power failure lights will charge their internal high-capacity Nickel-Metal-Hydride (NiMH) battery. A full charge can take up to 6 days to achieve from a completely discharged state.

When line power fails, power failure light will automatically switch into power failure mode where the three high-intensity white LEDs are driven to full brightness to provide ample lighting for moving around in dark areas. The power failure lights also feature a nightlight mode that can be turned on and off to provide low-level lighting when desired.

Integrated models fit in standard decorator plate without sacrificing existing necessary electrical devices. Depressible lens acts as mode select switch as well as battery test switch. While in power failure mode unit can be placed in power save mode to conserve battery power for when it is needed most. Battery life of a fully charged unit is 90 minutes minimum from onset of power failure event.

#### Model EL200 & EL300

#### Specifications

Voltage - 120 Volts, 50/60 Hz.

Power Consumption – 17.0 Watts Max

Features – Power Failure Mode, Night Light Mode, Power Save Mode, Battery Test Mode

**Integrated Electrical Device:** 

• Model EL200: 15 Amp 125 VAC General Purpose Receptacle

• Model EL300: 15 Amp General Purpose Single-Pole Switch

Light Source - 3 High-Intensity White LEDs

Battery - Rechargeable 2/3A 900 mAH NiMH Battery

Battery Life - 4-Hours Minimum

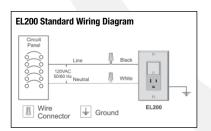
Temperature Operating Range - 32°F to 104°F / 0°C to 40°C

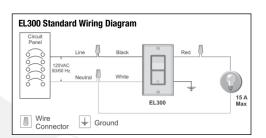
Environmental - 10% to 95% non-condensing relative humidity

Colors - Ivory, Light Almond, and White



| Model#  | Device     | Voltage | Amp Rating | Style     | Color        |
|---------|------------|---------|------------|-----------|--------------|
| EL200   | Receptacle | 120 VAC | 15 Amp     | Decorator | lvory        |
| EL200LA | Receptacle | 120 VAC | 15 Amp     | Decorator | Light Almond |
| EL200W  | Receptacle | 120 VAC | 15 Amp     | Decorator | White        |
| EL300   | Switch     | 120 VAC | 15 Amp     | Decorator | lvory        |
| EL300LA | Switch     | 120 VAC | 15 Amp     | Decorator | Light Almond |
| EL300W  | Switch     | 120 VAC | 15 Amp     | Decorator | White        |







**EL200W** 



**EL300W** 



# **Power Failure Egress Lighting**





**EL500E** 

### **Power Failure Egress Lighting**

The EL500E power failure egress light fits into standard electrical wall boxes and is powered by line voltage. During normal power conditions unit will charge its internal high-capacity Nickel-Metal-Hydride (NiMH) battery. A full charge can take up to 6 days to achieve from a completely discharged state.

When line power fails, egress light will automatically switch into power failure mode where the three high-intensity red LEDs are driven to full brightness to provide low-level path of egress marking, guiding occupants to safety. These egress lights also feature a pilot mode that can be turned on and off to provide always-on path marking.

Depressible chevron lens acts as mode select switch as well as battery test switch. While in power failure mode unit can be placed in power save mode to conserve battery power for when it is needed most. Battery life of a fully charged unit is 4 hours minimum from onset of power failure event.

The EL500E also features an emergency input that can be connected to smoke detectors, fire alarm systems or security systems. When a signal is received the EL500E will go into a 1Hz flash mode to lead occupants to safety.

#### Specifications

Voltage - 120 Volts, 50/60 Hz. (Optional 277 VAC Operation)

Power Consumption - 17.0 Watts Max

Features – Power Failure Mode, Pilot Light Mode, Power Save Mode, Battery Test Mode, Flash Mode

**Integrated Electrical Device:** 

- Model EL200: 15 Amp 125 VAC General Purpose Receptacle
- Model EL300: 15 Amp General Purpose Single-Pole Switch

**Light Source –** 3 High-Intensity Red LEDs

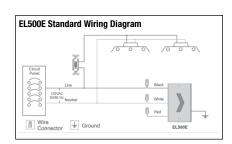
Battery - Rechargeable AA 2200 mAH NiMH Battery

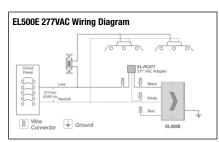
Battery Life – 4-Hours Minimum

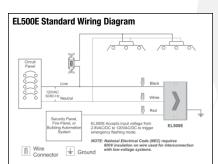
**Temperature Operating Range –** 32°F to 104°F / 0°C to 40°C

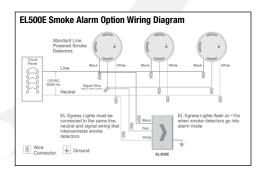
Environmental - 10% to 95% non-condensing relative humidity















#### **Contractor Benefits:**

- ✓ Affordable Less than the Cost of Other Systems
- ✓ Reliable No Late
  Night Call Backs
- ✓ Easy to Install No Special Wiring
- ✓ Easy to Program Finish in Minutes Instead of Days

#### **Home Owner Benefits:**

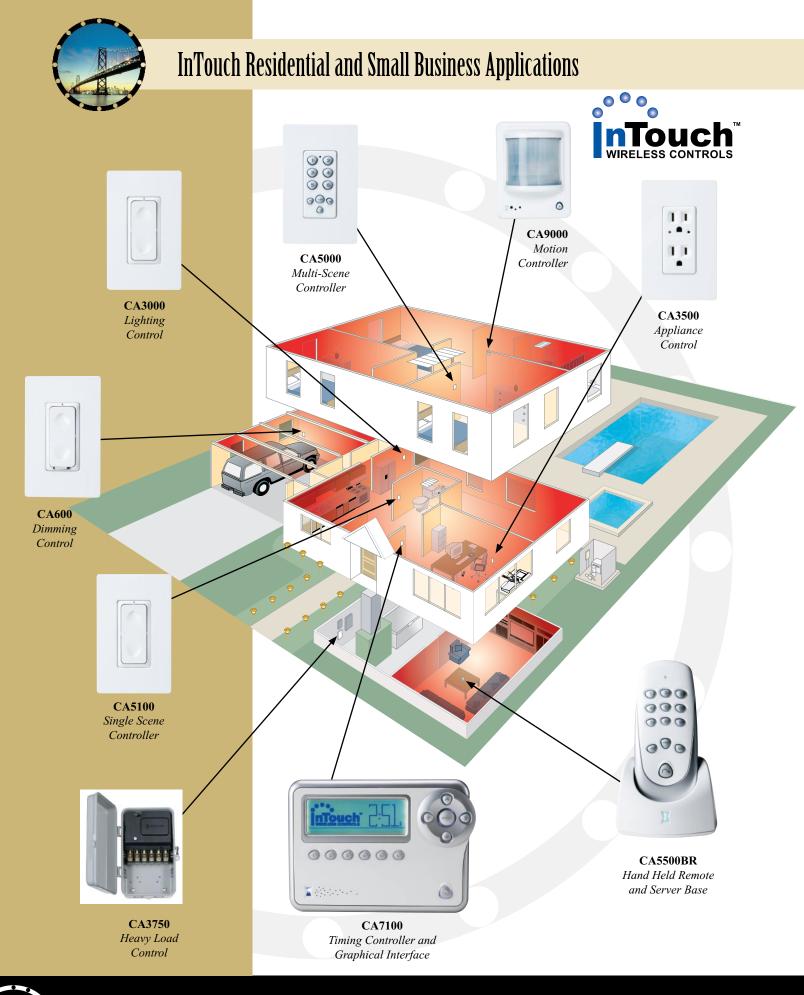
- ✓ Comfort Simple
  Push Button Control
- ✓ Easy to Use Simple Scene Creation & Editing
- ✓ Convenience –
  Scheduled Events Adds
  Simplicity to Every Home
- ✓ Peace of Mind Never Enter a Dark Home Again
- ✓ Energy Savings With Proper Programming
   System Can Pay for Itself

# Finally... A Wireless System Within Reach

#### Connect with an affordable, reliable and easy to install system of wireless home controls.

Intermatic® makes affordable and reliable home control a reality with the InTouch™ series of wireless controls. Until now, home controls had only two options — reliable controls that were too expensive or low-cost controls that were unreliable. That's all changed with Intermatic's InTouch wireless controls, which bring reliable controls together with low cost to deliver a home solution everyone can enjoy.





### Hand-Held Remote & Server Base

InTouch<sup>TM</sup> systems require the CA5500BR to take advantage of all the system features.

The CA5500BR Hand-Held Remote Controller and Server Base make up the heart of the InTouch<sup>™</sup> network. The InTouch<sup>™</sup> system has taken Z-wave<sup>®</sup> technology to an even higher level of functionality with the

introduction of its patent pending InTouch™ server technology. The InTouch™ server provides full two-way, real-time status of every device in the network including legacy Z-wave® devices. The InTouch™ server also makes a host of never before seen features available to the installer and homeowner including:

- Greater network range doubling the number of "hops" a signal can take to get to its target from the Z-wave<sup>®</sup> standard of 4 to 8
- In-field firmware upgrade capability future-proofing an InTouch™ network from protocol changes
- Centralized scene and status information ability to remotely edit scenes from anywhere in the network
- Full Z-wave® compatibility adding an InTouch™ server to any manufacturer's Z-wave® product instantly upgrades their capabilities to share many of the InTouch™ features

To build an InTouch™ network, start with the CA5500BR. Create a custom network with nine scenes that are unique to your home. To do this, add up to 230 additional devices such as the CA600 dimmer or CA3500 controlled receptacle. Add additional scenes and create convenient locations to launch them with an in-wall controller such as the CA5000. Use specialty controllers to add additional features. The CA9000 occupancy sensor launches a scene by walking into a room. The CA7100 launches scenes based on time-of-day and serves as a graphical interface to create and maintain all scenes in the network.

#### Remote Specifications:

User Interface: Nine Scene Selection Buttons with LED Scene Status Indicators, Network Setup Indicator, and

Four Action Buttons (Enter, Raise, Lower & Home)

Lost Remote Locator: Audible & Visual Indication when Activated

**Network Setup:** Include & Exclude Buttons **Battery:** Rechargeable Nickel Metal Hydride (NiMH)

Color: White & Gray

#### Charger Specifications:

Supply Power: 120 Volts 50/60 Hz Wall Pack Transformer 9VDC Output

**Network:** Scene & Status Server and Network Memory Backup **Charging:** Smart Charging with LED Indication of Progress

Color: White

#### **Network Specifications:**

**Minimum Range:** Indoor 50ft **Frequency:** 908.42 MHz

Mesh Network: Each line powered node acts as a repeater to route distant signals.

| Model#   | Description                                    |
|----------|--|
| CA5500BR | Hand Held Remote w/Charger Base & Power Supply |
| CA5500R  | Hand Held Remote Charger Base                  |
| CA5500B  | Hand Held Remote Control                       |





**CA5500BR** 









#### Model CA7100





### InTouch™ System Timing Control

The CA7100 InTouch™ System Timing Control allows the home owner to get the maximum value out of their InTouch™ system. By creating a central point of control for load scheduling throughout the home the user is freed of the hassle of setting schedules on multiple timers around the home and increases the energy management benefits to be gained.

The capabilities of the Timing Control are not limited to those applications that are preloaded but can be field upgraded to take advantage of future ones as well, planned enhancements include: HVAC Energy Management, Pool & Spa Control as well as Irrigation control.

- · Provides astro or time of day control of events and scenes
- · Allows for real-world naming of rooms and scenes
- · Easy scene or event creation and editing
- · Features "Random" function for a realistic "lived in" look
- Allows for creation of events based on time, action or a combination of time and action

#### Physical Specifications:

**Supply:** 120 Volts 50/60 Hz

Operating Temperature Range: 32°F (0°C) to 104°F (40°C)

**Power Consumption:** 4.0W Max **Display:** Backlit 128 x 64 Dot LCD Display

Real-Time Clock: Super-Cap Backed Clock Chip Keeps Time & Date Information Current for up to 3 Days.

Colors: White Face Plate with Gray Trim

Mounting: Mounts to Standard 3-Gang Electrical Box

#### **Programming:**

**Events:** Based on Time, Action or Combination of Time & Action **Scheduling:** Time of Day, Date, & Astronomic Schedules

User Interface: Six LED Scene Status Indicators, Menu Driven GUI, Six Button Navigation Pad, and Audio Feedback

#### **Network Specifications:**

Minimum Range: Indoor 50ft Frequency: 908.42 MHz

Mesh Network: Each line powered node acts as a repeater to route distant signals.

Size: 232 Z-Wave® Nodes

NOTE: REQUIRES CA5500BR TO FUNCTION



### InTouch™ Dimmers

Intermatic InTouch<sup>TM</sup> Dimmers allow for full range control of incandescent loads from any Z-wave<sup>®</sup> compatible controller. Additional features are obtained by using InTouch<sup>TM</sup> Dimmers within an InTouch<sup>TM</sup> network.

- · Multiple location dimming when used with wireless accessory controls.
- Multiple location On/Off control using conventional 3-way or 4-way wiring and devices.
- · Lights fade up or down when turned on or off.
- Automatically returns to last level in the event of power fluctuations.
- Light levels can be set by pressing and holding the rocker until the desired light level is reached.
- Full 230 device scene control when used with Intermatic InTouch™ scene and status server (CA5500BR).
- Dimmer always operates local load, does not require central control system.

#### Physical Specifications:

Switch: Single-Pole (One Location) or 3-Way (Multi-Location) or Wireless RF Control

**Supply:** 120 Volts 50/60 Hz

Operating Temperature Range: 32°F (0°C) to 104°F (40°C)

Power Consumption: 2.0W Max Maximum wattage: 600W Minimum wattage: 40W

**Colors:** Ships with Ivory, Light Almond, & White Rocker Plates **Mounting:** Mounts to Standard Single or Multi-Gang Electrical Boxes

#### Programming:

InTouch™ Scenes: Can Create Scenes with up to 230 Z-wave® Devices When Used With Scene & Status Server

**Routing Slave:** Can Control up to Five Associated Z-wave® Devices in non-InTouch™ network

Dimming: 1% Increments; 100 Steps

#### **Network Specifications:**

**Minimum Range:** Indoor 50ft **Frequency:** 908.42 MHz

Mesh Network: Each line powered node acts as a repeater to route distant signals.

| Model# | Dimmer Type                            | Watt Min | Watt Max |
|--------|--|----------|----------|
| CA600  | Incandescent Contemporary Style Dimmer | 40 W     | 600 W    |
| CA600D | Incandescent Decorator Style Dimmer    | 40 W     | 600 W    |

| Model#     | Dimmer Type                                       | Color        | Qty Pack |
|------------|---|--------------|----------|
| CADDTRM-I  | Decorator Replacement Trim Plate for CA600 Series | lvory        | 3pk      |
| CADDTRM-LA | Decorator Replacement Trim Plate for CA600 Series | Light Almond | 3pk      |
| CADDTRM-W  | Decorator Replacement Trim Plate for CA600 Series | White        | 3pk      |
| CADDTRM-G  | Decorator Replacement Trim Plate for CA600 Series | Gray         | 3pk      |
| CADDTRM-E  | Decorator Replacement Trim Plate for CA600 Series | Black        | 3pk      |











**CA600** 



**CA600D** 







#### CA3000



#### **CA3000D**

### InTouch™ General Purpose Switches

Intermatic InTouch™ Switches allow for On/Off control of connected general purpose loads from any Z-wave® compatible controller. Additional features are obtained by using InTouch™ Switches within an InTouch™ network.

- · Multiple location On/Off when used with wireless accessory controls.
- Multiple location On/Off control using conventional 3-way or 4-way wiring and devices.
- · Automatically returns to last state in the event of power fluctuations.
- Full 230 device scene control when used with Intermatic InTouch™ scene and status server (CA5500BR).
- Switch always operates local load, does not require central control system.

#### Physical Specifications:

Switch: Single-Pole (One Location) or 3-Way (Multi-Location) or Wireless RF Control

**Supply:** 120 Volts 50/60 Hz

Operating Temperature Range: 32°F (0°C) to 104°F (40°C)

Power Consumption: 2.0W Max

Ratings: 120VAC, 50/60 Hz 1800 Watts 15A Tungsten; 1800 Watts 15A Resistive/Inductive;

1800VA 15A Ballast; 1/2HP Motor

Colors: Ships with Ivory, Light Almond, & White Rocker Plates

Mounting: Mounts to Standard Single or Multi-Gang Electrical Boxes

#### Programming:

InTouch<sup>™</sup> Scenes: Can Create Scenes with up to 230 Z-wave<sup>®</sup> Devices

When Used With Scene & Status Server

**Routing Slave:** Can Control up to Five Associated Z-wave<sup>®</sup> Devices in non-InTouch™ network

#### **Network Specifications:**

Minimum Range: Indoor 50ft Frequency: 908.42 MHz

Mesh Network: Each line powered node acts as a repeater to route distant signals.

|         |                                  |         | Tungsten | Resistive | Ballast | Motor  |
|---------|----------------------------------|---------|----------|-----------|---------|--------|
| Model#  | Description                      | Voltage | Rating   | Rating    | Rating  | Rating |
| CA3000  | 15 Amp Contemporary Style Switch | 120 VAC | 1800 W   | 1800 W    | 1800 VA | 1/2 HP |
| CA3000D | 15 Amp Decorator Style Switch    | 120 VAC | 1800 W   | 1800 W    | 1800 VA | 1/2 HP |

| Model#     | Description   | Color | Qty Pack     |
|------------|---|-------|--------------|
| CADSTRM-I  | Decorator Replacement Trim Plate for CA3000 & CA5100 Series |       | lvory        |
| 3pk        |   |       |              |
| CADSTRM-LA | Decorator Replacement Trim Plate for CA3000 & CA5100 Series |       | Light Almond |
| 3pk        |   |       |              |
| CADSTRM-W  | Decorator Replacement Trim Plate for CA3000 & CA5100 Series |       | White        |
| 3pk        |   |       |              |
| CADSTRM-G  | Decorator Replacement Trim Plate for CA3000 & CA5100 Series |       | Gray         |
| 3pk        |   |       |              |
| CADSTRM-E  | Decorator Replacement Trim Plate for CA3000 & CA5100 Series |       | Black        |
|            |   |       |              |









### InTouch™ General Purpose Receptacle

Intermatic CA3500 InTouch™ Receptacle allows for On/Off control of connected general purpose loads from any Z-wave® compatible controller. Control applications include kitchen & bath appliances and table lamps.

- Multiple location On/Off control of receptacle when used with wireless accessory controls.
- "Local Control" feature senses user need for current and will automatically activate receptacle.
- Up-front activator switch always operates local load, does not require central control system.

#### Physical Specifications:

**Supply:** 125 Volts 50/60 Hz

Operating Temperature Range: -40°F (-40°C) to 104°F (40°C)

**Power Consumption:** 2.0W Max **Rating:** 15 Amp General Purpose

Colors: Ships with Ivory, Light Almond, & White Bezel Plates

Mounting: Mounts to Standard Single or Multi-Gang Electrical Boxes

#### **Network Specifications:**

Minimum Range: Indoor 50ft Frequency: 908.42 MHz

Mesh Network: Each line powered node acts as a repeater to route distant signals.





CA3500









# nTouch TM WIRELESS CONTROLS



CA3750







### InTouch™ Heavy Duty Contactor

Intermatic CA3750 InTouch™ Contactor allows for On/Off control of heavy current connected loads from any Z-wave® compatible controller. Control applications include; outdoor lighting, pool, spa, & irrigation pumps, water & baseboard heaters, and other high current loads.

- Multiple location On/Off control of contactor when used with wireless controls.
- Multi-Volt supply 120, 208, 240, or 277 VAC
- Factory set for simultaneous DPST contact operation.
- Configurable for 2 independently controllable SPST contacts when used with Intermatic InTouch™ scene and status server (CA5500BR) and a InTouch™ Timing Controller (CA7100).
- Up-front activator switch always operates load, does not require central control system.

#### Physical Specifications:

Supply: 120, 208, 240, or 277 Volts 50/60 Hz

Operating Temperature Range: -20°F (-29°C) to 155°F (68°C)

**Power Consumption:** 6.0W Max **Rating:** 6600 Watts 30 A Resistive; 5500VA 25 A Inductive;

5540 Watts 20 A@ 277VAC Ballast; 4400 Watts 20 A Tungsten; 1 HP @ 120VAC Motor; 3 HP @ 240VAC Motor

Enclosure: Grey NEMA 3R High Impact Polycarbonate Case

#### Network Specifications:

Minimum Range: Indoor 50ft Frequency: 908.42 MHz

**Mesh Network:** Each line powered node acts as a repeater to route distant signals.



# InTouch™ System Scene / Group Controller

The CA5000 Scene / Group Control allows the system designer to give the end user multiple control capabilities from a single wall box location. The CA5000 control operates on line voltage and can be ganged with switches and dimmers to eliminate wall clutter and special control station wiring. Additionally the enhance features of the InTouch™ network allows CA5000 to perform scene and group or partition control functions instead of requiring separate controls.

- Multiple location On/Off & Raise/Lower control when used with Z-wave® enabled devices.
- Allows control of up to 6 individual pre-set scenes or groups containing any number of Z-wave<sup>®</sup> enabled devices.
- · Features individual scene status feedback for enhanced control.
- · Separate focus and control buttons allow the user to custom mix scene or group selections and vary light levels.
- Home key provides for quick de-selection of scenes.

## Specifications:

**Supply:** 120 Volts 50/60 Hz

Operating Temperature Range: 32°F (0°C) to 104°F (40°C)

Power Consumption: 2.0W Max

User Interface: Six Scene / Group Selection Buttons with LED Scene Status Indicators, Network Setup Indicator, and

Four Action Buttons (Enter, Raise, Lower & Home)

Network Setup: Include & Exclude Functions

Colors: Ships with Ivory, Light Almond, & White Bezel Plates

Mounting: Mounts to Standard Single or Multi-Gang Electrical Boxes

## **Network Specifications:**

Minimum Range: Indoor 50ft Frequency: 908.42 MHz

Mesh Network: Each line powered node acts as a repeater to route distant signals.

Size: 232 Z-Wave® Nodes

NOTE: REQUIRES CA5500BR TO FUNCTION





CA5000













## **CA5100D**

## InTouch™ Accessory Controllers

The Accessory Controllers provide remote control of any Z-wave® enabled device. These controls operate on line voltage and can be ganged with switches and dimmers to eliminate wall clutter and special control station wiring. Additionally the enhance features of the InTouch<sup>TM</sup> network allow these controls to perform advanced scene control functions instead of requiring separate controls.

- Multiple location On/Off & Raise/Lower control when used with Z-wave® enabled switches and dimmers.
- Full 229 device scene control when used with Intermatic InTouch™ server (CA5500BR).

## Specifications:

**Supply:** 120 Volts 50/60 Hz

Operating Temperature Range: 32°F (0°C) to 104°F (40°C)

Power Consumption: 2.0W Max

**Colors:** Ships with Ivory, Light Almond, & White Rocker Plates **Mounting:** Mounts to Standard Single or Multi-Gang Electrical Boxes

## Programming:

InTouch™ Scenes: Can Create Scenes with up to 229 Z-wave® Devices When Used With Scene & Status Server

**Routing Slave:** Can Control up to Five Associated Z-wave® Devices in non-InTouch™ network

## **Network Specifications:**

Minimum Range: Indoor 50ft Frequency: 908.42 MHz

Mesh Network: Each line powered node acts as a repeater to route distant signals.

Size: 232 Z-Wave® Nodes

| Model#  | Description                             | Voltage |
|---------|---|---------|
| CA5100  | Contemporary Style Accessory Controller | 120 VAC |
| CA5100D | Decorator Style Accessory Controller    | 120 VAC |

| Model#     | Description   | Color | Qty Pack     |
|------------|---|-------|--------------|
| CADSTRM-I  | Decorator Replacement Trim Plate for CA3000 & CA5100 Series |       | lvory        |
| 3pk        |   |       |              |
| CADSTRM-LA | Decorator Replacement Trim Plate for CA3000 & CA5100 Series |       | Light Almond |
| 3pk        |   |       |              |
| CADSTRM-W  | Decorator Replacement Trim Plate for CA3000 & CA5100 Series |       | White        |
| 3pk        |   |       |              |
| CADSTRM-G  | Decorator Replacement Trim Plate for CA3000 & CA5100 Series |       | Gray         |
| 3pk        |   |       |              |
| CADSTRM-E  | Decorator Replacement Trim Plate for CA3000 & CA5100 Series |       | Black        |
| 3pk        |   |       |              |







## **InTouch™ Wireless Gateway**

The CA8200 InTouch™ Wireless Gateway gives the user greater control of their InTouch™ system by allowing them to activate and deactivate scenes from the comfort of their vehicle using either in-headliner mounted garage door opener buttons or the optional keychain remote. This feature gives the user greater peace of mind knowing they never have to enter a dark garage or home.

- · 3 Preset Scenes of Control
- · Compatible with popular in-headliner mounted garage door openers
- Stand alone operation; will control loads directly without the need for a CA5500BR InTouch™ Scene & Status Server

## Specifications:

Supply: 120 Volt 50/60 Hz

Battery: 9 Volt Alkaline (For Mobile Requirements)

Color: White

**Network Specifications:** 

Minimum Range: Indoor 50ft Frequency: 908.42 MHz

Mesh Network: Each line powered node acts as a repeater to route distant signals.

Size: 232 Z-Wave® Nodes

## InTouch™3-Button Keychain Controller

The CA5300 3-button Keychain Controller is for use with the CA8200 only and cannot directly control any of the InTouch™ devices. This accessory switch option allows users who do not have in-headliner or compatible garage door opener controls to use the CA8200 Wireless Gateway.

## Specifications:

Battery: 3 Volt Lithium CR2016

Color: White

Frequency: 372.0 MHz

## InTouch™ Wireless Conversion Module

The CA8250 conversion module allows the CA5300 keychain or in-headliner control to operate with any garage door opener. It is a convenience accessory and is not required for a lighting control only application.

## Specifications:

Supply: 120 Volt Color: White

















CA8250











## InTouch™ USB Controller

The InTouch™ CA8700 USB Controller allows installers and users to access their InTouch™ network using a PC. The USB stick when paired with a variety of applications software can give whole home control, remote access through the Internet and allows for in-field upgrade of InTouch™ controllers.

- Blue status LED
- · Optional desktop stand for improved RF range

## USB Controller Specifications:

Supply: 5 Volts

Version: USB HID (Human Interface Device)

**Operating Temperature Range:** 32°F (0°C) to 104°F (40°C)

**Status Indicator:** Blue LED **Color:** White & Silver

Mounting: Standard USB Connector

## **Desktop Stand Specifications:**

**Operating Temperature Range:** 32°F (0°C) to 104°F (40°C)

**Connector:** Standard USB Socket **Cable:** 6 foot USB extension cable

Color: White

## **Network Specifications:**

Minimum Range: Indoor 50ft Frequency: 908.42 MHz

**Mesh Network:** Each line powered node acts as a repeater to route distant signals.

Size: 232 Z-Wave® Nodes

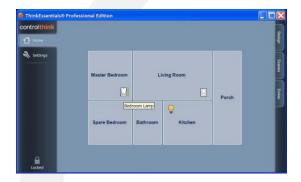
| Model#   | Description   |
|----------|---|
| CA8700   | InTouch USB Stick   |
| CA8750   | InTouch USB Stick w/Desktop Stand   |
| CA8750SW | InTouch USB Stick, Stand Home Control Software (PC), and Firmware Update Software |



## **Home Control Software**

Use the ThinkEssentials® Pro software to supplement your CA5500BR network or use it as a primary controller by itself. Includes the following features:

- Set up and control up to 230 Z-Wave devices
- Draw a basic floor plan of your home with ease and see the state of all your devices
- · Activate mood lighting (scenes) in your home or turn on/off zones of devices
- Schedules activate scenes or turn on/off zones at specific times of day, including sunrise/sunset
- Schedules can be set for every day, individual days of the week, or multiple days of the week
- Turn all devices on or off with the push of one button
- Optimize and repair your network of Z-Wave devices



## Firmware Update Utility

Your InTouch™ network is never obsolete with the Firmware Update Utility. Firmware is the operating software located on each of the InTouch controllers. Install the software and a CA8700 or CA8750 on a computer in your home. Download the latest firmware version from the web at InTouchControls.com. Now push the latest features and improvements to your system.











**CA9000** 





## InTouch™ Wireless PIR Occupancy Sensor

The InTouch™ CA9000 Occupancy Sensor provides passive infrared motion sensing to the InTouch™ system. Environmental controls such as lights, heating / cooling and even window shades can be activated by the home owner's entry to a room giving them an even higher level of automation.

- Multiple location On/Off control when used with Z-wave® enabled devices.
- Full 229 device scene control when used with Intermatic InTouch™ server (CA5500B).
- Pre-set scene control when used with up to 5 Z-wave® enabled devices in non-InTouch™ networks.
- · Wide detection pattern can be used for whole room coverage.

## Specifications:

Battery: 3 x "AA" Alkaline Batteries

**Optional Supply:** 9VDC Wallpack Transformer (CATRFM) **Operating Temperature Range:** 32°F (0°C) to 104°F (40°C)

Battery Life: 6 Months Under Normal Usage

Color: White

Mounting: Adjustable swivel neck rotates 30° vertically and 30° horizontally, Flat on wall, or Corner mount

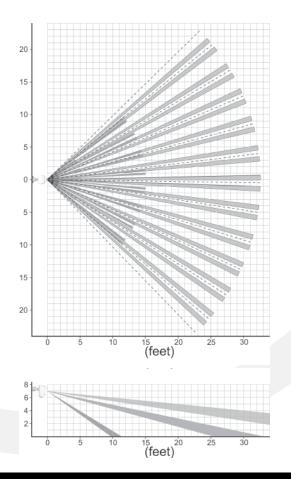
**Timing:** Pulse, 5 minute, 10 minute, 15 minute, and Manual Off time ranges **Sensing:** Twin pyro sensor elements provide for high accuracy and reliability

## **Network Specifications:**

Minimum Range: Indoor 50ft Frequency: 908.42 MHz

Mesh Network: Each line powered node acts as a repeater to route distant signals.

Size: 232 Z-Wave® Nodes



# **TimeMaster**

# **Electromechanical Time Controls**



## GM40 Series (24-Hour/7-Day)

The GM40 Multi-Volt Series Time Controls are universal, electromechanical time switches which can be field configured for various power supply voltages. The voltage options include 120VAC, 208/240VAC, and 277VAC, all within the same unit! Selection of the desired supply voltage is easily achieved by selecting the DIP to the corresponding input voltage. The mechanism is mounted in a compact NEMA 3R outdoor enclosure and features a DPDT switching configuration standard (i.e. two normally open and two normally closed contacts). All GM40 models are available as "Mechanism Only" (–M) for installation in other enclosures or control panels or "Bracket Mount" (- B). The GM40 is also available in a NEMA 1 Indoor Metal Enclosure (-IM).

The GM40 is a robust time switch capable of switching high amperage. Below are samples of the many applications where the GM40 can be used:

- · Lighting Control
- Access Control
- Heating, Air-Conditioning
- · Agricultural Facilities
- Pumps/Motors/Fan Control
- General Purpose Electrical Circuits

Amber and Green LED Lights Indicate Power and Status

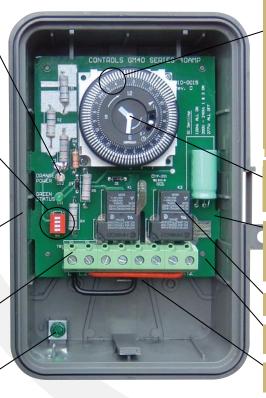
Easy Multi-Voltage Field Adjustable DIP Switch for 120, 208/240, or 277 VAC



New Compact VALOX®NEMA 3R Outdoor Enclosure is Standard

Large Screw Terminals for Easy Wiring #8 AWG

Ground Lug Termination



Captive Trippers
Can't Be Lost



Independently
Adjustable Trippers at
15 Minute Intervals
(2 hrs. for 7-day model)

True Clock Face with ON/OFF/AUTO Override Switch

NO TOOLS REQUIRED!
Our "GUTS" simply snap
into existing
INTERMATIC® enclosures

40 Amp Rated Contacts

Moisture Resistant Conformal Coated Board

SPDT and DPDT ALL-IN-ONE!



| GM40 Series Ordering Data   |                                 |                          |                     |  |  |  |  |
|---|---------------------------------|--------------------------|---------------------|--|--|--|--|
| Grasslin/Intermatic<br>Model  | Voltage                         | Output                   | Battery Backup      |  |  |  |  |
| 24-Hour Electromechanical, Multi-Voltage, SPDT/DPDT, NEMA 3R Outdoor Enclosure        |                                 |                          |                     |  |  |  |  |
| GM40  | 120, 208~240, 277VAC            | 40A DPDT                 | _                   |  |  |  |  |
| GM40Q   | 120, 208~240, 277VAC            | 40A DPDT                 | Yes                 |  |  |  |  |
| 7-Day (Skip-A-Day/Week  | ly) Electromechanical, Multi-Vo | ltage, SPDT/DPDT, NEMA 3 | R Outdoor Enclosure |  |  |  |  |
| GM40W   | 120, 208~240, 277VAC            | 40A DPDT                 | _                   |  |  |  |  |
| GM40QW  | 120, 208~240, 277VAC            | 40A DPDT                 | Yes                 |  |  |  |  |
| 24-Hour Electromechanic   | al, Multi-Voltage, SPDT/DPDT, N | Mechanism Only           |                     |  |  |  |  |
| GM40-M  | 120, 208~240, 277VAC            | 40A DPDT                 | _                   |  |  |  |  |
| GM40Q-M   | 120, 208~240, 277VAC            | 40A DPDT                 | Yes                 |  |  |  |  |
| 7-Day (Skip-A-Day/Weekly) Electromechanical, Multi-Voltage, SPDT/DPDT, Mechanism Only |                                 |                          |                     |  |  |  |  |
| GM40W-M   | 120, 208~240, 277VAC            | 40A DPDT                 |                     |  |  |  |  |
| GM40QW-M  | 120, 208~240, 277VAC            | 40A DPDT                 | Yes                 |  |  |  |  |

#### **ELECTRICAL RATINGS:**

N.O. Contacts:

40A Resistive @ 120~277VAC

1HP, 16FLA, 90LRA @ 120VAC

2HP, 12FLA, 52LRA @ 208~277VAC

30A Ballast @ 120VAC

20A Ballast @ 277VAC

15A Tungsten @ 120VAC

300VA Pilot Duty 120~240VAC

N.C. Contacts:

30A Resistive @ 120~277VAC

1HP, 12FLA, 30LRA @ 120VAC

2HP, 10FLA, 30LRA @ 240VAC

2A Tungsten @ 120VAC

10A Ballast @ 277VAC

Screw box lug terminals

Operating Temperature Range:

-40°F to 131°F (-40°C to 55°C)

Operating Humidity: 0 to 95% non-condensing

8.795" x 6.631" x 2.935" (H x W x D)

3 lbs.

50,000 Operations at Full Load

DPDT (2-N.O. and 2-N.C. Contacts)

7 Days

#### SPECIFIERS GUIDE

Furnish and install a Intermatic GM40 \_ Multi-Volt Series 24 hour or (7 day) time switch with captive trippers and quartz or synchronous drive. Input voltage shall be 120, 208/240 or 277VAC selectable via simple to set DIP switch. All units shall incorporate both SPDT and DPDT contacts that shall be rated at 40A, 2 HP @ 277V. To set the starting time and to provide time indication, the unit shall have an authentic clock face with hour and minute hands. LED indicators shall provide Power and Status feedback. Enclosure shall be NEMA 3R suitable for both indoor or outdoor installation. Time switch shall contain an OFF/AUTO/ON manual override. For Carry-over: The time switch shall have a quartz drive with 7 day reserve carry-over.





## GMX Series (24-Hour/7-Day)

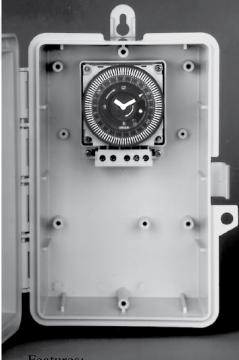
## **General Purpose Time Switch**

The GMX Series Time Controls are universal, electromechanical time switches. They are a low cost alternative for applications that do not require more than 21A or 2HP @240VAC. The unit is mounted in a NEMA 1 Indoor or NEMA 3R Outdoor enclosure.

APPLICATION: The GMX is a light duty commercial time switch ideal for 24, 120, or 277 VAC single phase applications such as:

- Lighting Control
- Access Control
- · Heating, Air-Conditioning
- · Agricultural Facilities
- Pumps/Motors/Fan Control
- General Purpose Electrical Circuits

|                              | GMX Series Orde                   | ring Data               |                |
|------------------------------|-----------------------------------|-------------------------|----------------|
| Grasslin/Intermatic<br>Model | Voltage Output                    |                         | Battery Backup |
| 24-Hour Electromechanic      | cal, SPDT, NEMA 1 Outdoor Enclos  | ure                     |                |
| GMXST-I-120                  | 120VAC, 60Hz                      | 21A SPDT                | _              |
| GMXQT-I-120                  | 120VAC, 50/60Hz                   | 21A SPDT                | Yes            |
| GMXST-I-240                  | 240VAC, 60Hz                      | 21A SPDT                | _              |
| GMXST-I-24                   | 24VAC, 60Hz                       | 21A SPDT                | _              |
| GMXQT-I-24                   | 24VAC, 50/60Hz; 12~24VDC          | 21A SPDT                | Yes            |
| 7-Day (Skip-A-Day/Week       | kly) Electromechanical, SPDT NEM  | IA 1 Outdoor Enclosure  |                |
| GMXSW-I-120                  | 120VAC, 60Hz                      | 21A SPDT                | _              |
| GMXQW-I-120                  | 120VAC, 50/60Hz                   | 21A SPDT                | Yes            |
| GMXSW-I-240                  | 240VAC, 60Hz                      | 21A SPDT                | _              |
| GMXQW-I-240                  | 240VAC, 50/60Hz                   | 21A SPDT                | Yes            |
| GMXSW-I-24                   | 24VAC, 60Hz                       | 21A SPDT                | _              |
| GMXQW-I-24                   | 24VAC, 50/60Hz; 12~24VDC          | 21A SPDT                | Yes            |
| 24-Hour Electromechanic      | cal, SPDT, NEMA 3R Outdoor Enclo  | osure                   |                |
| GMXST-0-120                  | 120VAC, 60Hz                      | 21A SPDT                | _              |
| GMXQT-0-120                  | 120VAC, 50/60Hz                   | 21A SPDT                | Yes            |
| GMXST-0-240                  | 240VAC, 60Hz                      | 21A SPDT                | _              |
| GMXST-0-24                   | 24VAC, 60Hz                       | 21A SPDT                | _              |
| 7-Day (Skip-A-Day/Week       | kly) Electromechanical, SPDT, NEN | MA 3R Outdoor Enclosure |                |
| GMXSW-0-120                  | 120VAC, 60Hz                      | 21A SPDT                | _              |
| GMXQW-0-120                  | 120VAC, 50/60Hz                   | 21A SPDT                | Yes            |
| GMXSW-0-240                  | 240VAC, 60Hz                      | 21A SPDT                | _              |
| GMXSW-0-24                   | 24VAC, 60Hz                       | 21A SPDT                | _              |



- 21 Amp. Rating
- NEMA 1 Indoor or 3R Outdoor Enclosure
- SPDT Switch
- Captive trippers with intervals of 15 minutes on 24-hour models (2 hours on 7-day models)
- True clock face, easy to set
- Finger safe terminals
- Enclosure provides space for field added contactor or other accessories.





#### Features:

- 40 Amp. Rating
- Saves energy by shutting heaters OFF during "off-peak" periods
- Captive trippers with easy to read clock face
- Manual Override
- Power and Status LED Indicators
- Ground Lug
- Built-In Battery Backup Standard
- Raintight NEMA 3R Enclosure
- True Clock Face

## WHQ Series (24-Hour/7-Day)

## Water Heater Timers w/Battery Backup

The WHQ Series Water Heater Timers are designed for control of residential, commercial, or industrial electric water heaters up to 10,000 Watts capacity running at 208/240VAC. The unit is mounted in a NEMA 3R Outdoor enclosure and can be placed in basements or mechanical rooms.

**APPLICATION:** This unit is designed to save energy and maximize hot water usage throughout the day. For example, the unit could be programmed to turn ON during periods of high usage such as in the early morning hours and OFF during low demand periods such as late evenings.

| WHQ Series Ordering Data   |                               |          |     |  |  |  |  |
|--|-------------------------------|----------|-----|--|--|--|--|
| Grasslin/Intermatic<br>Model   | Battery Backup                |          |     |  |  |  |  |
| 24-Hour Electromechanical, DPDT, NEMA 3R Outdoor Enclosure                   |                               |          |     |  |  |  |  |
| WHQ4   | 208~240VAC, 60Hz 40A DPDT Yes |          |     |  |  |  |  |
| 7-Day (Skip-A-Day/Weekly) Electromechanical, DPDT, NEMA 3R Outdoor Enclosure |                               |          |     |  |  |  |  |
| WHQ7   | 208~240VAC, 60Hz              | 40A DPDT | Yes |  |  |  |  |

#### **ELECTRICAL RATINGS:**

N.O. Contacts:

40A Resistive @ 250VAC

10,000 Watts

N.C. Contacts:

30A Resistive @ 250VAC

7.500 Watts

## WIRING CONNECTIONS:

Screw box lug terminals

## **ENVIRONMENTAL RATINGS:**

Operating Temperature Range:

-40°F to 131°F (-40°C to 55°C)

Operating Humidity: 0 to 95% non-condensing

## **ENCLOSURE DIMENSIONS:**

8.795" x 6.631" x 2.935" (H x W x D)

SHIPPING WEIGHT: 3 lbs.

ELECTRICAL LIFE:

50,000 Operations at Full Load

## SWITCH CONFIGURATION:

DPDT (2-N.O. and 2-N.C. Contacts)

**BATTERY BACKUP OPTION:** 7 Days

## **SPECIFIERS GUIDE**

Furnish and install a Intermatic WHQ \_\_\_\_ Water Heater Time Control with captive trippers and quartz (battery backup) drive. Input voltage shall be 208/240VAC on all models. Contacts shall be (DPDT) rated at 40A, 10,000 Watts @ 250VAC. To set the starting time and to provide time indication, the unit shall have an authentic clock face with hour and minute hands. Enclosure to be NEMA 3R

rain-tight. Time switch shall contain an OFF/AUTO/ON manual override



## MIL72 Series (24-Hour/7-Day)

## **Surface or Flush Mounted Time Switches**

The MIL72 Series time switches are designed to be mounted inside a control panel and can accommodate surface/DIN rail or flush/panel mounting.

**APPLICATION:** The MIL72 Series is a light duty commercial time switch ideal for 24, 120, or 277VAC single phase applications such as:

- Lighting Control
- Access Control
- Heating, Air-Conditioning
- · Agricultural Facilities
- Pumps/Motors/Fan Control
- General Purpose Electrical Circuits





(Flush Mounting)

| Grasslin<br>Model    | Intermatic<br>Model | Override | Mount   |             | Input Voltage | Switch Rating<br>250V Res. | Minimum<br>On/Off Time | Event<br>On/Off Time |
|----------------------|---------------------|----------|---------|-------------|---------------|----------------------------|------------------------|----------------------|
| 24-Hour Time Control |                     |          |         |             |               |                            |                        |                      |
| MIL72A STuZ-24       | MIL72ASTUZ-24       | No       | Surface | Synchronous | 24VAC         | SPDT 21A                   | 15 Min                 | ON 1/4 hr.           |
| MIL72A STuZ-120      | MIL72ASTUZ-120      | No       | Surface | Synchronous | 120VAC        | SPDT 21A                   | 15 Min                 | ON 1/4 hr.           |
| MIL72A STuZ-240      | MIL72ASTUZ-240      | No       | Surface | Synchronous | 208/240VAC    | SPDT 21A                   | 15 Min                 | ON 1/4 hr.           |
| MIL72A STuZH-24      | MIL72ASTUZH-24      | Yes      | Surface | Synchronous | 24VAC         | SPDT 21A                   | 15 Min                 | ON 1/4 hr.           |
| MIL72A STuZH-120     | MIL72ASTUZH-120     | Yes      | Surface | Synchronous | 120VAC        | SPDT 21A                   | 15 Min                 | ON 1/4 hr.           |
| MIL72A STuZH-240     | MIL72ASTUZH-240     | Yes      | Surface | Synchronous | 208/240VAC    | SPDT 21A                   | 15 Min                 | ON 1/4 hr.           |
| MIL72A QTuZH-24      | MIL72AQTUZH-24      | Yes      | Surface | Quartz*     | 24VAC         | SPDT 21A                   | 15 Min                 | ON 1/4 hr.           |
| MIL72A QTuZH-120     | MIL72AQTUZH-120     | Yes      | Surface | Quartz      | 120VAC        | SPDT 21A                   | 15 Min                 | ON 1/4 hr.           |
| MIL72E STuZ-24       | MIL72ESTUZ-24       | No       | Flush   | Synchronous | 24VAC         | SPDT 21A                   | 15 Min                 | ON 1/4 hr.           |
| MIL72E STuZ-120      | MIL72ESTUZ-120      | No       | Flush   | Synchronous | 120VAC        | SPDT 21A                   | 15 Min                 | ON 1/4 hr.           |
| MIL72E STuZ-240      | MIL72ESTUZ-240      | No       | Flush   | Synchronous | 208/240VAC    | SPDT 21A                   | 15 Min                 | ON 1/4 hr.           |
| MIL72E STuZH-24      | MIL72ESTUZH-24      | Yes      | Flush   | Synchronous | 24VAC         | SPDT 21A                   | 15 Min                 | ON 1/4 hr.           |
| MIL72E STuZH-120     | MIL72ESTUZH-120     | Yes      | Flush   | Synchronous | 120VAC        | SPDT 21A                   | 15 Min                 | ON 1/4 hr.           |
| MIL72E STuZH-240     | MIL72ESTUZH-240     | Yes      | Flush   | Synchronous | 208/240VAC    | SPDT 21A                   | 15 Min                 | ON 1/4 hr.           |
| MIL72E QTuZH-24      | MIL72EQTUZH-24      | Yes      | Flush   | Quartz*     | 24VAC         | SPDT 21A                   | 15 Min                 | ON 1/4 hr.           |
| MIL72E QTuZH-120     | MIL72EQTUZH-120     | Yes      | Flush   | Quartz      | 120VAC        | SPDT 21A                   | 15 Min                 | ON 1/4 hr.           |
| 7-Day Time Control   |                     |          |         |             |               |                            |                        |                      |
| MIL72A SWuZ-24       | MIL72ASWUZ-24       | No       | Surface | Synchronous | 24VAC         | SPDT 21A                   | 2 hr.                  | ON 2 hr.             |
| MIL72A SWuZ-120      | MIL72ASWUZ-120      | No       | Surface | Synchronous | 120VAC        | SPDT 21A                   | 2 hr.                  | ON 2 hr.             |
| MIL72A SWuZ-240      | MIL72ASWUZ-240      | No       | Surface | Synchronous | 208/240VAC    | SPDT 21A                   | 2 hr.                  | ON 2 hr.             |
| MIL72A SWuZH-24      | MIL72ASWUZH-24      | Yes      | Surface | Synchronous | 24VAC         | SPDT 21A                   | 2 hr.                  | ON 2 hr.             |
| MIL72A SWuZH-120     | MIL72ASWUZH-120     | Yes      | Surface | Synchronous | 120VAC        | SPDT 21A                   | 2 hr.                  | ON 2 hr.             |
| MIL72A SWuZH-240     | MIL72ASWUZH-240     | Yes      | Surface | Synchronous | 208/240VAC    | SPDT 21A                   | 2 hr.                  | ON 2 hr.             |
| MIL72A QWuZH-24      | MIL72AQWUZH-24      | Yes      | Surface | Quartz*     | 24VAC         | SPDT 21A                   | 2 hr.                  | ON 2 hr.             |
| MIL72A QWuZH-120     | MIL72AQWUZH-120     | Yes      | Surface | Quartz      | 120VAC        | SPDT 21A                   | 2 hr.                  | ON 2 hr.             |
| MIL72A QWuZH-240     | MIL72AQWZH-240      | Yes      | Surface | Quartz      | 208/240VAC    | SPDT 21A                   | 2 hr.                  | ON 2 hr.             |
| MIL72E SWuZ-24       | MIL72ESWUZ-24       | No       | Flush   | Synchronous | 24VAC         | SPDT 21A                   | 2 hr.                  | ON 2 hr.             |
| MIL72E SWuZ-120      | MIL72ESWUZ-120      | No       | Flush   | Synchronous | 120VAC        | SPDT 21A                   | 2 hr.                  | ON 2 hr.             |
| MIL72E SWuZ-240      | MIL72ESWUZ-240      | No       | Flush   | Synchronous | 208/240VAC    | SPDT 21A                   | 2 hr.                  | ON 2 hr.             |
| MIL72E SWuZH-24      | MIL72ESWUZH-24      | Yes      | Flush   | Synchronous | 24VAC         | SPDT 21A                   | 2 hr.                  | ON 2 hr.             |
| MIL72E SWuZH-120     | MIL72ESWUZH-120     | Yes      | Flush   | Synchronous | 120VAC        | SPDT 21A                   | 2 hr.                  | ON 2 hr.             |
| MIL72E SWuZH-240     | MIL72ESWUZH-240     | Yes      | Flush   | Synchronous | 208/240VAC    | SPDT 21A                   | 2 hr.                  | ON 2 hr.             |
| MIL72E QWuZH-24      | MIL72EQWuZH-24      | Yes      | Flush   | Quartz*     | 24VAC         | SPDT 21A                   | 2 hr.                  | ON 2 hr.             |
| MIL72E QWuZH-120     | MIL72EQWuZH-120     | Yes      | Flush   | Quartz      | 120VAC        | SPDT 21A                   | 2 hr.                  | ON 2 hr.             |
| MIL72E QWuZH-240     | MIL72EQWuZH-240     | Yes      | Flush   | Quartz      | 208/240VAC    | SPDT 21A                   | 2 hr.                  | ON 2 hr.             |

#### **Features:**

- Synchronous drive or quartz drive with battery backup
- 21A SPDT switch
- Captive trippers with intervals as low as 15 minutes
- With or without 3-way override
- True clock face
- Surface, flush, or DIN rail mount

\*Quartz 24VAC models will operate on 12-24VDC



# **Electromechanical Cycle Time Switches**



#### Talento 121

#### **Features:**

- Synchronous drive or quartz drive with battery backup
- 21A SPDT switch
- Captive trippers with interval as low as 15 minutes
- With or without 3-way override
- True clock face
- · Surface, flush, or DIN rail mount



## FM/1 S 12H

## **Features:**

- 12 hour cycle
- 7.5 minute resolution
- · Captive trippers
- SPDT 21A switch
- Flush, surface or DIN rail mounting

## Talento 121

## **One Hour Repeat Cycle Time Switch**

The Talento 121 is a synchronous motor driven electromechanical one hour time switch intended as a low cost repeat cycle timer for industrial processes and other applications. It provides continuous on and off cycling of a load in a pattern which will repeat every hour. Captive trippers allow setting up to 24 ON and 24 OFF times in 1.25 minute increments over a one hour period. It may be used in conjunction with an Intermatic 24-hour or 7-day time switch to provide repeat cycle timed switching only during selected periods of the day or week. It may be surface or DIN rail mounted within panels, or may be mounted in an Intermatic indoor or outdoor enclosure.

## **Specifications:**

Size – 2.13" x 3.31" x 2.56" deep Switch Output – SPDT isolated contacts

itput – SPDT isolated contacts 16A Resistive @ 125/250VAC

4A Inductive @ 125/250VAC

1350W Tungsten @ 240V

Shortest Switching Time - 1.25 Minutes

**Operating Temperature –** -13°F to 130°F

**Operating Humidity –** 0 to 95% RH non-condensing

Wiring Connections - Screw terminals for up to #12AWG wire

## FM/1 S 12H

## 12 Hour Repeat Cycle Time Switch

The FM/1 S 12H is a synchronous motor driven electromechanical 12 hour time switch intended as a low cost repeat cycle timer for industrial processes and other applications. It provides continuous on and off cycling in a pattern which will repeat every 12 hours. Captive trippers allow setting up to 48 ON and 48 OFF times in 7.5 minute increments over a 12 hour period.

## **Specifications:**

**Size** – 2.36" x 2.36" x 1.25" **Supply Voltage** – 24, 120, 240VAC **Power Consumption** – 1VA

Switch Rating - SPDT

Resistive: 21A Tungsten: 1350W

Inductive: 1HP @ 120VAC 2HP @ 240VAC

Wiring Connections - 1/4" quick-connects

| Talento 121 and FM/1 S 12H Ordering Data |                     |            |           |                |                        |               |  |
|--|---------------------|------------|-----------|----------------|------------------------|---------------|--|
| Grasslin<br>Model                        | Intermatic<br>Model | Voltage    | Carryover | Switch Program | Minimum<br>On/Off Time | Switch Output |  |
| Talento-121-120                          | TALENT0121-<br>120  | 120VAC     | No        | 1 Hour         | 1.25 Minutes           | SPDT 16A Res. |  |
| Talento-121-240                          | TALENTO121-<br>240  | 208/240VAC | No        | 1 Hour         | 1.25 Minutes           | SPDT 16A Res. |  |
| FM/1 S 12H-120                           | FM1S12HU-120U       | 120VAC     | No        | 12 Hour        | 7.5 Minutes            | SPDT 21A Res. |  |



# **Electronic Time Controls**



## GM40E Series (24-Hour and/or 7-Day All-In-One)

## **Electronic General Purpose Time Switch**

The GM40E Series Time Controls are universal, electronic time switches designed for general purpose commercial applications. Available in voltage specific 120VAC, 208/240VAC or 277VAC 60/50Hz. The mechanism is mounted in a NEMA 3R outdoor enclosure and features a DPDT switching configuration standard (i.e. two normally open and two normally closed contacts). All GM40E models are available as "Mechanism Only" ( -M) for installation in other enclosures or control panels or "Bracket Mount" ( -B). The GM40E is also available in a NEMA 1 Indoor Metal Enclosure (-IM).

APPLICATION: The GM40E is a robust time switch capable of switching high amperage. Below are samples of the many applications where the GM40E can be used:

- Lighting Control
- · Access Control
- Heating, Air-Conditioning
- Agricultural Facilities
- Pumps/Motors/Fan Control
- · General Electrical Circuits

|                              | GM40E Series Ordering Data  |                     |                    |                   |  |  |  |  |  |
|------------------------------|---|---------------------|--------------------|-------------------|--|--|--|--|--|
| Grasslin/Intermatic<br>Model | Voltage Output  |                     | Programs           | Battery<br>Backup |  |  |  |  |  |
| 24-Hour/7-Day Electronic     | 24-Hour/7-Day Electronic, DPDT, NEMA 3R Outdoor Enclosure                             |                     |                    |                   |  |  |  |  |  |
| GM40E-120                    | 120VAC, 50/60Hz   | 40A DPDT            | 14                 | Yes               |  |  |  |  |  |
| GM40E-240                    | 240VAC, 50/60Hz   | 40A DPDT            | 20                 | Yes               |  |  |  |  |  |
| GM40E-277                    | 277VAC, 60Hz  | 40A DPDT            | 20                 | Yes               |  |  |  |  |  |
| 24-Hour/7-Day Electronic     | c, DPDT, NEMA 3R Outdoor Enclo  | sure w/Automatic Da | aylight Saving Adj | ustment           |  |  |  |  |  |
| GM40E42-120                  | 120VAC, 50/60Hz   | 40A DPDT            | 42                 | Yes               |  |  |  |  |  |
| 24-Hour/7-Day Electronic     | c, DPDT, Mechanism Only   |                     |                    |                   |  |  |  |  |  |
| GM40E-M-120                  | 120VAC, 50/60Hz   | 40A DPDT            | 14                 | Yes               |  |  |  |  |  |
| GM40E-M-240                  | 240VAC, 50/60Hz   | 40A DPDT            | 20                 | Yes               |  |  |  |  |  |
| 24-Hour/7-Day Electronic     | 24-Hour/7-Day Electronic, DPDT, Mechanism Only w/Automatic Daylight Saving Adjustment |                     |                    |                   |  |  |  |  |  |
| GM40E42-M-120                | 120VAC, 50/60Hz   | 40A DPDT            | 42                 | Yes               |  |  |  |  |  |

# **ELECTRICAL RATINGS:**

40A Resistive @ 120~277VAC 1HP, 16FLA, 90LRA @ 120VAC

2HP, 12FLA, 52LRA @ 208~277VAC 30A Ballast @ 120VAC

20A Ballast @ 277VAC 15A Tungsten @ 120VAC

300VA Pilot Duty 120~240VAC

N.O. Contacts:

N.O. Contacts:

30A Resistive @ 120~277VAC 1HP, 12FLA, 30LRA @ 120VAC 2HP, 10FLA, 30LRA @ 240VAC 2A Tungsten @ 120VAC 10A Ballast @ 277VAC

## **WIRING CONNECTIONS:**

Screw box lug terminals

## **ENVIRONMENTAL RATINGS:**

Operating Temperature Range: -40°F to 131°F (-40°C to 55°C)

Operating Humidity: 0 to 95% non-condensing

#### **ENCLOSURE DIMENSIONS:**

8.795" x 6.631" x 2.935" (H x W x D)

SHIPPING WEIGHT: 3 lbs. **ELECTRICAL LIFE:** 

50,000 Operations at Full Load

#### **SWITCH CONFIGURATION:**

DPDT (2-N.O. and 2-N.C. Contacts)

**BATTERY BACKUP OPTION: 7 Days** 



#### **Features:**

- 40 Amp. Rating
- Rechargeable battery backup
- SPDT and DPDT All-in-One!
- NEMA 3R Outdoor Enclosure is Standard
- No Tools Required—Guts Snap Easily Into Intermatic® Enclosure.
- Power and Status LED Indicators
- GM40E42 Models have automatic Daylight Saving Time adjustment
- Ground Lug



# **Electronic Time Controls**





#### **Features:**

- 16 Amp. Rating
- NEMA 1 Indoor or 3R Outdoor Enclosure
- SPDT
- 24-Hour/7-Day Electronic w/Battery Backup
- GMX Digi42 has automatic Daylight Saving Time adjustment
- Finger safe terminals
- Enclosure provides space for field added contactor or other accessories

## GMX Digi Series (24-Hour and/or 7-Day All-in-one)

## **General Purpose Time Switch**

The GMX Digi Series Time Controls are universal, electronic time switches. They are a low cost alternative for applications that do not require more than 16A. The unit is mounted in a NEMA 3R Outdoor enclosure.

**APPLICATION:** The GMX Digi is a light duty commercial time switch ideal for 24, 120, or 277 VAC single phase applications such as:

- Lighting Control
- Access Control
- Heating, Air-Conditioning
- Agricultural Facilities
- Pumps/Motors/Fan Control
- General Electrical Circuits

|                       | GMX Digi Series Ordering Data |           |                  |         |          |      |  |  |  |
|-----------------------|-------------------------------|-----------|------------------|---------|----------|------|--|--|--|
| Grasslin<br>Model     | Intermatic<br>Model           | Enclosure | Voltage          | Program | Switch   | Amps |  |  |  |
| GMX-digi20-I-120      | GMXDIGI20-I-120               | NEMA 1    | 120 50/60HZ      | 20      | SPDT     | 16   |  |  |  |
| GMX-digi20-l-240      | GMXDIGI20-I-240               | NEMA 1    | 208/240V 50/60HZ | 20      | SPDT     | 16   |  |  |  |
| GMX-digi20-I-24       | GMXDIGI20-I-24                | NEMA 1    | 24V 50/60HZ      | 20      | SPDT     | 16   |  |  |  |
| GMX-digi42-I-120      | GMXDIGI42-I-120               | NEMA 1    | 120 50/60HZ      | 42      | SPDT     | 16   |  |  |  |
| GMX-digi42-l-240      | GMXDIGI42-I-240               | NEMA 1    | 208/240V 50/60HZ | 42      | SPDT     | 16   |  |  |  |
| GMX-digi42-l-24       | GMXDIGI42-I-24                | NEMA 1    | 24V 50/60HZ      | 42      | SPDT     | 16   |  |  |  |
| GMX-digi42-I-12       | GMXDIGI42-I-12                | NEMA 1    | 12VDC            | 42      | SPDT     | 16   |  |  |  |
| GMX-digi20-0-120      | GMXDIGI20-0-120               | NEMA 3R   | 120 50/60HZ      | 20      | SPDT     | 16   |  |  |  |
| GMX-digi20-0-240      | GMXDIGI20-0-240               | NEMA 3R   | 208/240V 50/60HZ | 20      | SPDT     | 16   |  |  |  |
| GMX-digi20-0-24       | GMXDIGI20-0-24                | NEMA 3R   | 24V 50/60HZ      | 20      | SPDT     | 16   |  |  |  |
| GMX-digi42-0-120      | GMXDIGI42-0-120               | NEMA 3R   | 120 50/60HZ      | 42      | SPDT     | 16   |  |  |  |
| GMX-digi42-0-12       | GMXDIGI42-0-12                | NEMA 3R   | 12VDC            | 42      | (2) SPDT | 16   |  |  |  |
| GMX2-digi42-I-120     | GMXDIGI42-I-120               | NEMA 1    | 120 50/60HZ      | 42      | (2) SPDT | 16   |  |  |  |
| GMX2-digi42-I-240     | GMXDIGI42-I-240               | NEMA 1    | 208/240V 50/60HZ | 42      | (2) SPDT | 16   |  |  |  |
| GMX2-digi42-I-24      | GMXDIGI42-I-24                | NEMA 1    | 24V 50/60HZ      | 42      | (2) SPDT | 16   |  |  |  |
| GMX2-digi42-0-<br>120 | GMXDIGI42-0-120               | NEMA 3R   | 120 50/60HZ      | 42      | (2) SPDT | 16   |  |  |  |

## **ELECTRICAL RATINGS:**

SPDT Contacts:

16A Resistive @ 120~250VAC

1,000W Tungsten @ 240VAC

#### **WIRING CONNECTIONS:**

Screw terminals accepts up to 12AWG wire

#### **ENVIRONMENTAL RATINGS:**

Operating Temperature Range: -20°F to 140°F (-28.9°C to 60°C) Operating Humidity: 0 to 95%

non-condensing

## **ENCLOSURE DIMENSIONS:**

10" x 6.50" x 3.75" (H x W x D)

SHIPPING WEIGHT: 2 lbs.

ELECTRICAL LIFE:

6,000 Operations at Full Load

**SWITCH CONFIGURATION:** 

SPDT (1-N.O. and 1-N.C. Contacts)

**BATTERY BACKUP OPTION: 7 Days** 

# Single Channel Electronic Time Controls



## Digi 20 and Digi 42 Series

## 24-Hour and/or 7-Day

**APPLICATION:** Time based control of lighting, ventilating, heating, cooling or other electrical loads in commercial and industrial applications. These one channel time switches are programmable for 24-hour or 7-day schedules. The Digi 42 offers an "8th day" or holiday schedule. The Digi 20A or Digi 42A are intended for either surface or DIN rail mounting. Both models are completely enclosed in a plastic housing and includes a terminal cover and sub-base for installation and hard wiring. The Digi 20E or Digi 42E are intended for flush mounting. Both models are supplied with a clear plastic snap-on dust cover.

## **Specifications:**

|                                       | Digi 20 | Digi 42 |
|---------------------------------------|---------|---------|
| Channels                              | 1       | 1       |
| Programs                              | 20      | 42      |
| Holiday Program                       | No      | Yes     |
| Reserve Carryover, min.               | 1 week  | 2 weeks |
| Automatic Spring/Fall Daylight Saving |         |         |
| Time Changeover                       | No      | Yes     |
| Technical Date                        |         |         |

**Technical Data** 

Output – 1 SPDT relay with dry contacts

Switching Capacity – 16A Resistive @ 277VAC
1000W Tungsten @ 240VAC

Input Draw - 4VA

Shortest Switching Time - 1 minute

Accuracy: Less than ±4 minutes per year deviation

Ambient Temperature: 0°F to 140°F (-18°C to 60°C)

Ambient Humidity: 0 to 95% RH, non-condensing

Selectable AM/PM or 24 hr. (military) time LCD display

One Key Daylight Time Changeover (automatic on Digi 42)

**Manual 3-Way Override:** Temporary or permanent ON or OFF status indication in LCD display.

#### **Wiring Connections:**

"A" Models: screw terminals for #10 to #24 AWG wire

"E" Models: 1/4" quick connects





#### **Features:**

- 24 hour or 7 day programming with accuracy to the second
- Easy programming; minimal keys and programming steps
- Unique "Circular Programming" with large keys is easier to use
- Selectable blocks of weekdays or weekends for quick programming on Digi 20, any combination of days on Digi 42
- Holiday program on Digi 42 may be scheduled a week in advance for one or more days
- Rechargeable battery backup with 1-4 weeks reserve carry-over
- Manual override provides for either temporary or continuous ON or OFF state, with status displayed in large LCD
- Digi 42 models have automatic
   Daylight Saving Time changeover
- 24V models will operate either on AC or DC

|                              | Digi 20 and Digi 42 Series Ordering Data |                     |                      |                                 |                                  |  |  |  |  |  |
|------------------------------|--|---------------------|----------------------|---------------------------------|----------------------------------|--|--|--|--|--|
| Grasslin/Intermatic<br>Model | Timer Voltage                            | Mounting            | Setpoint<br>Programs | Maximum weekly<br>On/Off Events | Relay Output<br>Resistive Rating |  |  |  |  |  |
| Digi20A-120                  | 120V, 50/60Hz                            | Surface or DIN Rail | 20                   | 140                             | SPDT, 16A, 250V                  |  |  |  |  |  |
| Digi20A-240                  | 208/240V,<br>50/60Hz                     | Surface or DIN Rail | 20                   | 140                             | SPDT, 16A, 250V                  |  |  |  |  |  |
| Digi20A-24                   | 24V, 50/60Hz                             | Surface or DIN Rail | 20                   | 140                             | SPDT, 16A, 250V                  |  |  |  |  |  |
| Digi20A-277                  | 277V, 50/60Hz                            | Surface or DIN Rail | 20                   | 140                             | SPDT, 16A, 250V                  |  |  |  |  |  |
| Digi42A-120                  | 120V, 50/60Hz                            | Surface or DIN Rail | 42                   | 294                             | SPDT, 16A, 250V                  |  |  |  |  |  |
| Digi42A-240                  | 208/240V 50/60Hz                         | Surface or DIN Rail | 42                   | 294                             | SPDT, 16A, 250V                  |  |  |  |  |  |
| Digi42A-24                   | 24V, 50/60Hz                             | Surface or DIN Rail | 42                   | 294                             | SPDT, 16A, 250V                  |  |  |  |  |  |
| Digi42A-12                   | 12VOC, 50/60Hz                           | Surface or DIN Rail | 42                   | 294                             | SPDT, 16A, 250V                  |  |  |  |  |  |
| Digi20E-120                  | 120V, 50/60Hz                            | Flush Panel         | 20                   | 140                             | SPDT, 16A, 250V                  |  |  |  |  |  |
| Digi20E-240                  | 208/240V 50/60Hz                         | Flush Panel         | 20                   | 140                             | SPDT, 16A, 250V                  |  |  |  |  |  |
| Digi20E-24                   | 24V, 50/60Hz                             | Flush Panel         | 20                   | 140                             | SPDT, 16A, 250V                  |  |  |  |  |  |
| Digi20E-277                  | 277V, 50/60Hz                            | Flush Panel         | 20                   | 140                             | SPDT, 16A, 250V                  |  |  |  |  |  |
| Digi42E-120                  | 120V, 50/60Hz                            | Flush Panel         | 42                   | 294                             | SPDT, 16A, 250V                  |  |  |  |  |  |
| Digi42E-240                  | 208/240V 50/60Hz                         | Flush Panel         | 42                   | 294                             | SPDT, 16A, 250V                  |  |  |  |  |  |
| Digi42E-24                   | 24V, 50/60Hz                             | Flush Panel         | 42                   | 294                             | SPDT, 16A, 250V                  |  |  |  |  |  |
| Digi42E-12                   | 12VOC, 50/60Hz                           | Flush Panel         | 42                   | 294                             | SPDT, 16A, 250V                  |  |  |  |  |  |
| (24V models will operate or  | AC or DC)                                |                     |                      |                                 |                                  |  |  |  |  |  |



# **Dual Channel Electronic Time Controls**



#### **Features:**

- 24 hour or 7 day programming with resolution to the minute and accuracy to the second
- · Large keys ease programming
- Unique circular programming pattern and minimal steps simplify programming
- Automatic Daylight Saving Time changeover in Spring and Fall eliminates need to manually

change

time

- Holiday, or "8th day" program may be scheduled a week in advance for one or more days
- Each channel may be programmed separately, or both together
- Automatically recharged NiCad battery maintains program and display for two weeks or more
- Manual override for each channel provides for either temporary or continuous ON or OFF state, with status displayed in large LCD

## Diai 42/2

## 24-Hour and/or 7-Day

**APPLICATION:** This unit can be used to control 240VAC two-phase loads such as pumps, compressors, etc. It can also be used to provide time based control of two circuit lighting, ventilating, heating, cooling or other electrical loads in commercial and industrial applications. The Digi 42/2 time switches are programmable for 24-hour or 7-day schedules as well as an "8th day" or holiday schedule. Each channel can operate independently or combined.

## **Specifications:**

**Output Switches –** Two SPDT relays with dry contacts **Switch Capacity –** 16A General Purpose, 125-250VAC

1000W Tungsten, 250V 500W Tungsten, 125V

N.O. Contact: 1HP, 240VAC; 1/2HP, 120VAC

Pilot Duty: 720VA, 120-240VAC

N.C. Contact: 3/4HP, 240VAC; 1/3HP, 120VAC

Pilot Duty: 360VA, 120-240VAC

Input Power - 4.4VA

Shortest Switching Time - 1 minute

Accuracy: Less than ±4 minutes per year deviation
Ambient Temperature: 0°F to 140°F (-18°C to 60°C)
Ambient Humidity: 0 to 95% RH, non-condensing
Selectable AM/PM or 24 hr. (military) time display

Selectable completely automatic or one key manual daylight time changeover

Manual 3-Way Override: Temporary or permanent ON or OFF status indication in LCD display.

Wiring Connections: Screw terminals #12 to #24AWG SIZE: 2.83" x 2.83" square face, x 2.28" deep UL AND CANADIAN UL RECOGNIZED: File E83486

| Digi 42/2 Ordering Data      |                         |                  |  |     |   |  |  |  |
|------------------------------|-------------------------|------------------|--|-----|---|--|--|--|
| Grasslin/Intermatic<br>Model | Timer Voltage Mounting* |                  | Setpoint Maximum weekly Programs On/Off Events |     | Relay Output<br>General Purpose<br>Rating |  |  |  |
| Digi42/2-120                 | 120V, 50/60Hz           | Flush or Surface | 42   | 294 | (2) SPDT, 16A, 250VAC                     |  |  |  |
| Digi42/2-240                 | 240V, 50/60Hz           | Flush or Surface | 42   | 294 | (2) SPDT, 16A, 250VAC                     |  |  |  |
| Digi42/2-24                  | 24V, 50/60Hz            | Flush or Surface | 42   | 294 | (2) SPDT, 16A, 250VAC                     |  |  |  |

\* For DIN rail mounting, order: MB-DIN Rail Mounting Base

# Advanced Electronic Time Controls 1, 2, and 4 Channels



## Talento 400 & 800 Series

## 24 Hour, 7 Day, 365 Day Multi-Function Time Controls

**APPLICATION:** The Talento series electronic time switches provide time-of-day control for lighting, heating, air conditioning, pumps, motors or general electrical circuits. The "400" series are 24-hour/7-day controls, while the "800" series units offer 365-day programming with holiday capability through the year 2095. All models offer automatic leap year and daylight savings adjustment. These features are activated when the user enters the current date and respective Daylight Saving Time change-over dates. From that point on, daylight change-over dates will never have to be entered again. An LCD display indicates the load status, time-of-day, weekday and on the "800" series, the date. The units can be surface mounted, mounted to a standard DIN rail or within an Intermatic enclosure for stand-alone installations. Enclosure options include indoor or outdoor plastic (with solid or clear cover) or indoor metallic. In addition to the conventional ON/OFF programming format, these units offer pulse and cycle functions. A pulse is simply an ON or OFF event with a duration of one or more seconds. The cycle function provides for a repeating ON event within a selectable total cycle. Both the ON duration and the total cycle duration are independently programmable in minutes or seconds. In addition, the cycle function can be set to repeat indefinitely or to occur within a time and/ or date range.

#### SPECIFIERS GUIDE

800 Series: The contractor shall furnish and install a Intermatic talento 894, 4 channel (892, 2 channel / 891, 1 channel) electronic time switch. Each channel shall be independently programmable. A total of 400 events shall be provided. The time switch shall offer daily, weekly or annual programming capability with up to 99 separate holiday periods of any duration and priority. Three types of switching commands shall be provided; on/off, pulse and cycle. Automatic or user selectable Daylight Saving Time change-over shall be incorporated through the year 2095. An optional Windows®-based software program shall be available for remote programming capability, It shall provide full graphic indication of the switching schedule. It shall also include a database of fixed and floating holidays. Floating holidays will automatically repeat each year on the correct date. An astronomical program shall be included which will automatically adjust the switch event schedule according to the changing sunrise and sunset times. An LCD display shall be provided to indicate the current time, date, switch contact status and program schedule. A replaceable lithium battery shall be provided to maintain the current time and date in the event of a power failure for up to six (6) years; the switch program shall be stored in non-volatile (EEPROM) memory. The SPDT switch contacts shall be rated for 16A at 250VAC. Time switch supply voltage shall be 24VAC/DC or 120VAC or 240VAC. The time switch shall be capable of surface or DIN rail mounting or it can be provided in an indoor or outdoor (NEMA 1 or 3R) enclosure. It shall be UL, C-UL recognized, and UL/C-UL listed in optional enclosure.

**400 Series:** The contractor shall furnish and install a Intermatic talento 472, 2 channel (471, 1 channel) electronic time switch. Each channel shall be independently programmable. A total of 40 (30, 471) events shall be provided. The time switch shall offer daily or weekly programming. Three types of switching commands shall be provided; on/off, pulse and cycle. Automatic or user selectable Daylight Saving Time change-over shall be incorporated through the year 2095. An LCD display shall be provided to indicate the current time, day, switch contact status and program schedule. A lithium battery shall be provided to maintain the current time and date in the event of a power failure for up to three (3) years; the switch program shall be stored in non-volatile (EEPROM) memory. The SPDT switch contacts shall be rated for 16A at 250 VAC. Time switch supply voltage shall be 24VAC/DC or 120VAC, or 240VAC. The time switch shall be capable of surface or DIN rail mounting or it can be provided in an indoor or outdoor (NEMA 1 or 3R) enclosure. It shall be UL, C-UL recognized, and UL/C-UL listed in optional enclosure.

## **Remote PC Programming**

The talento 800 series can be programmed from a PC utilizing the optional **talento dialog set.** The set includes Windows®-based software, the **taxxi** hand-held programmer, CD-ROM, interconnect cable and instructions.

The software contains a schedule of **fixed** and **floating** holidays that can be selected, as required, for the particular application. **Floating** holidays will automatically repeat on the correct date, year after year. Thus, all **fixed** and **floating** holidays need only be programmed once. In addition, an **astronomical** program is included which will automatically adjust the program schedule to follow the changing sunrise and sunset times.

Once the programming is completed on the PC, it is transferred to the **taxxi** hand-held programmer from which programs are downloaded into one or more installed talento 800 series time controls. The **taxxi** can store up to four independent programs and can also upload a program from the talento into a PC for review or editing.



#### **Features:**

- 1, 2 & 4 channels programmable independently or simultaneously
- Automatic leap year and daylight saving time adjustment
- Pulse programming for school bells, sirens, or lighting contactor applications
- Cycle programming for pump or other sequencing applications
- · Lithium battery backup keeps clock running
- EEPROM Non-Volatile program memory
- Astronomical function on Talento 800 series (Requires Software)





# Advanced Electronic Time Controls 1, 2, and 4 Channels





## **Features:**

- 8 channels programmable independently or simultaneously
- 7 day programming
- 2 ON and 2 OFF settings per day
- ON-OFF-AUTO Override for each channel
- Holiday "OFF" provision
- Indoor/Outdoor enclosure w/clear door
- Battery backup for 1 month
- 10 Amp, SPDT switching



| 1                            | Talento 400/800 Series Ordering Data |          |          |          |  |  |  |  |  |
|------------------------------|--------------------------------------|----------|----------|----------|--|--|--|--|--|
| Grasslin/Intermatic<br>Model | Voltage Output                       |          | Channels | Programs |  |  |  |  |  |
| Mechanism Only               |                                      |          |          |          |  |  |  |  |  |
| TALENT0471-120               | 120VAC, 50/60Hz                      | 16A SPDT | 1        | 30       |  |  |  |  |  |
| TALENT0891-24                | 24VAC/DC, 50/60Hz                    | 16A SPDT | 1        | 400      |  |  |  |  |  |
| TALENT0891-120               | 120VAC, 50/60Hz                      | 16A SPDT | 1        | 400      |  |  |  |  |  |
| TALENT0472-120               | 120VAC, 50/60Hz                      | 16A SPDT | 2        | 30       |  |  |  |  |  |
| TALENT0892-24                | 24VAC/DC, 50/60Hz                    | 16A SPDT | 2        | 400      |  |  |  |  |  |
| TALENT0892-120               | 120VAC, 50/60Hz                      | 16A SPDT | 2        | 400      |  |  |  |  |  |
| TALENT0894-24                | 24VAC/DC, 50/60Hz                    | 16A SPDT | 4        | 400      |  |  |  |  |  |
| TALENT0894-120               | 120VAC, 50/60Hz                      | 16A SPDT | 4        | 400      |  |  |  |  |  |
| NEMA 1 Indoor Enclosure      | )                                    |          |          |          |  |  |  |  |  |
| GMX471-I-120                 | 120VAC, 50/60Hz                      | 16A SPDT | 1        | 30       |  |  |  |  |  |
| GMX891-I-120                 | 120VAC, 50/60Hz                      | 16A SPDT | 1        | 400      |  |  |  |  |  |
| GMX472-I-120                 | 120VAC, 50/60Hz                      | 16A SPDT | 2        | 30       |  |  |  |  |  |
| GMX892-I-24                  | 24VAC/DC, 50/60Hz                    | 16A SPDT | 2        | 400      |  |  |  |  |  |
| GMX892-I-120                 | 120VAC, 50/60Hz                      | 16A SPDT | 2        | 400      |  |  |  |  |  |
| GMX894-I-24                  | 24VAC/DC, 50/60Hz                    | 16A SPDT | 4        | 400      |  |  |  |  |  |
| GMX894-I-120                 | 120VAC, 50/60Hz                      | 16A SPDT | 4        | 400      |  |  |  |  |  |

## SRS 3800

## 7 Day, 8-Channel End Time Switch

**APPLICATION:** Time of day ON/OFF control of 8 circuits of HVAC systems, zone heating, industrial processes, alarm systems, lighting, fans, pumps or other loads in commercial, industrial, institutional, and agricultural facilities. A simple and effective energy management system for small and mid-sized office buildings, schools, banks, malls, and government buildings.

## **Specifications:**

Input Voltage - 120VAC 50/60 Hz

Output Rating - 10A Resistive @ 120~240VAC per channel

**Output Configuration:** 6 SPDT, 2 SPST (NO)

**Power Consumption:** 12VA **Shortest Switching Time:** 1 minute

Ambient Temperature:  $14^{\circ}F$  to  $122^{\circ}F$  ( $-10^{\circ}C$  to  $50^{\circ}C$ ) Ambient Humidity: 0 to 95% RH, non-condensing

Manual 3-Way Override: Auto-On-Off "ON" or "OFF" status indicator for each channel Wiring Connections: Screw terminals, 12-24AWG Size: 8.38 (213mm) x 7.08" (180mm) x 4.5" (114mm)

| SRS 3800 Ordering Data      |              |                      |          |          |  |  |  |
|-----------------------------|--------------|----------------------|----------|----------|--|--|--|
| Grasslin/Intermatic Voltage |              | Output               | Channels | Programs |  |  |  |
| Plastic Clear Enclosure     |              |                      |          |          |  |  |  |
| SRS3800-120                 | 120VAC, 60Hz | 10A, 6-SPDT & 2-SPST | 8        | 224      |  |  |  |

# **Electromechanical Timer Modules**



## FM/1 Series

## 24 Hour, 7 Day

APPLICATION: The FM/1 series electromechanical timer modules are designed to be placed inside a machine control panel, circuit board, or other equipment. It offers up to 21A switching designed for control of heating, ventilating, air conditioning, refrigeration, lighting, security, circulating pumps, spas or any electrical load requiring 24-hour or 7-day scheduling.

## **Specifications:**

Size: 2.36" x 2.36" x 1.25" Supply Voltage: 24, 120, 240VAC Power Consumption: 1 VA Switch Rating: SPDT Resistive: 21A Tungsten: 1350W

Inductive: 1HP @ 120VAC 2HP @ 240VAC

Wiring Connections: 1/4" quick-connects Installation: Stand Alone: With indoor or outdoor

enclosure

Panel: Surface mounting



## **Features:**

- 21A SPDT switch
- Captive Trippers
- 1/4" quick terminals
- Noise Immune—Ideal for robust applications

|                     | FM/1 Series Ordering Data <sup>†</sup> |          |                   |           |                         |                        |                       |                         |  |
|---------------------|--|----------|-------------------|-----------|-------------------------|------------------------|-----------------------|-------------------------|--|
| Grasslin<br>Model   | Intermatic<br>Model                    | Override | Switch<br>Program | Carryover | Program<br>On/Off Every | Minimum<br>On/Off Time | Switch Output<br>Type | Switch Output<br>Rating |  |
| FM/1 STuZ-120       | FM1STUZ-120U                           | No       | 24 Hr.            | No        | 15 Minutes              | 15 Minutes             | SPDT                  | 21A. Res.               |  |
| FM/1 STuZ-24        | FM1STUZ-24U                            | No       | 24 Hr.            | No        | 15 Minutes              | 15 Minutes             | SPDT                  | 21A. Res.               |  |
| FM/1 STuZ-240       | FM1STUZ-240U                           | No       | 24 Hr.            | No        | 15 Minutes              | 15 Minutes             | SPDT                  | 21A. Res.               |  |
| FM/1 SWuZ-120       | FM1SWUZ-120U                           | No       | 7 day             | No        | 2 Hours                 | 2 Hours                | SPDT                  | 21A. Res.               |  |
| FM/1 SWuZ-24        | FM1SWUZ-24U                            | No       | 7 day             | No        | 2 Hours                 | 2 Hours                | SPDT                  | 21A. Res.               |  |
| FM/1 SWuZ-240       | FM1SWUZ-240U                           | No       | 7 day             | No        | 2 Hours                 | 2 Hours                | SPDT                  | 21A. Res.               |  |
| FM/1 STuZH-120      | FM1STUZH-120U                          | Yes      | 24 Hr.            | No        | 15 Minutes              | 15 Minutes             | SPDT                  | 21A. Res.               |  |
| FM/1 STuZH-24       | FM1STUZH-24U                           | Yes      | 24 Hr.            | No        | 15 Minutes              | 15 Minutes             | SPDT                  | 21A. Res.               |  |
| FM/1 STuZH-240      | FM1STUZH-240U                          | Yes      | 24 Hr.            | No        | 15 Minutes              | 15 Minutes             | SPDT                  | 21A. Res.               |  |
| FM/1 SWuZH-120      | FM1SWUZH-120U                          | Yes      | 7 day             | No        | 2 Hours                 | 2 Hours                | SPDT                  | 21A. Res.               |  |
| FM/1 SWuZH-24       | FM1SWUZH-24U                           | Yes      | 7 day             | No        | 2 Hours                 | 2 Hours                | SPDT                  | 21A. Res.               |  |
| FM/1 SWuZH-240      | FM1SWUZH-240U                          | Yes      | 7 day             | No        | 2 Hours                 | 2 Hours                | SPDT                  | 21A. Res.               |  |
| FM/1 SWuZH-277      | FM1SWUZH-277U                          | Yes      | 7 day             | No        | 2 Hours                 | 2 Hours                | SPDT                  | 21A. Res.               |  |
| FM/1 QTuZH-120      | FM1QTUZH-120U                          | Yes      | 24 Hr.            | 7 day     | 15 Minutes              | 15 Minutes             | SPDT                  | 21A. Res.               |  |
| FM/1 QTuZH-24       | FM1QTUZH-24U                           | Yes      | 24 Hr.            | 7 day     | 15 Minutes              | 15 Minutes             | SPDT                  | 21A. Res.               |  |
| FM/1 QWuZH-<br>120  | FM1QWUZH-120U                          | Yes      | 7 day             | 2 Hr.     | 2 Hours                 | 2 Hours                | SPDT                  | 21A. Res.               |  |
| FM/1 QWuZH-<br>240  | FM1QWUZH-240U                          | Yes      | 7 day             | 2 Hr.     | 2 Hours                 | 2 Hours                | SPDT                  | 21A. Res.               |  |
| Available with 24V, | 120V, 240V, 277VAC ir                  | nput     |                   |           |                         | _                      |                       |                         |  |











# **Electromechanical Timer Modules**



## **Features:**

- Very small and compact, fits anywhere
- On/Auto/Off manual switch standard
- Captive trippers for easy programming
- 1/4" quick terminals







## **KM2 Series**

24 Hour, 7 Day

APPLICATION: The KM/2 series modules are designed to fit into tight locations. It offers up to 21A switching designed for control of heating, ventilating, air conditioning, refrigeration, lighting, security, circulating pumps, spas or any electrical load requiring 24-hour or 7-day scheduling.

## **Specifications:**

**Size:** 1.67" x 2.64" x 1.67" Supply Voltage: 24, 120, 240VAC Power Consumption: 1 VA Switch Rating: SPDT

Resistive: 21A @ 250V Motor: 1HP @ 125VAC 2HP @ 250VAC Inductive: 8A @ 250VAC Tungsten: 1350W

Wiring Connections: 1/4" quick-connects

| KM2 Series Ordering Data     |                                  |                         |                        |      |          |  |  |
|------------------------------|----------------------------------|-------------------------|------------------------|------|----------|--|--|
|                              | OPERATING FEATURES Switch Output |                         |                        |      |          |  |  |
| Grasslin/Intermatic<br>Model | Switch Program                   | Program<br>On/Off Every | Minimum<br>On/Off Time | Туре | Rating   |  |  |
| KM2STUH-120                  | 24 Hr.                           | 20 Minutes              | 20 Minutes             | SPDT | 21A Res. |  |  |

## **Electronic Timer Modules**



## FM/1 digi 20

## 24 Hour and/or 7 Day

## **Specifications:**

Switch Rating: SPDT 16A Resistive @ 277VAC 1000W Tungsten @ 240VAC

**Input Draw:** 4VA

Input Frequency: 50/60Hz

**Shortest Switching Time:** 1 minute

Ambient Temperature: 0°F to 140°F (-18°C to 60°C)
Ambient Humidity: 0 to 95% RH, non-condensing
Wiring Connections: 1/4" quick connects
UL and Canadian UL File E 83486

## Features:

- 20 programs, up to 140 events per week
- · Easy to program with large keys
- 16 Amp @ 277V SPDT switching
- Capacitor backup with 5 day carryover
- Manual override

## FM/1 digi 14

## **Specifications:**

**Wiring Connections:** 1/4" Quick Terminals **Supply Voltage:** 125VAC, 60 Hz.

Switch Output: SPDT (Form C Relay Contacts)
Switch Rating: 15A General Purpose/Resistive @125VAC
1000W Tungsten @125VAC

1/2HP @125VAC

Battery Back-Up: Rechargeable Ni-MH (Holds program

and keeps time for up to 60 days)

Operating Temperature: -10°C to + 55°C

Accuracy: ± 1 sec/day at 20°C

Number of Programs: 7 ON, 7 OFF Block Programming: MON-SUN, MON-FRI, SAT-SUN,

MON-SAT, MON-WED-FRI

**Specifications:** 

16A Resistive @ 277VAC

Input Frequency: 50/60Hz

1000W Tungsten @ 240VAC

Shortest Switching Time: 1 minute

Ambient Temperature: 0°F to 140°F (-18°C to 60°C)

Ambient Humidity: 0 to 95% RH, non-condensing Wiring Connections: 1/4" quick connects UL and Canadian UL File E 83486

Switch Rating: SPDT

Input Draw: 4VA

FM/1 digi 42

Shortest Switching Time: 1 Minute Display: Backlit LCD (Illuminates in the dark) Protection: MOV and Thermal Fuse Approvals: UL & Canadian UL

#### **Features:**

- Integrated MOV surge protection assures reliable operation
- Thermal fuse protects unit in the event of overload
- 1/4" quick terminals for easy wiring connection
- Rechargeable Ni-MH battery holds program and keeps time for up to 60

#### days

- Block programming reduces number of events:
   MON-SUN, MON-FRI, SAT-SUN, MON-SAT,
   MON-WED-FRI
- Backlit LCD illuminates in the dark
- 14 programs for maximum 98 weekly ON/OFF

## Features:

- · Automatic Daylight Saving Time Changeover
- 42 programs, up to 294 events per week
- Holiday programming
- 16 Amp @ 277V SPDT switching
- Rechargeable battery backup with carryover of over 4 weeks















#### FM/1 Series Ordering Data - FM/1 digi 42 also available for 12VDC input, 24V models are AC/DC Grasslin Intermatic Input Switch Max. Weekly Holiday Reserve Relav **Programs** Model Model Voltage **Program** On/Off Events **Program** Carryover Output FM/1 digi 14-120 FM1DIGI14-120U 120V. 50/60Hz 24 hr. / 7 day ٩R SPDT 15A 14 Nο 60 days FM/1 digi 20-120 FM1DIGI20-120U 120V, 50/60Hz 24 hr. / 7 day 20 140 No 1 week SPDT 16A FM/1 digi 20-240 FM1DIGI20-240U 240V, 50/60Hz 24 hr. / 7 day 20 140 No 1 week SPDT 16A FM/1 digi 20-24 FM1DIGI20-24U 24V, 50/60Hz 24 hr. / 7 day 20 140 SPDT 16A No 1 week FM1DIGI20-277U FM/1 digi 20-277 277V, 50/60Hz 24 hr. / 7 day 20 140 No 1 week SPDT 16A FM/1 digi 42-120 FM1DIGI42-120U 120V, 50/60Hz 24 hr. / 7 day 42 294 SPDT 16A Yes 2 weeks FM/1 digi 42-24 FM1DIGI42-24U 24V, 50/60Hz 24 hr. / 7 day 42 SPDT 16A 294 Yes 2 weeks FM/1 digi 42-12VDC FM1DIGI42-12U 24V, 50/60Hz 24 hr. / 7 day 42 294 SPDT 16A 2 weeks



# **In-Wall Electronic Timer**



#### **Features:**

- Operates on 120V or 277VAC
- · Mounts in standard wallbox
- Single button ON/OFF operation
- Backlit LCD display
- Preset time adjustments; 5, 15, 30,

minutes, 3, 6, 9, 12 hours

- Switch holds position during a power failure (on or off), restarts at preset time when power is restored
- UL and cUL Listed
- Clamshell packaging available
- Wall plate included
- Works with fluorescent and compact fluorescent lights



## Eilo

## ET616

#### **Electronic Interval Countdown Timer**

The ET616 is a wall mounted Electronic Time Switch which automatically turns lights or other loads OFF after a preset time period. When used for control of lights in a conference room, rest room, or similar temporary use room, it functions like a standard light switch, turning the lights ON when the button is pressed, and OFF when pressed again. If left ON, it will automatically turn OFF after a time period settable from 5 minute to 12 hours via tamper-proof dip switches. It is also suitable for the control of tanning beds, fans, heaters, chemical pumps, laboratory apparatus, and other applications requiring a preset ON time and automatic shutoff

## **Specifications:**

Input: 120V or 277VAC 50/60 Hz

## **Switch Rating:**

1000W Tungsten, 800W Ballast Switch Rating @ 120VAC 1500W Tungsten, 1200W Ballast Switch Rating @ 277VAC 8.3A Resistive @120VAC

5.4A Resistive @277VAC

Operating Temperature: 0° to 100°F (–18° to 38°C)
Operating Humidity: 0-95% RH Non-Condensing

Faceplate Color: White

**Timing Accuracy:** Less Than 1% Deviation **Wiring Connections:** 6" Leadwires

#### **SPECIFIERS GUIDE**

Furnish and install a Intermatic Model ET616 Electronic Interval Timer. The timer shall fit a standard 2-1/2" deep single or multigang wall box and decorator style wall plate. It shall be capable of being powered by 120 or 277 volts without a neutral connection. The unit shall offer preset time intervals of 5, 15, 30 or 60-minutes and 3, 6, 9 or 12- hours set with "DIP" switches. Operation shall be via a single push button located on the front of the time switch. The push button shall operate as a standard on/off switch as well as to initiate the selected countdown interval. The time switch shall incorporate a "scroll-up" or "scroll-down" feature that allows the preset time to be adjusted up or down. The timer shall provide a "beep" and "flash" mode to indicate the last minute of operation. If activated, the unit shall flash once at the one-minute mark or beep once every 5 seconds from the one-minute mark to the shutdown point. The unit shall provide a reset feature, activated by pressing the push button once during the last minute of operation, to reinitiate the selected countdown interval. The time switch shall incorporate a backlit LCD to display the countdown time. The unit shall contain a capacitor to retain the switch position during a power failure for up to 10 hours.

| ET616 Ordering Data          |                          |                                       |   |  |  |  |  |
|------------------------------|--------------------------|---------------------------------------|---|--|--|--|--|
| Grasslin/Intermatic<br>Model | Voltage                  | Timing Interval                       | Switch Rating   |  |  |  |  |
| ET616                        | 120 or 277 VAC, 50/60 Hz | 5, 15, 30, 60 Min.<br>3, 6, 9, 12 Hr. | 1000W (Tungsten) @ 120V<br>800W (Ballast) @ 120V<br>1500W (Tungsten) @ 277V<br>1200W (Ballast) @ 277V |  |  |  |  |

# **In-Wall Electromechanical Timer**



## KM2 In-Wall Timer

## 24 Hour, 7 Day

Replaces standard wall switch (toggle) to provide automatic control of outdoor or indoor lighting, fans, pumps, office machines, and other types of circuits. Captive trippers are easy to set, can't be lost. 72 trippers provide up to 36 ON/OFF events in 24 hour period. Three way, OFF/AUTO/ON override switch provides continuous ON or OFF positions. UL Listed. Easy wiring and installation.

## **Specifications:**

#### **Switch Rating:**

20A @ 120VAC, 60Hz 2400W Resistive 8A Inductive 1HP @ 120VAC 1350W Tungsten

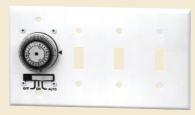
## **Environmental Ratings:**

Operating Temperature Range: -40°F to 180°F (-40°C to 85°C)

Operating Humidity: 0 to 95% non-condensing

Wiring Connections: (3) #14AWG color coded lead wires

Hot – Black Switched – Red Neutral – White



4-gang/toggle



Dual Timer (2-gang with 2 KM2's)



2-gang/decorator



2-gang/toggle

| KM2 Ordering Data |            |                         |          |  |  |  |
|-------------------|------------|-------------------------|----------|--|--|--|
| 24 Hour           | 7 Day      | Wallplate Configuration | Switch   |  |  |  |
| KM2ST-1G          | KM2SW-1G   | 1 Gang                  | SPST     |  |  |  |
| KM2STU-1G         | KM2SWU-1G  | 1 Gang, 3 Way           | SPDT     |  |  |  |
| KM2ST-2G          | KM2SW-2G   | 2 Gang, Toggle          | SPST     |  |  |  |
| KM2ST-3G          | _          | 3 Gang, Toggle          | SPST     |  |  |  |
| KM2ST-4G          | _          | 4 Gang, Toggle          | SPST     |  |  |  |
| KM2ST-2D          | KM2SW-2D   | 2 Gang, Decorator       | SPST     |  |  |  |
| KM2ST-3D          | _          | 3 Gang, Decorator       | SPST     |  |  |  |
| KM2ST-2R          | _          | 2 Gang, Receptacle      | SPST     |  |  |  |
| KM2STST-2G        | KM2SWSW-2G | 2 Gang, Dual Timers     | (2) SPST |  |  |  |



## **Features:**

- Captive trippers with 20 minute switching interval (2-1/3 hr. for 7 day)
- SPST 20A, 1HP @ 120V switch
- Replaces standard wall switches
- Multiple plates available
- Reliable synchronous timer motor
- Easy wiring and installation
- Works with fluorescent and compact fluorescent lights





# **In-Wall Electronic Timer**



#### **Features:**

- Sleek profile
- Easy to program
- Single push-button control
- Mounts in standard wallbox
- Built-in rechargeable battery never needs replacement
- LCD display
- Flush mounted design
- Non-volatile memory
- Captive cover plate
- UL Listed and CSA Approved
- Wall plate included
- Works with fluorescent and compact fluorescent lights



## ET724 Electronic In-Wall Timer

## 24 Hour and/or 7 Day

Replaces standard wall switch (toggle) to provide automatic control of outdoor or indoor lighting, fans, pumps, office machines, and other types of circuits. The unit can be programmed for 7-0N and 7-0FF events daily or weekly. Large clear LCD display indicates the time of day and ON/0FF status. The ET724 is designed to be mounted in a standard decorator plate for a sleek modern look.

## **Specifications:**

**Input:** 120VAC, 60 Hz **Switch Rating:** 

15A Ballast @ 120VAC 15A Tungsten @ 120VAC 1800W Resistive 1HP Motor

**Operating Temperature:** 32° to 122°F (0° to 50°C)

Faceplate Color: White or Light Almond Timing Accuracy: Less Than 1% Deviation Wiring Connections: 6" Leadwires

| Digi 42/2 Ordering Data      |              |              |                |                           |                   |  |  |  |
|------------------------------|--------------|--------------|----------------|---------------------------|-------------------|--|--|--|
| Grasslin/Intermatic<br>Model | Color        | Voltage      | Programs       | Blocks                    | Battery<br>Backup |  |  |  |
| ET724-CS                     | White        | 120VAC, 60Hz | 7-0N and 7-0FF | Mon~Sun, Mon~Fri, Sat~Sun | 30 Days           |  |  |  |
| ET724-A-CS                   | Light Almond | 120VAC, 60Hz | 7-0N and 7-0FF | Mon~Sun, Mon~Fri, Sat~Sun | 30 Days           |  |  |  |

## SPECIFIERS GUIDE

Furnish and install a Intermatic model ET724 electronic in-wall 7 day time control. The timer shall fit into a standard 2-1/2" deep single or multigang wall box and decorator style wallplate. It shall not protrude from the wall more than 1/8" and have a captive cover plate over the programming keys. The unit shall be capable of switching a 15 amp ballast or general purpose load or 1 HP motor and have seven independently programmable events. The battery backup will be a rechargeable NiMh type that does not require replacement.



# **Lighting Controller 1 and 2 Channels**



## LM Series

## **Light Sensor Controller**

The LM series includes one or two channels for electronic lighting controls. They are provided with a water-proof light level sensor that can be remotely mounted up to 330 feet away. For large installations, up to 10 units (20 channels) can be connected to a single sensor. The integral light sensitivity adjustment provides a wide range of settings, making these units applicable for control of indoor and outdoor lighting as well as automatic awnings or shades. These units operate strictly via a light level adjustment. The LM2 units have an independent light level setting for each channel. Either unit can be connected in series with any Intermatic Time Switch to provide time-of-day control.

## **APPLICATIONS:**

· Parking Lights

Perimeter Lighting

· Retail Stores

Warehouses

Schools

• 24-Hour Convenience Stores

## **Specifications:**

Input Voltage: Separate models available for 120V or

277VAC; 50/60 Hz

Resistive Rating: 10A @ 277VAC per Channel Ballast Rating: 8A @ 277VAC per Channel Output Relay: SPDT "dry" contacts for each channel

**Power Consumption:** 2.5VA **Temperature Range:** 

Control Unit -4°F to 131°F (-20°C to 55°C) Sensor -22°F to 158°F (-30°C to 70°C)

**Humidity Range:** 

Control Unit 0 to 95% RH non-condensing

Sensor 0 to 100% RH

Weight: 8.5 oz.

Mounting: Surface & DIN rail

(NEMA 1 & 3R enclosures available)

**Light Sensitivity Adj.:** .2 to 50 Foot Candles

(w/LS1 sensor)

(10 to 1000 F.C. w/LS2 sensor) Sensor Time Delay - 0 to 100 sec.

Time Switch Accuracy:  $\pm$  2.5 seconds per day @

68°F (20°C)



File #E83486

| LM Series Ordering Data      |        |         |         |           |                     |  |  |
|------------------------------|--------|---------|---------|-----------|---------------------|--|--|
| Grasslin/Intermatic<br>Model | Sensor | Voltage | Channel | Enclosure | Mounting            |  |  |
| LM1-I-120                    |        | 120V    | 1       | NEMA 1    |                     |  |  |
| LM1-0-120                    |        | 120V    | 1       | NEMA 3R   | _                   |  |  |
| LM1-0-277                    |        | 277V    | 1       | NEMA 3R   |                     |  |  |
| LM2-I-120                    |        | 120V    | 2       | NEMA 1    |                     |  |  |
| LM2-0-120                    |        | 120V    | 2       | NEMA 3R   |                     |  |  |
| LM2-0-277                    | —      | 277V    | 2       | NEMA 3R   |                     |  |  |
| PC1-120-LS1                  | LS1    | 120V    | 1       |           | Surface or DIN Rail |  |  |
| PC1-120-LS2                  | LS2    | 120V    | 1       | —         | Surface or DIN Rail |  |  |
| PC1-277-LS1                  | LS1    | 277V    | 1       |           | Surface or DIN Rail |  |  |
| PC1-277-LS2                  | LS2    | 277V    | 1       |           | Surface or DIN Rail |  |  |
| PC2-120-LS1                  | LS1    | 120V    | 2       |           | Surface or DIN Rail |  |  |
| PC2-120-LS2                  | LS2    | 120V    | 2       |           | Surface or DIN Rail |  |  |
| PC2-277-LS1                  | LS1    | 277V    | 2       |           | Surface or DIN Rail |  |  |
| PC2-277-LS2                  | LS2    | 277V    | 2       | _         | Surface or DIN Rail |  |  |



## **Features:**

- Single channel (PC1) or Dual channel (PC2) models available
- Single channel unit for 1 light level set point
- Dual channel for 2 separate light level set points
- · Adjustable dial for foot-candle settings
- Includes remote light sensor with lifetime warranty
- DIN Rail/Surface mount or in our NEMA 3R Outdoor Enclosure



## **LS1 Transparent Sensor** Sensitivity: 0.2 to 50 Foot-Candles Case: Transparent (IP65)

Application: Dusk to Dawn



#### LS2 Dark Sensor

Sensitivity: 10 to 1,000 Foot-Candles Case: Dark UV Filter (IP65) Application: Cloudy Environment



# Lighting Controller w/Electronic Time Switch 1 and 2 Channels



## **Features:**

- · Single or two channel
- 10A switch rating
- Battery backup
- Delay Adjustment Potentiometer prevent nuisance activation
- Remote sensor
- · Automatic Daylight Saving time changeover



## LS1 Transparent Sensor Sensitivity: 0.2 to 50 Foot-Candles Case: Transparent (IP65) Application: Dusk to Dawn



## LS2 Dark Sensor Sensitivity: 10 to 1,000 Foot-Candles Case: Dark UV Filter (IP65) Application: Cloudy Environment

# LightMaster

## **PC Digi Series**

## 24 Hour and 7 Day Combination Light Sensor Controller & Time Switch

The PC Digi and LM Digi series are one or two channel electronic lighting controls and time switch combination. They are provided with a waterproof light level sensor that can be remotely mounted up to 330 feet away. For large installations, up to 10 units (20 channels) can be connected to a single sensor. The integral light sensitivity adjustment provides a wide range of settings, making these units applicable for control of indoor and outdoor lighting as well as automatic awnings or shades. The PC "Digi" models incorporate an integral one or two channel electronic timer with automatic "DayLight Savings Time" changeover.

## **Specifications:**

Input Voltage: Separate models available for 120V or 277VAC; 50/60 Hz

Resistive Rating: 10A @ 277VAC per Channel Ballast Rating: 8A @ 277VAC per Channel Output Relay: SPDT "dry" contacts for each channel

**Power Consumption:** 2.5VA **Temperature Range:** 

Control Unit -4°F to 131°F (-4°C to 55°C) Sensor -22°F to 158°F (-22°C to 70°C)

**Humidity Range:** 

Control Unit 0 to 95% RH non-condensing

Sensor 0 to 100% RH

Weight: 8.5 oz.

**Mounting:** Surface & DIN rail (NEMA 1 & 3R enclosures available)

Light Sensitivity Adj.: .2 to 50 Foot Candles (w/LS1 sensor)

(10 to 1000 F.C. w/LS2 sensor) Sensor Time Delay - 0 to 100 sec.



File #E83486

| PC Digi Series Ordering Data |                     |        |         |         |                     |  |  |  |
|------------------------------|---------------------|--------|---------|---------|---------------------|--|--|--|
| Grasslin<br>Model            | Intermatic<br>Model | Sensor | Voltage | Channel | Mounting            |  |  |  |
| PC1-digi20-120               | PC1-D20-120-LS2     |        | 120V    | 1       | Surface or DIN Rail |  |  |  |
| PC1-digi20-277               | PC1-D20-277-LS2     |        | 277V    | 1       | Surface or DIN Rail |  |  |  |
| PC2-digi30-120               | PC2-D30-120-LS2     |        | 120V    | 2       | Surface or DIN Rail |  |  |  |
| PC2-digi30-277               | PC2-D30-277-LS2     |        | 277V    | 2       | Surface or DIN Rail |  |  |  |
| PC1-D20-120-LS2              | PC1-D20-120-LS1     | LS1    | 120V    | 1       | Surface or DIN Rail |  |  |  |
| PC2-D20-277-LS2              | PC1-D20-277-LS1     | LS1    | 277V    | 1       | Surface or DIN Rail |  |  |  |
| PC2-D30-120-LS2              | PC2-D30-120-LS1     | LS1    | 120V    | 2       | Surface or DIN Rail |  |  |  |
| PC2-D30-277-LS2              | PC2-D30-277-LS1     | LS1    | 277V    | 2       | Surface or DIN Rail |  |  |  |

# AC Hour Meter (Non-Reset Type)



## **FWZ Series**

FWZ 36, 53, and 55 Hour Meters are rectangular flush panel mount designed to fit into tight locations. All can withstand IP54 environmental rating (requires use of gasket). See IP rating table on page 40 for more detail

All models also available with 1/4" spade terminals without screw clamp.

FWZ53-120/50U FWZ53-240U FWZ53-24U



- Bezel: 1.42" x 0.95" (36 x 24mm)
- Capacity: 99.999.99 hours
- Digits: 7
- Voltage: 24, 120, 240, 50 or 60Hz models
- Power Consumption: 1VA
- Temperature: -40° to 160°F (-40° to 72°C)
- Termination: Combination 1/4" spade and screw clamp. Rear access screw terminals available (model "K")
- Weight: 1.2oz
- Flush panel retainer mounted with wire spring clip retainer
- Panel Opening: 1.36" x 0.90" rectangular (34.5 x 23mm)

FWZ55K-240U\* FWZ55K-120U\* FWZ55-120U FWZ55-240U



- Bezel: 2.36" x 1.36" (60 x 34.5mm)
- Capacity: 99.999.99 hours
- Digits: 7 0.16" high numerals
- Voltage: 24, 120, 240, 50 or 60Hz models
- Power Consumption: 1VA
- Temperature: -40° to 160°F (-40° to 72°C)
- Termination: Combination 1/4" spade and screw clamp. Rear access screw terminals available (model "K")
- Weight: 1.8oz
- Flush panel retainer mounted with slip-on plastic retaining bracket
- Panel Opening: 2.06" x 1.08" rectangular (52 x 27.5mm)

\*Rear access screw terminals





- Bezel: 1.42" x 0.95" (36 x 24mm)
- Capacity: 99.999.99 hours
- Digits: 7
- Voltage: 24, 120, 240, 50 or 60Hz models
- Power Consumption: 1VA
- Temperature: -40° to 160°F (-40° to 72°C)
- Termination: Combination 1/4" spade and screw clamp. Rear access screw terminals available (model "K")
- Weight: 1.2oz
- Flush panel retainer mounted with wire spring clip retainer
- Panel Opening: 1.36" x 0.90" rectangular (34.5 x 23mm)



FWZ72-120U FWZ72-240U FWZ72-24U FWZ72K-120U\* FWZ72K-240U\*

Black Polycarbonate



FWZ72B-120U FWZ72B-240U FWZ72B-24U

Blue-Silver on Colorless Frosted Polycarbonate

- Bezel: 2.83" round (72mm) 3-hole
- Capacity: 99.999.99 hours
- Digits: 7 0.16" high numerals
- Voltage: 24, 120, 240, 50 or 60Hz models
- Power Consumption: 1VA
- Temperature: -40° to 160°F (-40° to 72°C)
- Termination: Combination 1/4" spade and screw clamp. Rear access screw terminals available (model "K")
- Weight: 1.8oz
- Flush panel mounted with (3) 0.185" holes for #8 screws
- Panel Opening: 1.75" round (44.5mm) or 1.50" x 1.00" rectangular (38 x 25mm)

\*Rear access screw terminals











# AC Hour Meter (Non-Reset Type)

UWZ48A-120U UWZ48A-240U UWZ48A-24U



• Bezel: 1.89" x 1.89" (48 x 48mm)

• Capacity: 99,999.99 hours

• Mounting: Surface

• Digits: 7 − 0.16" high

• Voltage: 24, 120, 240, 50 or 60Hz

Power Consumption: 1VA

• Temperature: -40° to 160°F (-40° to 72°C)

• Termination: Screw Lugs

• Weight: 2.5oz.

Wall mounted type. Used in conjunction with a terminal cover for added safety, the UWZ 48A is surface mounted. Installation merely requires fixing the base to wall or panel with two screws, wiring the base, and plugging in the meter with the terminal cover.

**Ordering Information:** UWZ 48A – voltage/freq.

## **UWZ Series**

The UWZ 48 Series is designed to meet IP20 environmental rating for indoor applications. All models are light grey color with white numerals on black background. Tenths and hundredths numerals are yellow. An orange dial adjacent to the hundredths digit provides running indication. See IP rating table on page 40 for more detail.



UWZ48-120U UWZ48-240U UWZ48-24U

- Bezel: 1.89" x 1.89" (48 x 48mm)
- Capacity: 99,999.99 hours
- Mounting: Surface
- Digits: 7 − 0.16" high
- Voltage: 24, 120, 240, 50 or 60Hz
- Power Consumption: 1VA
- Temperature: -40° to 160°F (-40° to 72°C)
- Termination: Screw Lugs
- · Weight: 2.5oz.

Surface mounted type. The UWZ 48 unit with plug-in base where terminal protection is not necessary. The socket base is easy to install and connect. The meter is simply plugged into the base and secured by one screw.

Ordering Information: UWZ 48 - voltage/freq.



UWZ48E-120U UWZ48E-240U UWZ48E-24U

- Bezel: 1.89" x 1.89" (48 x 48mm)
- Capacity: 99,999.99 hours
- Mounting: Flush
- Digits: 7 0.16" high numerals
- Voltage: 24, 120, 240, 50 or 60Hz
- Power Consumption: 1VA
- Temperature: -40° to 160°F (-40° to 72°C)
- Termination: Combination 1/4" spade and screw clamp
- Weight: 2.1oz.

Flush mounted with bracket. The UWZ 48E unit fits into a  $1.79 \times 1.79$  in. (45.5  $\times$  45.5mm) cut-out. The thickness of the panel for flush mounting can be up to 0.35in. (9mm). The unit is secured in position by a plastic slip-on retaining bracket. Also fits square or round openings for 72mm meters with optional 72mm bezel.

 $\label{eq:continuous} \textbf{Ordering Information:} \ \ \text{UWZ 48E-voltage/freq}.$ 



UWZ48V-120U UWZ48V-240U UWZ48V-24U



- Capacity: 99,999.99 hours
- Mounting: DIN Rail
- Digits: 7 0.16" high numerals
- Voltage: 24, 120, 240, 50 or 60Hz
- Power Consumption: 1VA
- Temperature: -40° to 160°F (-40° to 72°C)
- Termination: Combination 1/4" spade and screw clamp
- Weight: 2.5oz.

DIN rail mounting. A special snap-on socket base enables the unit to be quickly and simply fitted on DIN rail.

Ordering Information: UWZ 48V - voltage/freq.



- Bezel: 2.28" round (58mm)
- Capacity: 99,999.99 hours
- Mounting: Flush
- Digits: 7 − 0.16" high numerals
- Voltage: 24, 120, 240, 50 or 60Hz
- Power Consumption: 1VA
- Temperature: -40° to 160°F (-40° to 72°C)
- Termination: Combination 1/4" spade and screw clamp
- Weight: 2.1oz.

Flush mounted with bracket. The UWZ 52E with round face is fastened with a plastic slip-on retaining bracket. For larger cutouts up to a 60mm diameter, a slip-on 65mm ø bezel is available.

**Ordering Information:** UWZ 52E - voltage/freq.









# DC Hour Meter (Non-Reset Type)



## **GZ** Series



#### GZ40AU

- SAE Bezel: 2.31" dia. (59mm)
- Capacity: 99.999.9 hours
- Digits: 6 0.125 high numerals Hours: white on black Tenths: red on white
- Voltage: 4-40VDC and 10-80VDC
- Power Consumption: .03W @ 12VDC .70W @ 48VDC
- Temperature: -22° to 150°F (-30° to 65°C) Special Model Temp: -40° to 185°F (-40° to 85°C)
- Vibration Resistance: 10 to 75Hz @ 1-8g's
- Termination: 1/4" spade terminals
- Protected From: reverse polarity, inductive switch
- · Weight: 2oz



#### GZ40BU

- 3-Hole Bezel: 2.80" dia. (72mm)
- · Totally sealed case
- Capacity: 99.999.9 hours
- Digits: 6 0.125 high numerals Hours: white on black Tenths: red on white
- Voltage: 4-40VDC and 10-80VDC
- Power Consumption: .03W @ 12VDC .70W @ 48VDC
- Temperature: -22° to 150°F (-30° to 65°C) Special Model Temp: -40° to 185°F (-40° to 85°C)
- Vibration Resistance: 10 to 75Hz @ 1-8g's
- Termination: 1/4" spade terminals
- Protected From: reverse polarity, inductive switch
- Weight: 2oz

## GZ41U



- Bezel: 2.12" x 1.25" (54 x 32mm)
- Capacity: 99.999.9 hours
- Digits: 6 0.125 high numerals Hours: white on black Tenths: red on white
- Voltage: 10-80VDC
- Power Consumption: .03W @ 12VDC .70W @ 48VDC
- Temperature: -22° to 150°F (-30° to 65°C)
   Special Model Temp: -40° to 185°F (-40° to 85°C)
- Vibration Resistance: 10 to 75Hz @ 1-8g's
- Termination: 1/4" spade terminals
- Protected From: reverse polarity, inductive switch
- Weight: 2oz

## **RZ Series**

# The Hour Meter Without Electrical Connection



RZ52HU RZ52DHU RZ52VU RZ52V

Bezel: 2.28" round (58mm)

The RZ hour meter records the running time of machines, vehicles, etc. which vibrate during operation. The automatic mechanism in this meter converts vibrations into energy which drives the hour meter and minute sweep hand. It is so sensitive, it is capable of operating from the slight vibration of a moving car.

## LEGEND RZ52/RZ60

RZ52 = Model reference D = Rubber mounting assembly h = Horizontal installation v = Vertical installation



GZ52U GZ52BU

#### GZ52U

Operating Voltage
Current Consumption
Accuracy
Mechanical Movement
Display
Operation Indicator
Bezel
Electrical Connection
Polarity Protection
Mounting
Operating Temperature
Storage Temperature
Environmental Rating
Shock Resistance
Vibration Resistance

## GZ52BU

8-30VDC
<3mA @12VDC
±0.5sec/day@20°C
2-Phase Step Motor
6 Digits (99999.9 Hours)
LED
Metal (Chrome) Circular
1/4" Quick Connectors
Diode
Flush (screw adj.)
-40°C - 85°C
-40°C - 90°C
IP 65

DIN EN60068-2-27

DIN EN60068-2-64

CF

8-30VDC
<3mA @12VDC
±0.5sec/day@20°C
2-Phase Step Motor
6 Digits (99999.9 Hours)
LED
Black (Plastic) Circular
1/4" Quick Connectors
Diode
Flush (screw adj.)
-40 C - 85°C
-40 C - 90°C

DIN EN60068-2-27

DIN EN60068-2-64

IP 65

CF

Œ

Approvals



# **Accessories**

55mm Bezel for UWZ 48E

**BEZ-55GRAYU** 



72mm Bezel for UWZ 48E **BEZ-72U** 



72mm Bezel w/3 pins for round 3-bolt hole openings for UWZ 48E

BEZ-72PU

## E300 Compact Plastic Outdoor Enclosure



- Plastic NEMA 3R raintight enclosure with hinged door and latch.
- Provisions for mounting Intermatic timer modules.
- Five combination 1/2"-3/4" knockouts: In bottom, sides and back.
- Exterior Size: 8.795" x 6.631" x 2.935" deep.
- Dark grey plastic finish.

## **E150 Plastic Indoor Enclosure**



- Plastic NEMA 1 enclosure with hinged door and latch.
- Provisions for mounting ANY Intermatic time control.
- Five combination 1/2"-3/4" knockouts: Inbottom, sides and back.
- Exterior Size: 6.5" x 10" x 3.75" deep.
- Interior Size: 4.75" x 7.75" x 3" deep.
- Pale grey plastic finish.

## **Miscellaneous Accessories**

## Intermatic/ Grasslin

DIN-4 4" Metal Rail

## **REPLACEMENT BATTERIES**

DC-FMEU Clear Plastic Cover FM/1 Electronic
DC-FME-AU Clear Plastic Cover FM/1

Electromechanical

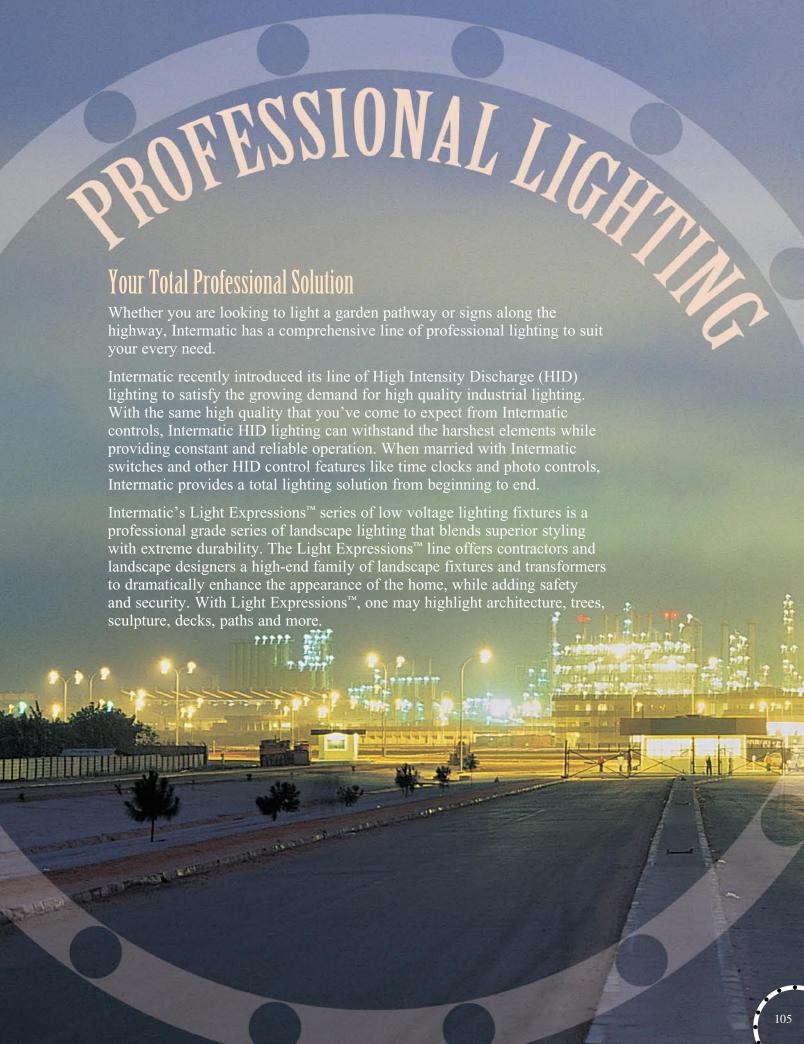
## **HOUR METER ACCESSORIES**

BEZ-55GRAYU BEZ-55BLACKU BEZ-72U BEZ-72PU

55mm Sq. Bezel Adapter, Grey, UWZ 48E 55mm Sq. Bezel Adapter, Black, UWZ 48E 72mm Sq. Bezel Adapter, Grey, UWZ 48E 72mm Sq. Bezel Adapter w/pins for 3-Hole

Pattern, Grey, UWZ 48E Gasket for FWZ55 Models

G-55U Gas











D

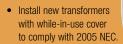
# Field Installed Timer TN111RM40



- 24-Hour Mechanical
- 2 ON / 2 OFF settings per day
- Rated for outdoor use

WP3100C

# While-In-Use Outdoor Outlet Cover





For more information see page 15.

# Light Expressions

Intermatic® professional grade transformers are the most reliable low voltage transformers available. Manufactured by Intermatic Incorporated — recognized worldwide for high quality timers and system controls — these transformers are especially designed for trouble-free operation and long lasting durability. Ensure that all of your professional lighting installations operate trouble-free and provide long-lasting service by using only Intermatic® professional grade transformers.

kevhole slots

"Your success can depend on it!"

## Professional Grade Low Voltage Multi-Tap Lighting Transformers

## **Product Features:**

- 19 gauge stainless steel NEMA 3R enclosure with winter wheat finish
- · Hinged door with lockable latch
- Knock-outs on back, bottom and sides for supply and load lines
   AL300MTSS/AL600MTSS: One combination 1/2"—3/4" knockout
   on the left side. Two combination 1/2"—3/4" and two combination
   1"—1-1/4" Knockouts on the bottom.

**AL900MTSS/AL1200MTSS:** One combination 1/2"–3/4" knockout on the left side. Five combination 1/2"–3/4" and three combination 1"–1-1/4" Knockouts on the bottom.

- · Heavy-duty mounting brackets with quick-hang
- Protective cover separating supply voltage and low voltage wiring
- Re-settable circuit breaker for each 300 Watt circuit

## Specifications:

- Multi-voltage outputs (12, 13, 14, and 15V)
- Two common terminals per 300 watt circuit
- Six foot supply cord with 3-prong plug
- CSA listed in US and Canada to UL1838 standards for low voltage lighting transformers

|       |            |         | 300W     |              |
|-------|------------|---------|----------|--------------|
| Image | Model#     | Wattage | Circuits | Weight (lbs) |
| A     | AL300MTSS  | 300     | 1        | 19           |
| В     | AL600MTSS  | 600     | 2        | 24           |
| С     | AL900MTSS  | 900     | 3        | 38           |
| D     | AL1200MTSS | 1200    | 4        | 44           |

## Field Installed Photo Controls (sold separately)

## Fixed Position Mounting, Thermal-Type

|        | Watts    | VA      | Amps     | Amps    |       |
|--------|----------|---------|----------|---------|-------|
| Model# | Tungsten | Ballast | Tungsten | Ballast | Volts |
| K4021C | 1800     | 1000    | 15       | 8.3     | 120   |

## Stem Mounting, Thermal-Type

|        | Watts    | VA      | Amps     | Amps    |       |
|--------|----------|---------|----------|---------|-------|
| Model# | Tungsten | Ballast | Tungsten | Ballast | Volts |
| K4121C | 1800     | 1000    | 15       | 8.3     | 120   |
| K4121M | 2000     | 1800    | 16.7     | 15      | 120   |
| K4421M | 1800     | 1000    | 15       | 8.3     | 120   |

## Stem & Swivel Mounting, Thermal-Type

| Model# | Watts<br>Tungsten | VA<br>Ballast | Amps<br>Tungsten | Amps<br>Ballast | Volts |
|--------|-------------------|---------------|------------------|-----------------|-------|
| K4221C | 1800              | 1000          | 15               | 8.3             | 120   |
| K4251* | 1800              | 1000          | 15               | 8.3             | 120   |

\* Certified by CSA to US and Canadian Standards.

For more information see pages 21-22.

# Light Expressions

## E. AL300TPWS

- Heavy-duty 16 ga. stainless steel case
- · Built-in photo control option
- Manual ON/OFF switch
- · Fully programmable timer
- One set of 300 watt terminal blocks
- · Heavy-duty power cord
- 5 Year limited warranty
- · Re-settable circuit breaker
- Rain tight enclosure with lifetime limited warranty
- Complete ground shield protection for safe operation. Suitable for use with submersible luminaries or submersible pumps
- Suitable for use with submersible luminaries or submersible pumps
- Meets UL and cCSAus safety standards
- Field Selectable Output Voltage Switch (12V, 13V, or 14V) - One switch per 300W circuit.

## H. AL300RTW

- Heavy-duty 18 ga. steel housing
- · Manual ON/OFF switch
- Fully programmable timer
- One set of 300 watt terminal blocks
- · Heavy-duty power cord
- 5 year limited warranty
- · Automatic circuit breaker
- · Rain tight enclosure
- Complete ground shield protection for safe operation. Suitable for use with submersible luminaries or submersible pumps
- Suitable for use with submersible luminaries or submersible pumps
- Meets UL and cCSAus safety standards

## F. AL600TPWS

- Heavy-duty 16 ga. stainless steel case
- · Built-in photo control option
- · Manual ON/OFF switch
- · Fully programmable timer
- Two sets of 300 watt terminal blocks
- · Heavy-duty power cord
- 5 year limited warranty
- · Re-settable circuit breaker
- Rain tight enclosure with lifetime limited warranty
- Complete ground shield protection for safe operation. Suitable for use with submersible luminaries or submersible pumps
- Suitable for use with submersible luminaries or submersible pumps
- Meets UL and cCSAus safety standards
- Field Selectable Output Voltage Switch (12V, 13V, or 14V) - One switch per 300W circuit.

## I. AL600TW

- Heavy-duty 18 ga. steel housing
- · Manual ON/OFF switch
- Fully programmable timer
- Two sets of 300 watt terminal blocks
- · Heavy-duty power cord
- 5 year limited warranty
- Automatic circuit breaker
- · Rain tight enclosure
- Complete ground shield protection for safe operation. Suitable for use with submersible luminaries or submersible pumps
- Suitable for use with submersible luminaries or submersible pumps
- Meets UL and cCSAus safety standards

## G. AL900TPWS

- Heavy-duty 16 ga. stainless steel case
- · Built-in photo control option
- Manual ON/OFF switch
- · Fully programmable timer
- Three sets of 300 watt terminal blocks
- · Heavy-duty power cord
- . 5 year limited warranty
- · Re-settable circuit breaker
- Rain tight enclosure with lifetime limited warranty
- Complete ground shield protection for safe operation. Suitable for use with submersible luminaries or submersible pumps
- Suitable for use with submersible luminaries or submersible pumps
- Meets UL and cCSAus safety standards
- Field Selectable Output Voltage Switch (12V, 13V, or 14V) - One switch per 300W circuit.

#### J. AL900TW

- Heavy-duty 18 ga. steel housing
- · Manual ON/OFF switch
- Fully programmable timer
- Three sets of 300 watt terminal blocks
- · Heavy-duty power cord
- 5 year limited warranty
- Automatic circuit breaker
- · Rain tight enclosure
- Complete ground shield protection for safe operation. Suitable for use with submersible luminaries or submersible pumps
- Suitable for use with submersible luminaries or submersible pumps
- Meets UL and cCSAus safety standards











All Intermatic AL Transformers meet UL1838 Standards





# Light Expressions

# K







#### K. AL60TW

- · High-impact polymer case
- Manual ON/OFF switch
- · Fully programmable timer
- 2 sets of ON/OFF trippers
- Automatic circuit breaker
- Ground shield protection
- · Heavy-duty power cord
- 5 year limited warranty
- Rain tight enclosure

## L. AL300MTW

TRANSFORMER:

- 300VA (True Watts) multi-tap (12V, 13V, 15V)
- · Heavy 18 ga. painted steel housing
- · Re-settable circuit breaker
- Heavy duty power cord code compliant for use with submersible luminaries
- Easy hook-up to color coded and labeled leads
- · Conduit ready with knockouts
- 10 year limited warranty on transformer

INDEPENDENT DIGITAL SELF ADJUSTING INDOOR TIMER:

- · Set it once, no re-setting required
- Automatically adjusts sunrise/ sunset times
- Automatically adjusts for daylight savings time
- . Battery back-up included
- · Easy to read LCD display
- . One year limited warranty on timer

#### M. AL600MTW

TRANSFORMER:

- 600VA (True Watts) multi-tap (12V, 13V, 15V)
- Heavy 18 ga. painted steel housing
- Re-settable magnetic circuit breakers (2)
- Heavy duty power cord code compliant for use with submersible luminaries
- Easy hook-up to color coded and labeled leads
- · Conduit ready with knockouts
- 10 year limited warranty on transformer

INDEPENDENT DIGITAL SELF ADJUSTING INDOOR TIMER:

- · Set it once, no re-setting required
- Automatically adjusts sunrise/ sunset Times
- Automatically adjusts for daylight savings time
- · Battery back-up included
- . Easy to read LCD display
- · One year limited warranty on timer

## N. AL300BW

- · High-impact PVC case
- Water tight enclosure, can be buried to ground level
- Can be controlled externally
- Three 1.5" I.D. knockouts for line voltage conduit
- Automatic circuit breaker
- Ground shield protection for safe operation
- 5 year limited warranty

All Intermatic AL Transformers meet UL1838 Standards



# Light Expressions

Our Professional Grade Lighting line includes a wide range of weatherproof transformers, low voltage fixtures, specialty insulated cables and a variety of accessories. Intermatic offers an expanded selection of fixtures designed for easy installation. All have the most advanced features that result from our many years of experience in low voltage lighting.



AL111 Well Light with 14W Poly-Star bulb



AL115 Submersible Light with 20W halogen MR16 bulb



AL375V Metal Light with 18W wedge base bulb and Verde finish



AL385V Brass Light with 18W wedge base bulb and Verde Patina finish



Accessories

## **Low Voltage Cable**



AL10210 10/2 100 ft. AL102-5C 10/2 500 ft. AL12210 12/2 100 ft.

**AL122-5C** 12/2 500 ft.



AL395 Brass Light with 18W wedge base bulb and Aged Brass finish



AL395V Brass Light with 18W wedge base bulb and Verde Patina finish



AL401 Metal Floodlight with 35W MR16 bulb and Black finish



AL402 Metal Floodlight with 50W PAR36 bulb and Black finish



AL8-12
Designed specifically for weatherproof, outdoor, hard-wire installations



AL402TA Metal Floodlight with 50W PAR36 bulb and Textured Architectural Bronze finish



AL403 Metal Floodlight with 35W Halogen MR16 bulb and Black finish



AL403TA Metal Floodlight with 35W Halogen MR16 bulb and Textured Architectural Bronze finish



AL1160
Fixture Ground Stake,
1/2" Female Thread,
Heavy Duty Plastic





# Light Expressions









AL405 Brass Light with 18W wedge base bulb and Aged Brass finish



AL405V Brass Light with 18W wedge base bulb and Verde Patina finish



AL406 Metal Deck Light with 8W bayonet bulb and Black finish



AL406TA Metal Deck Light with 8W bayonet bulb and Textured Architectural Bronze finish



AL407TA Metal Cone Walk Light with 18W wedge base bulb and Textured Architectural Bronze finish



AL408TA Metal Dome Walk Light with 18W wedge base bulb and Textured Architectural Bronze finish



AL409 Metal Bollard Light with 50W MR16 bulb and Black finish



AL409TA Metal Bollard Light with 50W MR16 bulb and Textured Architectural Bronze finish



AL425C Copper Ellipse Light with 18W wedge base bulb



AL501 Mini Floodlight with 35W halogen MR16 bulb and Black finish



AL502 Large Floodlight with 50W PAR36 bulb and Black finish



AL502DS Large Floodlight with 50W PAR36 bulb and Dark Sand finish

# **Professional Grade Transformers**



# Light Expressions



AL502TA Large Floodlight with 50W PAR36 bulb and Architectural Bronze finish



AL506 Metal Floodlight with 35W halogen MR16 bulb and Black finish



AL510V Large Brass Floodlight with 50W PAR36 bulb and Verde finish





AL521 Cast Metal Acorn Style Path Light with 35W halogen MR16 bulb and Black finish



AL550 3 Tier Path Light with 18W wedge base bulb and Black finish



AL550DS 3 Tier Path Light with 18W wedge base bulb and Dark Sand finish



AL550TA 3 Tier Path Light with 18W wedge base bulb and Architectural Bronze finish









WL050MH WL070MH WL100MH



WL035HPS WL050HPS WL070HPS WL100HPS



WL150MH WL175MH



WL150HPS



WL250MH



WL250HPS







WL400HPS

Intermatic's line of HID lighting is the perfect solution for a wide variety of outdoor lighting needs. In addition, Intermatic has a full array of controls and sensors designed to complement any residential, commercial or industrial lighting system.

### **Wall Packs**

Ideal for: Parking Areas, Entrances, Walkways, Underpasses, Loading Docks, Recreation Areas and

- **▼Whitelest!** for wet locations
- Heavy duty die-cast aluminum powder coating construction
- · Corrosion-resistant hardware
- 1/2" tapped holes available for installing photocell (photocell optional)

| Part Number | Wattage | Lamp                 | Voltage          | Finish | Lens          |
|-------------|---------|----------------------|------------------|--------|---------------|
| WL035HPS    | 35W     | High Pressure Sodium | 120V             | Bronze | Polycarbonate |
| WL050HPS    | 50W     | High Pressure Sodium | 120V             | Bronze | Polycarbonate |
|             |         | -                    | 120/208/240/277V |        |               |
| WL050MH     | 50W     | Metal Halide         | Quad Tap*        | Bronze | Polycarbonate |
|             |         |                      | 120/208/240/277V |        |               |
| WL070HPS    | 70W     | High Pressure Sodium | Quad Tap*        | Bronze | Polycarbonate |
|             |         |                      | 120/208/240/277V |        |               |
| WL070MH     | 70W     | Metal Halide         | Quad Tap*        | Bronze | Polycarbonate |
|             |         |                      | 120/208/240/277V |        |               |
| WL100HPS    | 100W    | High Pressure Sodium | Quad Tap*        | Bronze | Glass         |
|             |         | -                    | 120/208/240/277V |        |               |
| WL100MH     | 100W    | Metal Halide         | Quad Tap*        | Bronze | Glass         |
|             |         |                      | 120/208/240/277V |        |               |
|             |         |                      | 120/208/240/277V |        |               |
| WL150HPS    | 150W    | High Pressure Sodium | Quad Tap*        | Bronze | Glass         |
|             |         |                      | 120/208/240/277V |        |               |
| WL150MH     | 150W    | Metal Halide         | Quad Tap*        | Bronze | Glass         |
|             |         |                      | 120/208/240/277V |        |               |
| WL175MH     | 175W    | Metal Halide         | Quad Tap*        | Bronze | Glass         |
|             |         |                      |                  |        |               |
|             |         |                      | 120/208/240/277V |        |               |
| WL250HPS    | 250W    | High Pressure Sodium | Quad Tap*        | Bronze | Glass         |
|             |         |                      | 120/208/240/277V |        |               |
| WL250MH     | 250W    | Metal Halide         | Quad Tap*        | Bronze | Glass         |
|             |         |                      |                  |        |               |
|             |         |                      | 120/208/240/277V |        |               |
| WL400HPS    | 400W    | High Pressure Sodium | Quad Tap*        | Bronze | Glass         |
|             |         |                      | 120/208/240/277V |        |               |
| WL400MH     | 400W    | Metal Halide         | Quad Tap*        | Bronze | Glass         |

| *NOTF: Fixture is available as | 120. 277. 347V Tri | n Tan Ballast fixtures. | Add a "T" suffix to | the appropriate part number. |
|--------------------------------|--------------------|-------------------------|---------------------|------------------------------|







### **Cut-Off Wall Packs**

Ideal for: Buildings, Backyards, Parks, Signs and Sports Fields.

- · UL/CUL listed for wet locations
- Reduces light pollution
- Dark Sky compliant with shield
- Multi-tap ballast: 120/208/240/277 Volts
- · Heavy duty die cast construction dark bronze color
- 1/2" tapped holes available for installing photocell (sold separately)
- US brand lamp included

| Part Number | Wattage | Lamp                 | Voltage         | Finish | Lens  |
|-------------|---------|----------------------|-----------------|--------|-------|
| WLC70HPS    | 70W     | High Pressure Sodium | 120V            | Bronze | Glass |
|             |         | 12                   | 20/208/240/277\ | 1      |       |
| WLC100HPS   | 100W    | High Pressure Sodium | Quad Tap        | Bronze | Glass |
|             |         | 12                   | 20/208/240/277\ | 1      |       |
| WLC100MH    | 100W    | Metal Halide         | Quad Tap        | Bronze | Glass |
|             |         | 12                   | 20/208/240/277\ | 1      |       |
| WLC150HPS   | 150W    | High Pressure Sodium | Quad Tap        | Bronze | Glass |
|             |         | 12                   | 20/208/240/277\ | 1      |       |
| WLC150MH    | 150W    | Metal Halide         | Quad Tap        | Bronze | Glass |
|             |         | 12                   | 20/208/240/277\ | 1      |       |
| WLC175MH    | 175W    | Metal Halide         | Quad Tap        | Bronze | Glass |
|             |         | 12                   | 20/208/240/277\ | 1      |       |
| WLC250HPS   | 250W    | High Pressure Sodium | Quad Tap        | Bronze | Glass |
|             |         | 12                   | 20/208/240/277\ | 1      |       |
| WLC400HPS   | 400W    | High Pressure Sodium | Quad Tap        | Bronze | Glass |
|             |         | 12                   | 20/208/240/277\ | 1      |       |
| WLC250MH    | 250W    | Metal Halide         | Quad Tap        | Bronze | Glass |
|             |         | 12                   | 20/208/240/277\ | 1      |       |
| WLC400MH    | 400W    | Metal Halide         | Quad Tap        | Bronze | Glass |



| Part Number | Wattage | Lamp                 | Voltage         | Finish | Lens  |  |
|-------------|---------|----------------------|-----------------|--------|-------|--|
|             |         |                      | 120/208/240/277 | V      |       |  |
| WLFC150HPS  | 150W    | High Pressure Sodium | Quad Tap        | Bronze | Glass |  |
|             |         |                      | 120/208/240/277 | V      |       |  |
| WLFC150MH   | 150W    | Metal Halide         | Quad Tap        | Bronze | Glass |  |
|             |         |                      | 120/208/240/277 | V      |       |  |
| WLFC175MH   | 175W    | Metal Halide         | Quad Tap        | Bronze | Glass |  |



WLC70HPS WLC100HPS



WLC100MH



WLC150HPS



WLC150MH WLC175MH



WLC250HPS WLC400HPS



WLC250MH WLC400MH



WLFC150HPS



WLFC150MH WLFC175MH





### **Floodlights**

**Part Number** 

FL035HPS

FL050HPS

FL070HPS

Ideal for: Buildings, Backyards, Highway Signs, Outdoor Advertising Boards, Parks and Sports Fields

Lamp

High Pressure Sodium

High Pressure Sodium

High Pressure Sodium

- UL and CUL listed for wet locations
- · Heavy duty die-cast aluminum powder coating construction

Wattage

35W

50W

70W

· Corrosion-resistant hardware

- High impact-resistant tempered glass
- Lamp holder E-26, UL approved

Voltage

120V

120V

120V

• Multi-tap ballast: 120/208/240/277 Volts

Finish

Bronze

Bronze

Bronze

Lens

Glass

Glass

Glass



FL035HPS FL050HPS FL070HPS



FL050MH FL070MH FL100MH



FL100HPS



FL150MH FL175MH



FL150HPS



FL250MH FL400MH



FL250HPS FL400HPS

|          |      |                      | 120/208/240/277V |        |       |
|----------|------|----------------------|------------------|--------|-------|
| FL050MH  | 50W  | Metal Halide         | Quad Tap*        | Bronze | Glass |
|          |      |                      | 120/208/240/277V |        |       |
| FL070MH  | 70W  | Metal Halide         | Quad Tap*        | Bronze | Glass |
|          |      |                      | 120/208/240/277V |        |       |
| FL100HPS | 100W | High Pressure Sodium | Quad Tap*        | Bronze | Glass |
|          |      |                      | 120/208/240/277V |        |       |
| FI 100MH | 100W | Metal Halide         | Quad Tap*        | Bronze | Glass |

|          |      |                      | 120/208/240/277V |        |       |
|----------|------|----------------------|------------------|--------|-------|
| FL150HPS | 150W | High Pressure Sodium | Quad Tap*        | Bronze | Glass |
|          |      |                      | 120/208/240/277V |        |       |
| FL150MH  | 150W | Metal Halide         | Quad Tap*        | Bronze | Glass |
|          |      |                      | 120/208/240/277V |        |       |
| FL175MH  | 175W | Metal Halide         | Quad Tap*        | Bronze | Glass |

|          |      |                      | 120/208/240/277V |        |       |  |
|----------|------|----------------------|------------------|--------|-------|--|
| FL250HPS | 250W | High Pressure Sodium | Quad Tap*        | Bronze | Glass |  |
|          |      |                      | 120/208/240/277V |        |       |  |
| FL250MH  | 250W | Metal Halide         | Quad Tap*        | Bronze | Glass |  |
|          |      |                      | 120/208/240/277V |        |       |  |
| FL400HPS | 400W | High Pressure Sodium | Quad Tap*        | Bronze | Glass |  |
|          |      |                      | 120/208/240/277V |        |       |  |
| FL400MH  | 400W | Metal Halide         | Quad Tap*        | Bronze | Glass |  |

<sup>\*</sup>NOTE: Fixture is available as 120, 277, 347V Trip Tap Ballast fixtures. Add a "T" suffix to the appropriate part number.

### **Dusk-to-Dawn Lights**

Ideal for: Perimeter and Security Lighting, Loading Platforms, Barnyards, Parking Lots, Rural Homes, Public Entrances and OFF-Street Parking

- · UL listed for wet locations
- Precision die-cast aluminum housing with natural finish
- UV-stabilized PS Lens
- 24" arm

- · Dusk-to-dawn with twist-lock photo control
- · Mounting hardware included
- Lamp holder E-39, 4KV and UL approved
- 120 Volt fixture

| Part Number | Wattage | Lamp                 | Voltage | Lens          | Arm |  |
|-------------|---------|----------------------|---------|---------------|-----|--|
| DD150HPS    | 150W    | High Pressure Sodium | 120V    | Polycarbonate | 24" |  |
| DD175MV     | 175W    | Mercury Vapor        | 120V    | Polycarbonate | 24" |  |



DD175MV



DD150HPS





Lens

Glass

Glass

Glass



### **Quartz Floodlights**

Ideal for: Building Facades, Signs, Sports Fields and Emergency and Temporary Floodlighting

Lamp

Quartz Halogen

Quartz Halogen

Quartz Halogen

- UL and CUL listed for wet locations
- · Die-cast aluminum construction
- · Tempered door glass
- Hinged front door

**Part Number** 

FL150Q

FL300Q

FL500Q

- 1/2" threaded swivel mount
- Dark bronze finish
- 120 Volt fixture

**Voltage** 

120V

120V

120V

FL150Q



FL300Q FL500Q



### **Canopy Lights**

Ideal for: Parking Areas, Entrances, Walkways, Underpasses, Loading Docks and Recreation Areas

- UL listed for wet locations
- Heavy duty die-cast aluminum powder coating construction

Wattage

150W

300W

500W

- · High impact polycarbonate lens
- · Corrosion-resistant hardware

• 1/2" tapped holes available for installing photocell (photocell optional)

**Finish** 

Bronze

Bronze

Bronze

• multi tap ballast: 120/208/240/277 Volts

| Part Number | Wattage | Lamp                 | Voltage         | Finish | Lens          |
|-------------|---------|----------------------|-----------------|--------|---------------|
|             |         | 1                    | 20/208/240/277\ | /      |               |
| CP150HPS    | 150W    | High Pressure Sodium | Quad Tap        | Bronze | Polycarbonate |
|             |         | 1                    | 20/208/240/277\ | 1      |               |
| CP150MH     | 150W    | High Pressure Sodium | Quad Tap*       | Bronze | Polycarbonate |

<sup>\*</sup>NOTE: Fixture is available as 120, 277, 347V Trip Tap Ballast fixtures. Add a "T" suffix to the appropriate part number.





CP150MH



### Wall Fixture with Photocell

Ideal for: Parking Areas, Entrances, Walkways, Underpasses, Loading Docks and Recreation Areas

- UL listed for wet locations
- · High-impact polycarbonate lens and housing
- Aluminum baseplate with conduit access
- Corrosion-resistant hardware
- 120 Volt installed photocell included
- Multi-tap ballast: 120 Volt fixture

| Part Number | Wattage | Lamp                 | Voltage | Finish | Lens          |  |
|-------------|---------|----------------------|---------|--------|---------------|--|
| WL070HPSPC  | 70W     | High Pressure Sodium | 120V    | Bronze | Polycarbonate |  |

WL070HPSPC











### FL150QMSW



FL300MSW











### **Motion Detection Lights**

Ideal for: Entries, Patios, Porches, Garages and Out Buildings

- UL and CUL listed for wet locations
- · Distortion free lens
- · Built in surge protection
- Manual override

- 150 W halogen max (bulb included)
- Voltage 120V/60Hz
- Wall mount
- · Adjustable "ON" time

| Part Number | Wattage | Description                                 | Voltage | Finish | Lamp Included |
|-------------|---------|---|---------|--------|---------------|
| FL150QMSW   | 150W    | Dual Sensor Motion Detection Security Light | 120V    | White  | Yes           |

Ideal for: Buildings, Backyards, Parks, Signs and Sports Fields

- UL and CUL listed for wet locations
- Distortion free lens with two detection planes
- Built in surge protection
- Manual override

- Voltage 120V/60Hz
- · Wall mount and soffit/eave mount applications
- · Adjustable "ON" time

| Part Number | Wattage | Description                     | Voltage | Finish | Lamp Included |
|-------------|---------|---------------------------------|---------|--------|---------------|
| FL300MSW    | 300W    | Motion Detection Security Light | 120V    | White  | No            |

Ideal for: Lighting, Alarms, Video Cameras, Fans and Electrical Appliances

- UL and CUL listed for wet locations
- Distortion free lens with two detection planes
- · Built in surge protection
- Manual override

- Voltage 120V/60Hz
- · Wall mount and soffit/eave mount applications
- · Adjustable "ON" time
- Part Number
   Wattage
   Description
   Voltage
   Finish
   Lamp Included

   HLMSW
   300W
   Motion Detection Security Switch
   ?
   White
   N/A

### **Vapor Tight Fixtures**

Ideal for: Use in severe service areas where extreme conditions prevail; Subways, Construction Sites, Bridges, Tunnels, Freezers, Waste Water & Sewage Treatment Plants

- Rugged, seamless, die-cast construction prevents moisture to enter
- · Powder coat finish for maximum durability
- Industrial grade, fully enclosed and gasketed
- Heat resistant glass globes

| Part Number | Wattage | Lamp         | Voltage | Glass<br>Globe | Cast<br>Guard |
|-------------|---------|--------------|---------|----------------|---------------|
| VPXG-11-CGI | 100W    | Not included | 120     | Yes            | Yes           |
| VPKG-11-CGI | 100W    | Not included | 120     | Yes            | Yes           |
| VAMC O1 CCI | 100W    | Not included | 120     | Voc            | Voc           |





# OOL&SPA Helping Maintain the Luxuries of Life Few things exceed the pleasure of a refreshing dip in the pool on a hot summer day or a relaxing soak in the hot tub on a chilly evening. Intermatic helps maintain these luxuries with a variety of reliable controls, which combine economy and flexibility in a single enclosure. Too often, as technology advances, controlling that technology becomes exceedingly complex. Intermatic has made a commitment to provide its customers with controls that are as easy to install as they are to use. While maintaining its reputation for reliability, Intermatic designs innovative pool and spa controls that are powerful and intuitive. Providing simple, focused controls allows the consumer to purchase only the features they need for their application - saving money and easing frustration. Intermatic's products are flexible and designed to work together cohesively in an endless number of scenarios. Intermatic controls reduce installation costs and maintain consistent performance for aeration, freeze protection, lighting and pumping year after year.



# **Salt Chlorine Generators**



PE40K240V



### **Cell Features**

The I-Pure system utilizes plates that are specially coated to convert regular table salt into natural chlorine. The system uses the most advanced self-cleaning technologies, including reversed polarity, which allows the Cell to stay cleaner and last longer than other self-cleaning cells. The clear Cell also allows for easy regular inspections for calcium build-up.



### PE25 & PE40 Series

### I-Pure Stand Alone Salt Chlorine Generator

While traditional Salt Chlorine Generators can be difficult to manage and operate, the new I-Pure Salt Chlorine Generator takes the hassle out of sanitizing pools and spas. The I-Pure system produces more chlorine than other Salt Chlorine Generators and provides homeowners with easy-to-use, high quality sanitation at a competitive price.

Designed for pools up to 25,000 gallons or 40,000 gallons, the I-Pure Stand Alone Salt Generator's self-adjustable control dial allows users to increase or decrease chlorine production with ease. The simplified controls of the I-Pure deliver easy pool maintenance.

### Applications

Residential PoolsWater FeaturesFountains

### Specifications

Case — 15.0" (38.3 cm) high x 10.5" (26.8 cm) wide x 4.5" (11.4 cm) deep.

Voltage: 120VAC or 240VAC (See Below)

**Shipping Weight:** See Chart **Agency Approval:** ARL

### Checklist for proper operation:

 Salt
 3000 to 4000 ppm

 Free Chlorine
 1 to 3 ppm

 PH
 7.2 to 7.8

**Total Alkalinity** 80 to 180 - adjust per calcium hardness level

 Stabilizer (Cyanuric Acid)
 60 - 80

 Nitrates
 0 ppm

 Metals
 0 ppm

 Phosphates
 0 ppm

Calcium Hardness Determine level for individual pool surface

Saturation Index -0.3 to 0.3 (0 is ideal)

| Model     | Max Gallons | Volts 60 Hz | Shipping Weight   |
|-----------|-------------|-------------|-------------------|
| PE25K120V | 25,000      | 120         | 22.0 lbs (9.9 kg) |
| PE25K240V | 25,000      | 208-240     | 22.0 lbs (9.9 kg) |
| PE40K120V | 40,000      | 120         | 22.0 lbs (9.9 kg) |
| PE40K240V | 40,000      | 208-240     | 22.0 lbs (9.9 kg) |

### I-Pure Demo Kits

**PEDCHLR -** Empty I-Pure shell only **PEDCELL -** Empty I-Pure cell only

# **Digital Controls**



# PE1500RC Series Mini-Wave Wireless Pool/Spa Control Panels



For pool/spa combinations or pool/water feature combinations, the PE1541RC controls four circuits, two PE24VA valve actuators, Wireless Panel Mounted Transceiver (PE650) and Hand-Held Transceiver (PE950), which allows the system to display the status of each of the four on-demand circuits, pool and spa water temperature, pool and spa thermostat set point, heating status and overall communication status. PE1501RC does not include actuators and is designed for pool or spa applications.

### **Applications**

- Pool & Spa Lighting
- Landscape Lighting
- Pool / Water Feature Applications
- Garden & Fountain Applications

### **PE1500RC**

 $\textbf{Case} - 22" \ (55.9 \ \text{cm}) \ \text{high} \ x \ 14-3/4" \ (37.5 \ \text{cm}) \ \text{wide} \ x \ 4-1/4" \ (10.8 \ \text{cm}) \ \text{deep}, \ 0.048" \ \text{steel} \ \text{with light} \ \text{beige finish}.$   $\textbf{Knockouts} - 0 \ \text{ne} \ 1.09 \ \text{diameter through hole, six combination} \ 1/2"-3/4" \ \text{knockouts, 2 combination} \ 3/4", 1", 1-1/4" \ \text{knockouts, four} \ 1/2" \ \text{knockouts on the left side and four combination} \ 1/2"-3/4" \ \text{knockouts, two combination} \ 3/4"-1" \ \text{on the back. One knockout} \ 1-3/4" \ x \ 2-3/4" \ \text{on the right}$  side for mounting switches or GFCI.

Panel Rating - 100 Amp 120/240 VAC or 120/208 VAC single phase

Switch Rating - 17A Resistive, 120/240 VAC., 50/60 Hz; 1.5 HP @ 120 VAC., 50/60 Hz; 3.0 HP @ 240 VAC., 50/60 Hz; 10 Amp Tungsten, 120/240 VAC, 50/60 Hz

Shipping Weight - 24.3 lbs. (10.9 kg)

Agency Approval - CSA/C-US

| Model #  | Description/Mechanism | Circuits | Actuators | Switch | Clock Supply Volts 60 Hz |
|----------|-----------------------|----------|-----------|--------|--------------------------|
| PE1541RC | PB313E                | 4        | 2         | 4-SPST | 120 or 240               |
| PE1501RC | PB313E                | 4        | None      | 4-SPST | 120 or 240               |



**PE1541RC** 



**PE1501RC** 



# **Digital Wireless Controls**



PE45343RC

### PE40000 Series

### I-Wave Wireless Pool/Spa Control

Intermatic's wireless pool and spa controls utilize ground-breaking Z-wave<sup>™</sup> technology. While some controls communicate transmission problems, Intermatic's wireless devices allow total and uninterrupted communication between the controller and the equipment.

Intermatic's modular approach provides for added diversity and convenience. Modules are capable of working independently or within a system. Portions can be added or replaced without interfering with the original system, and each system can be designed to incorporate as many or as few features as needed to accomplish the task at hand — making Intermatic the most value added and cost-effective choice.

All I-Wave Models include wireless transmitter and receiver, two PE24VA valve actuators, five total circuits (three timed and two on demand), two-speed control, water temperature display, heater temperature control, fireman switch, freeze protection and 125 Amp breaker base.

### Applications

- Pool/Spa combinations
- Water features
- Fountains

### Specifications

 ${\bf Case} - 26.0$ " (66.3 cm) high x 18.0" (45.9 cm) wide x 5.5" (14.0 cm) deep, 0.048" steel with electrostatically applied light beige finish.

**Knockouts:** Two combination 3/4"-1"-1-1/4" and eleven combination 1/2"-3/4" knockouts on the bottom. Two 3/4"-1" combination and four combination 1/2"-3/4" knockouts on the back. Low voltage compartment has two combination 1/2"-3/4" knockouts and one 3/4" hole with a shutter bushing installed. Two combination 3/4"-1" and one combination 1/2-3/4" knockouts. One 1-3/4" x 2-3/4" knockout on the right side.

Switch Rating: P1353ME and P4243ME - see page 121

| Model       | Mechanisms           | Switch   | Transformer | Volts 60Hz     | Shipping Weight |
|-------------|----------------------|----------|-------------|----------------|-----------------|
| PE45343RC   | P1353ME and P4243ME  | 5 - SPST | None        | 120 or 208-240 | 44.0 lbs.       |
| PE45343RCT1 | P1353ME and P4243ME  | 5 - SPST | 100 Watt    | 120 or 208-240 | 51.0 lbs        |
| PE45343RCT3 | P1353ME and P4243ME  | 5 - SPST | 300 Watt    | 120 or 208-240 | 56.0 lbs        |
| PE650       | Wireless Receiver    | _        | -           | -              | 5.5 lbs         |
| PE950       | Wireless Transmitter | -        | _           | _              | 5.5 lbs         |







# **Digital Control Accessories**



# I-Wave Mechanisms — Three Circuit Clock P1353ME

Designed as part of the I-Wave system and for aftermarket and retro-fit applications, the P1353ME can be installed into almost any Intermatic enclosure and has the ability to program up to three circuits. Choose between six pre-programmed modes of operation, which include single speed pump or 2-speed pump/cleaner pump combinations. In addition, programmed modes that include auxiliaries can control pumps up to 3 HP as well as underwater, landscape and/or fountain lighting. Countdown and Override features allow cycle interruptions when pool/spa service is required. All timing and protection associated with filter pump/ cleaner pump combinations and two-speed pumps has already been integrated into the software.

- 120 or 208-240 volt input voltage
- Memory backup
- · Freeze protection
- · Heater protection (fireman switch)
- LCD readout
- Three ON/OFF events per day per circuit
- Shipping weight 3 lbs (1.4 kg)
- Agency approval CSA/C-US

### CONTACT RATINGS — EACH CIRCUIT, ALL MODES

- 20A Resistive, 120/240 VAC., 50/60 Hz
- 20A FLA@120 VAC, 96A LRA@120 VAC, 50/60 Hz
- 17A FLA@240 VAC, 80A LRA@120 VAC, 50/60 Hz
- 5 Amps Tungsten, 120/240 VAC, 50/60 Hz
- 5 Amps Ballast, 120/240 VAC, 50/60 Hz

### Mode 1 - (Aux1, Aux2, Aux3)

The time switch is 3-circuit switch with all three switches controlling auxiliary devices.

### Mode 2 – (Pump High, Pump Low, Aux3)

The time switch is a 2-circuit switch with the 1st & 2nd switch controlling a two-speed pump. The 3rd switch is controlling any auxiliary device. All protection associated with a two speed pump is preprogrammed into this mode.

### Mode 3 - (Pump, Aux2, Cleaner Pump)

The time switch is a 3-circuit switch with the 1st switch controlling a single speed pump, the 2nd switch control any auxiliary device, and the 3rd switch operates a boost-er/cleaner pump. All timing & protection associated with a filter pump/cleaner pump combination is preprogrammed into this mode.

### **Mode 4** – (Pump High, Pump Low, Cleaner Pump)

The time switch is a 2-circuit switch with the 1st & 2nd switch controlling a 2-speed pump. The 3rd switch is controlling a booster/cleaner pump. All protection associated with a 2-speed pump and booster/cleaner pump combination is preprogrammed into this mode.

### Mode 5 - (Pump L1, Pump L2, Aux3)

The time switch is a 2-circuit switch with the 1st & 2nd switch controlling a 240V pump, where both L1 & L2 are required to be disconnected when the pump is OFF. The 3rd switch is controlling any auxiliary device.

### Mode 6 - (Aux1, Aux2, Aux3)

Identical to Mode 1, in which each of the three single pole circuits are defined generically and can control any load within each of its individual circuit ratings, with all three circuits acting independent of each other. However, with Mode 6, the fireman switch closes only when circuit 1 (the filter pump) is manually turned on — not when the lock clurns it ON. This mode is useful when you have Circuit 1 connected to a circulation pump in the spa. When the spa is not in use, the clock circulates the water to filter it, but does not turn ON the heater. When the spa is in use, the heater is also turned ON by manually



P1353ME

### Valve/Pump Switch — P4243ME

Designed as part of the I-Wave system and for aftermarket and retro-fit applications, the P4243ME is most suited for controlling up to two different circuits associated with pool/spa combinations but can also be used to control all the equipment typically needed in connection with water features, water gardening, solar heating and other similar applications. This unit snaps into almost any Intermatic enclosure and controls pumps up to 3HP, 24 volt supply for up to three valve actuators, automatic HIGH/LOW water temperature selector, heater connection circuit and push button control for each load with indicator lights on the face of switch. In addition, the unit has connections for a hard wired or wireless remote and a master switch controller.

- 120 or 208-240 volt input voltage
- · Controls up to three valve actuators
- · Controls two circuits
- · Switches heater thermostat
- · Remote control capabilities
- Shipping weight 3 lbs (1.4 kg)
- Agency approval CSA/C-US

# CONTACT RATINGS — EACH CIRCUIT

- 17A Resistive, 120/240 VAC., 50/60 Hz
- 1.5 HP @ 120 VAC., 50/60 Hz
- 3.0 HP @ 240 VAC., 50/60 Hz
- 10 Amp Tungsten, 120/240 VAC, 50/60 Hz
- Valve Actuator Supply: 24VAC 40VA



P4243ME



# **Digital Control Accessories**

### **PE650**

PF950



133PE1484A

### **I-Wave Remote Controls** Panel Mounted Transceiver (PE650) with Antenna (PA118)

Utilizing ground breaking Z-Wave technology, Intermatic's Wireless Panel Mounted Transceiver and Hand-Held Transceiver provides for reliable two-way communication and long range ability that is unmatched by any other wireless protocols.

The main function of the Panel Mounted Transceiver is to take commands from the Wireless Hand Held Transceiver (PE950) and hand them off to two mechanisms (P1353ME and/or P4243ME).

This unit can control:

- . One P1353ME unit and one P4243ME unit
- · One or Two P1353ME units
- One or Two P4243ME units
- Gas or Electric heater Thermostat

In cases where the two devices are too far apart for direct communication, a Transceiver Repeater Module (HAO4C) can be installed and will relay commands between the two devices. You can also purchase a (PA121) 35-ft. Antenna Extension Cable Assembly when structures impede transmissions between the Panel Mounted Transceiver and Hand Held Transceiver.

### Wireless Hand-Held Transceiver (PE950)

The main function of the Wireless Hand-Held Transceiver is to transmit user commands to the Panel-Mounted Transceiver (PE650) and display the status of the equipment, pool and spa water temperature, pool and spa thermostat set point, heating status and overall communication status. The device can control up to five loads, typically:

- The three loads in the Three-Circuit Clock
- The two relays in the Valve/Pump Switch, usually water temperature controls for pool/spa
- The actuators that switch between pool and spa

The unit floats if thrown in the pool or spa, is water-submersible, shock resistant and requires three (3) AA batteries. Expected battery life is approximately one year in typical use.

The Wireless Hand-Held Transceiver (PE950) can only communicate with the Panel-Mounted Transceiver (PE650) and Transceiver Repeater Module (HA04C) and is compatible with no other hardware. In addition, when the components of a specific system are linked together into a network, communication with another neighboring system cannot occur. Up to five PE950 units can be used in a single installation.

### Three-Button Wired Remote Control (133PE1484A)

The Three-Button Wired Remote Control (133PE1484A) plugs into either the Three-Circuit Clock (P1353ME) or Valve/Pump Switch (P4243ME) and is normally installed as a spa-side remote. Most often the remote controls the filter pump, jets and lights, plus includes indicator lights on the face of the button. When installed as part of a system, it replaces the wireless method of controlling the three circuits within the mechanism. The Three-Button Wired Remote Control can also be installed where a third mechanism is needed in the enclosure, since the Wireless Hand-Held Transceiver (PE950) can only control two mechanisms.

# **Digital Control Accessories**



### I-Wave Accessories Water Temperature Sensor (PA122)

The Intermatic Water Temperature Sensor (PA122) installs in the inlet side of the heater and monitors both pool and spa water temperature, depending on the position of the diverter valves. Installation is necessary for the thermostatic control to work. The sensor plugs into the Panel Mounted Transceiver (PE650) and the water temperature is displayed on the Hand-Held Transceiver (PE950).

### Freeze (Air Temperature) Sensor (178PA28A)

Add the Intermatic Freeze or Air Temperature Sensor (178PA28A) to installations where below-freezing outdoor temperatures are a concern. The sensor is designed to protect the pool and spa equipment and plumbing against freeze damage. The sensor plugs into the circuit board on the back of the P1353ME and turns ON the filter pump when air temperature drops below the programmed temperature. The freeze programming mode will not appear unless the sensor is plugged into the clock.

### 35-ft. Antenna Extension Cable Assembly (PA121)

When a structure impedes transmission between the Panel-Mounted Transceiver (PE650) and Handheld Transceiver(s) (PE950), you can use the 35-ft. Antenna Extension Cable Assembly (PA121) to relocate the antenna from the Panel-Mounted Transceiver to the area of operation, ensuring that communication between the Hand-Held unit and the control center is successful.

### Transceiver Repeater Module (HA04C)

The Transceiver Repeater Module (HAO4C) ensures that no problems in reception occur between the Hand-Held Controller(s) (PE950) and the Panel-Mounted Transceiver (PE650). Reception is affected by distance (about 100 feet, direct line of sight) and by physical obstacles (like brick walls or structures). However, by plugging in a Transceiver Repeater Module where necessary, long distances or physical obstructions can be overcome.

| Model #  | Description               | Case Qty. | Case Weight       |
|----------|---------------------------|-----------|-------------------|
| PA122    | Water temperature sensor  | 1         | 0.3 lbs. (0.1 kg) |
| 178PA28A | Freeze sensor             | 1         | 0.3 lbs. (0.1 kg) |
| PA121    | Antenna extension         | 1         | 3.0 lbs. (0.1 kg) |
| HA04C    | Repeater module - outdoor | 6         | 4.5 lbs. (2.0 kg) |
| PA120    | Relay - DPST, 24VAC coil  | 1         | 0.4 lbs. (0.2 kg) |
| 143T145A | Relay - DPST, 24VDC coil  | 1         | 0.4 lbs. (0.2 kg) |







Antenna Extension Cable Accessory PA121



HA04C



143T145A

PA120



# **Digital Controls**









### PE100 Series

### Mini PE Series Digital Pool or Spa Controls



Intermatic's Mini-PE Series Digital Controls couple the standard features of our compact T100 Series mechanical time switches with the convenience of digital automation. One of Intermatic's latest innovations, the P1353ME allows the ability to program up to three circuits. Beyond single and two-speed pump/booster pump applications, auxiliary modes can control pumps up to 3HP as well as underwater, garden and/or fountain lighting.

Countdown and override features allow cycle interruptions when pool/spa service is required. All timing and protection associated with filter pump/booster pump combos and two-speed pumps has already been integrated into the digital software. The Mini-PE Series is available in both metal and plastic enclosures and with a wired remote command, freeze probe or both. See chart below for details.

Intermatic makes it simple to convert your Mini-PE Series Digital Control into a Wireless Control System. Simply install a Panel Mounted Transceiver (PE650) and Hand-Held Transceiver (PE950) to any Mini-PE Series control, which allows the system to display the status of each of the three circuits as well as pool or spa water temperature, pool or spa thermostat set point, heating status and overall communication status.

### Applications

- Single Speed Pump/Booster Pump Combos
- Water Feature Applications
- Pool & Spa Lighting
- Two-Speed Pump/Booster Pump Combos
- · Garden & Fountain Applications
- Landscape Lighting

### Specifications

Case - NEMA 3R rated for indoor-outdoor installation. 9-3/8" (23.8 cm) high, 5-1/2" (14.0 cm) wide, 3-5/8" (9.2 cm) deep in beige finish. "P" suffix models are same dimensions, except made from outdoor grade plastic. **Knockouts –** Combination 1/2" - 3/4" nominal knockouts, one on back and each side of case and two on bottom.

Switch Rating (each circuit) - 20 Amp Resistive, 120/240 VAC, 50/60 Hz; 20 Amp FLA @ 120 VAC, 96 Amp LRA @ 120 VAC, 50/60 Hz; 17 Amp FLA @ 240 VAC, 80 Amp LRA @ 240 VAC, 50/60 Hz; 5 Amp Tungsten, 120/240 VAC, 50/60 Hz; 5 Amp Ballast, 120/240V VAC, 50/60 Hz

Shipping Weight – 3.7 lbs (1.7 kg) Agency Approval - CSA/C-US

| Model #  | Description  | Switch   | <b>Clock Supply</b> |
|----------|--|----------|---------------------|
| PE153    | Digital Time Clock in Metal Enclosure                    | 3 - SPST | 120 or 240V         |
| PE153W   | Digital Time Clock in Metal Enclosure                    | 3 - SPST | 120 or 240V         |
|          | with 100' Wired Remote Command                           |          |                     |
| PE153F   | Digital Time Clock in Metal Enclosure                    | 3 - SPST | 120 or 240V         |
|          | with Freeze Protection Probe                             |          |                     |
| PE153WF  | Digital Time Clock in Metal Enclosure                    | 3 - SPST | 120 or 240V         |
|          | with 100' Wired Remote Command & Freeze Protection Probe |          |                     |
| PE153P   | Digital Time Clock in Plastic Enclosure                  | 3 - SPST | 120 or 240V         |
| PE153PW  | Digital Time Clock in Plastic Enclosure                  | 3 - SPST | 120 or 240V         |
|          | with 100' Wired Remote Command                           |          |                     |
| PE153PF  | Digital Time Clock in Plastic Enclosure                  | 3 - SPST | 120 or 240V         |
|          | with Freeze Protection Probe                             |          |                     |
| PE153PWF | Digital Time Clock in Plastic Enclosure                  | 3 - SPST | 120 or 240V         |
|          | with 100' Wired Remote Command & Freeze Protection Probe |          |                     |

NOTE: See page 122 for PE650 and PE950 specifications and page 121 for P1353ME specifications

# **Digital Controls**



### **PE Series Digital Controls**



For pool, spa or water feature applications, the I-Wave PE3 Series Wireless Control System includes one P1353ME mechanism that controls a total of three timed circuits, including single speed or two-speed filter pumps, cleaner/booster pumps, pool lights, spa lights and landscape lights. Countdown and override features allow programs to be interrupted for service and automatically resumed without reprogramming your system.

Intermatic makes it simple to convert your PE Series Digital Control into a Wireless Control System. Simply install a Panel Mounted Transceiver (PE650) and a Hand-Held Transceiver (PE950) to any PE Series Control, which allows the system to display the status of each of the three circuits as well as pool or spa water temperature, pool or spa thermostat set point, heating status and overall communication status.

PE25300RC comes complete with Wireless Panel Mounted Transceiver and Hand-Held Transceiver.

### **Applications**

- Single Speed Pump/Booster Pump Combos
- Two-Speed Pump/Booster Pump Combos
- os Pool & Spa Lighting

- · Water Feature Applications
- Garden & Fountain Applications
- Landscape Lighting

### PE25300 / PE25300RC

**Case** - 16-1/2" (41.9 cm) high x 10-7/8" (27.6 cm) wide x 4-1/4" (10.8 cm) deep, 0.048" steel with electrostatically applied light beige finish.

**Knockouts** – One 1.09 diameter through hole, six combination 1/2"-3/4" knockouts, and three combination 3/4"-1" knockouts on the bottom. Two combination 1/2"-3/4" on the left side and one combination 3/4"-1" on the back. One knockout 1-3/4" x 2-3/4" on the right side for mounting switches or GFCI.

Panel Rating - 60 Amp 120/240 V.A.C or 120/208 VAC single phase

Switch Rating - P1353ME - See page 121

Agency Approval - CSA/C-US

### PE35300

**Case** - 22" (55.9 cm) high x 14-3/4" (37.5 cm) wide x 4-1/4" (10.8 cm) deep, 0.048" steel with light beige finish. **Knockouts** - One 1.09 diameter through hole, six combination 1/2"-3/4" knockouts, 2 combination 3/4", 1", 1-1/4" knockouts, four 1/2" knockouts on the bottom. Two combination 1/2"-3/4" knockouts on the left side and four combination 1/2"-3/4" knockouts, two combination 3/4"-1" on the back. One knockout 1-3/4" x 2-3/4" on the right side for mounting switches or GFCI.

Panel Rating - 80 Amp 120/240 VAC or 120/208 VAC single phase

Switch Rating - P1353ME - See page 121

Agency Approval - CSA/C-US

| Model #   | Description/Mechanism | Switch | Clock Supply Volts 60 Hz | Shipping Weight   |
|-----------|-----------------------|--------|--------------------------|-------------------|
| PE25300   | P1353ME               | 3-SPST | 120 or 240               | 14.0 lbs (6.3 kg) |
| PE25300RC | P1353ME               | 3-SPST | 120 or 240               | 15.0 lbs (6.8 kg) |
| PE35300   | P1353ME               | 3-SPST | 120 or 240               | 19.0 lbs (8.6 kg) |





PE25300RC





# **Electronic Time Switches**

# Toronoria Control of the Control of

P1102ME



P1102FE



P1203FR

# P1000 & P7000 Series Electronic Time Switches and Mechanisms

This line of electronic time switches in safety enclosures are specially suited for applications where a need to turn equipment up to 8 ON and OFF cycles daily, and where the automatic operation of the equipment requires occasional override by someone other than a qualified service professional. Electronic technology allows up-to-the-minute programming accuracy. The unique "door within the door" provides safe access to the timer control buttons, but prevents entry into the wiring compartment. Light indicator illuminates when timer is in ON position. An override feature is provided to allow pool service without interruption of ON-OFF settings. Select feature allows timer to be continuously ON, OFF or in Auto mode. The addition of a radio receiver (Model P1203FR) provides a 2nd circuit for any other load (light, blower etc.) requiring control from a remote location. Typical application for the clock circuit would be the pool pump, and a pool light for the radio circuit. In case of power failure, a replaceable battery preserves programming for up to three years.

### **Applications**

- Filter pumps
- Pool/Spa lights
- · Water Features
- Fountains

### Specifications

Case – All plastic NEMA 3R rated for indoor-outdoor installation. 9-3/8" (23.9 cm) H, 5-1/2" (14.0 cm) W, 3-5/8" (9.2 cm) D in beige finish.

**Knockouts** – Combination 1/2" - 3/4" nominal knockouts, (1) on back and each side of case, and (2) on bottom. **Rating** – P1102FE - 3.0 HP @ 240V, 30 Amp resistive; P1203FR - 1.5 HP @ 120V, 3.0 HP @ 240V, 30 Amp resistive; **Radio Circuit** – 15 Amp resistive, 10 Amp Tungsten, 1 HP motor load - 120 VAC

**Shipping Weight –** 3.75 lbs (1.7 kg) **Agency Approval –** CSA/C-US

| Model<br>Number | Description                       | Switch   | Supply<br>Voltage 50/60 Hz          |
|-----------------|-----------------------------------|----------|-------------------------------------|
| P1102ME         | 24-Hour Electronic Mechanism Only | One DPST | 240V only clock & load              |
| P1103ME         | 24-Hour Electronic Mechanism Only | One DPST | 120V for clock                      |
|                 |                                   |          | 120V or 240V only clock & load      |
| P7101ME         | 7-Day Electronic Mechanism Only   | One DPST | 120V only clock & load              |
| P7102ME         | 7-Day Electronic Mechanism Only   | One DPST | 240V only clock & load              |
| P7103ME         | 7-Day Electronic Mechanism Only   | One DPST | 120V for clock                      |
|                 |                                   |          | 120V or 240V only clock & load      |
| P1102FE         | 24-Hour Electronic Time Switch    | One DPST | 240V only clock & load              |
| P1103FE         | 24-Hour Electronic Time Switch    | One DPST | 120V for clock                      |
|                 |                                   |          | 120V or 240V only clock & load      |
| P1203FR         | 24-Hour Electronic Time Switch    | One DPST | 3.0 HP - 208-240V only clock & load |
|                 | Radio Receiver Module             | One SPST | 120V only receiver & load           |
|                 |                                   |          |                                     |

# **Mechanical Time Switches**



# T100M Series 24 Hour Mechanical Time Switch Mechanisms

These heavy duty Time Switch Mechanisms are designed for industrial, commercial and residential applications, and have the highest motor load ratings in the industry. They provide up to 12 ON-OFF operations each day with minimum ON-OFF time of 1 hour. All models are equipped with "ON" and "OFF" trippers and can be installed in almost all Intermatic enclosures.

### **Applications**

• Filter pumps

Heat pumps

Lighting

### **Specifications**

Switch Rating: 40 Amp Resistive each pole 120-480 VAC; 40 Amp Tungsten, inductive or 1000 VA pilot duty each pole 120-277 VAC; 2 HP (24 FLA) 120 VAC; 5 HP (28 FLA) 240 VAC.

**Shipping Weight:** See Table **Agency approval:** CSA/C-US

| Model # | Description/Mechanism                | Switch | Clock Supply Volts 60 Hz | Shipping Weight  |
|---------|--------------------------------------|--------|--------------------------|------------------|
| T101M   | Mechanism only                       | SPST   | 120                      | 1.4 lbs (0.6 kg) |
| T102M   | Mechanism only                       | SPST   | 208-277                  | 1.4 lbs (0.6 kg) |
| T103M   | Mechanism only                       | DPST   | 120                      | 1.4 lbs (0.6 kg) |
| T104M   | Mechanism only                       | DPST   | 208-277                  | 1.4 lbs (0.6 kg) |
| T106M   | Mechanism only for 2-speed pump apps | SPDT   | 208-277                  | 1.4 lbs (0.6 kg) |

Note: See page 128 for available metal and plastic enclosures

# T100M201 Series 24 Hour Mechanical Time Switch Mechanism with Heater Protection

This Time Switch Mechanism provides coordinated control for heater and filter pump operations. It is designed to turn OFF a gas fired swimming pool heater approximately 20 minutes before the filter pump shuts down. This eliminates the problem of pounding and knocking due to overheated water, reduces scale and lime deposits and extends the service life of the heater. The 24-hour dial allows up to 12 ON-OFF operations each day. One set of "ON" and "OFF" trippers are supplied with each switch. Minimum ON-OFF time is one hour. Additionally, this mechanism can be installed in almost all Intermatic enclosures.

### **Applications**

· Pool and/or spa pumps with gas fired heaters

### **Specifications**

**Switch Rating:** 40 Amp Resistive each pole 120-480 VAC; 40 Amp Tungsten, inductive or 1000 VA pilot duty each pole 120-277 VAC; 2 HP (24 FLA) 120 VAC; 5 HP (28 FLA) 240 VAC.

Heater Control Circuit: 10 Amp, 240V. max

**Shipping Weight:** See Table **Agency approval:** CSA/C-US

| Model #  | Description/Mechanism                 | Switch | Clock Supply Volts 60 Hz | Shipping Weight  |
|----------|---------------------------------------|--------|--------------------------|------------------|
| T104M201 | Mechanism only with heater protection | DPST   | 208-277                  | 1.4 lbs (0.6 kg) |

Note: See page 128 for available metal and plastic enclosures



T104M



T104M201

# **Mechanical Time Switches**







# T100 Series Pool/Spa Time Switches

These heavy duty Mechanical Time Switches are designed for industrial, commercial and residential applications and have the highest motor load ratings in the industry. They provide up to 12 ON-OFF operations each day with a minimum ON-OFF time of 1 hour. All models are equipped with "ON" and "OFF" trippers and they are available in either plastic or metal indoor/outdoor enclosure.

T100R201 and T100P201 Series Time Switches are designed to turn OFF a gas fired swimming pool heater approximately 20 minutes before the filter pump shuts down. This eliminates the problem of pounding and knocking due to overheated water, reduces scale and lime deposits and extends the service life of the heater.

### **Applications**

- Booster pumps
- Fans
- Heat pumps
- Lighting

- Hydrochlorinators
- Air conditioning
- Music and signal system
- Swimming pool and/or spa filter pumps with gas fired heaters

### **Specifications**

Case: NEMA 3R rated for indoor-outdoor installation. 0.034" drawn steel 9-3/8" (23.8 cm) H, 5-1/2" (14.0 cm) W x 3-5/8" (9.2 cm) D in beige finish: "P" models are the same as above, except made from outdoor grade plastic.

**Knockouts:** Combination 1/2"–3/4" nominal knockouts, (1) on back and each side of case and (2) on bottom.

Switch Rating: 40 Amp Resistive each pole 120-480 VAC; 40 Amp Tungsten, inductive or 1000 VA pilot duty each pole

120-277 VAC; 2 HP (24 FLA) 120 VAC; 5 HP (28 FLA) 240 VAC.

Heater Protection Circuit: 10 Amp, 240 V. max.

**Shipping Weight:** 3.75 lbs (1.7 kg) **Agency Approval:** CSA/C-US

| Model #   | Description  | Switch | Clock Supply Volts 60Hz |
|-----------|--|--------|-------------------------|
| 2T485GA   | Metal enclosure only                                 | None   | NA                      |
| 2T2502GA  | Plastic enclosure only                               | None   | NA                      |
| 2TP3352A  | Plastic enclosure only with safety door              | None   | NA                      |
| T101P3    | Time switch in plastic enclosure                     | SPST   | 120                     |
| T104P3    | Time switch in plastic enclosure                     | DPST   | 208-277                 |
| T101R3    | Time switch in metal enclosure                       | SPST   | 120                     |
| T104R3    | Time switch in metal enclosure                       | DPST   | 208-277                 |
| T101P201* | Time switch in plastic enclosure w/heater protection | SPST   | 120                     |
| T104P201* | Time switch in plastic enclosure w/heater protection | DPST   | 208-277                 |
| T101R201* | Time switch in metal enclosure w/heater protection   | SPST   | 120                     |
| T104R201* | Time switch in metal enclosure w/heater protection   | DPST   | 208-277                 |

<sup>\*</sup>The heater protection switch (fireman switch) is closed when the time switch contacts are open to allow remote operation of the heater. A flow or pressure switch therefore must always be part of the heater control circuit.

For additional trippers (1 ON / 1 OFF per pack), order No. 156T1978A.

For additional "OFF" trippers (25 "OFF" per pack), order No. PA115

Note: See pages 121 and 127 for a detailed list of replacement mechanisms.

# **Mechanical Controls**



### T10000R Series **Pool & Spa Control Centers**



The T10000R Series Control Centers feature an all-weather enclosure and contain one or two heavy duty timer mechanisms. In addition, they have provision to install switches or GFCI receptacle on the side and additional switches inside. The enclosure accepts any combinations of P1353ME or P4243ME or T100M or RC2000M or PF1000M Series mechanisms.

### **Applications**

- Filter Pumps-Booster Pump Combinations
- Filter Pump-Light Controls
- · Pool-Spa Combinations

- · Yard Lighting
- Signs

### Specifications

Case - 12" (30.5 cm) H x 12" (30.5 cm) W x 4-1/4" (10.8 cm) D, 0.048" steel with electrostatically applied light beige

**Knockouts** – Five combination 1/2"-3/4" and two combination 3/4"-1" knockouts on the bottom.

One combination 1/2"-3/4" on the left side and one combination 3/4"-1" on the back.

One knockout 1-3/4" x 2-3/4" on the right side for mounting switches or GFCI.

Center Rating - 92 Amp per leg, 168 Amp Max. 120-240 VAC or 120-208 VAC single phase - 60 Hz

Time Switch Rating - 30 Amp Resistive Inductive, Tungsten or 1000 VA pilot duty each pole 120/208/240 VAC;

2 HP (24 FLA) - 120 VAC; 5 HP (28 FLA) - 240 VAC Shipping Weight - See Table.

Agency Approval - CSA/C-US

| Model #   | Description/Mechanism | Switch      | Clock Supply Volts 60 Hz | Shipping Weight   |
|-----------|-----------------------|-------------|--------------------------|-------------------|
| T10000R   | Enclosure Only        | None        | NA / NA                  | 9.3 lbs (4.2 kg)  |
| T10101R   | Two T101M             | SPST - SPST | 120 /120                 | 11.0 lbs (5.0 kg) |
| T10004R   | One T104M             | NA - DPST   | NA / 240                 | 10.5 lbs (4.7 kg) |
| T10404R   | Two T104M             | DPST - DPST | 240 / 240                | 11.0 lbs (5.0 kg) |
| T10604R*  | T106M & T104M         | SPDT - DPST | 240 / 240                | 11.0 lbs (5.0 kg) |
| T12404R** | T104M201 & T104M      | DPST -DPST  | 240 / 240                | 11.0 lbs (5.0 kg) |

<sup>\*</sup> For 2 speed pump applications.

For additional trippers (1 "ON" 1 "OFF" per pack), order No. 156T1978A.

For additional "OFF" trippers (25 "OFF" per pack), order No. PA115.

For Stand offs for décor knockouts (4 stand-offs per pack), order No. 21T156A.



T10000R



T10404R



<sup>\*\*</sup> The heater protection switch (fireman switch) is closed when the time switch contacts are open to allow remote operation of the heater. A flow or pressure switch therefore must always be part of the heater control circuit.



# **Mechanical Controls**



T21000R





T20004R

# T20000R Series

### 60 Amp Pool/Spa Control Panels

The T20000R Series Control Panels feature an all-weather enclosure and contain a 4 circuit breaker base, an equipment grounding bar and a mechanical time switch mechanism. The circuit breaker base accepts interchangeable type breakers made by a number of different manufacturers. In addition, the enclosure has provision for installing additional switches or GFCI receptacles on the side and inside.

### **Applications**

- Filter Pumps
- Lights
- · Ventilating Systems

- Signs
- · Air Conditioners
- Heaters

### Specifications

Case - 16-3/4" (42.6 cm) H x 8-7/8" (22.5 cm) W x 4-3/8" (11.1 cm) D. 0.048" steel with electrostatically applied light beige finish.

**Knockouts** – Five combination 1/2"-3/4" and three 3/4" - 1" on the bottom, one combination 1/2"-3/4" on the left side, one 3/4"-1" on the back and one combination 1-3/4" x 2-3/4" knockout on the right side for mounting switches or GFCI

Panel Rating - 60 Amp 120/240 VAC or 120/208 VAC; Single Phase-60 Hz

**Time Switch Rating** – 30 Amp Resistive Inductive, Tungsten or 1000 VA pilot duty each pole 120/208/240 VAC; 2 HP (24 FLA) - 120 VAC; 5 HP (28 FLA) - 240 VAC

Shipping Weight - See table.

Agency Approval - CSA/C-US

| Model #  | Description/Mechanism | Switch | Clock Supply Volts 60 Hz | Shipping Weight   |
|----------|-----------------------|--------|--------------------------|-------------------|
| T21000R  | Enclosure only        | None   | NA                       | 11.2 lbs (5.0 kg) |
| T21001R  | T101M                 | SPST   | 120                      | 14.0 lbs (6.3 kg) |
| T21004R  | T104M                 | DPST   | 240                      | 14.0 lbs (6.3 kg) |
| T20004R* | T104M                 | DPST   | 240                      | 14.0 lbs (6.3 kg) |

<sup>\*</sup> T20004R has a limited availability, T21004R is the replacement model.

For additional trippers (1 "ON" 1 "OFF" per pack), order No. 156T1978A

For additional "OFF" trippers (25 "OFF" per pack), order No. PA115

For Stand offs for décor knockouts (4 stand-offs per pack), order No. 21T156A



# **Mechanical Controls**



# T30000R Series 100 Amp Pool/Spa Control Panels



The T30000R Series Control Panels reduce installation costs and provide all of the electrical requirements for any pool and/or spa installation. They offer an all-in-one electrical control center which can be custom wired for a wide variety of requirements, and eliminate the need for additional junction boxes and service panels. The enclosure accepts any combinations of P1353ME or P4243ME or T100M or RC2000M or PF1000M Series mechanisms

### **Applications**

- Filter Pumps
- Booster Pumps
- · Heating Systems
- Lights
- · Cleaning Systems

- Security SystemsFountains
- Sprinkler Systems
- Valve Actuators
- Yard Lights

### **Specifications**

Case = 16-1/2" (41.9 cm) H x 10-7/8" (27.6 cm) W x 4-1/4" (10.8 cm) D, 0.048" steel with electrostatically applied beige finish

**Knockouts** – Two 1/2", three combination 1/2"-3/4", and two combination 3/4"-1" knockouts on the bottom. Four 1/2", three combination 1/2"-3/4" on the back. One combination 3/4"-1" on the left side. One 1-3/4" x 2-3/4" knockout on the right side for mounting switches and GFCI.

Panel Rating - 100 Amp., 120-240 VAC or 120-208 VAC single phase - 60Hz.

Timer Switch Rating – 30 Amp Resistive Inductive, Tungsten or 1000 VA pilot duty each pole 120/208/240 VAC; 2 HP (24 FLA) - 120 VAC; 5 HP (28 FLA) - 240 VAC

Shipping Weight - See table.

Agency Approval - CSA/C-US

| Model #   | Description/Mechanism | Switch      | Clock Supply Volts 60 Hz | Shipping Weight   |
|-----------|-----------------------|-------------|--------------------------|-------------------|
| T30000R5  | Enclosure Only        | None        | NA / NA                  | 18.6 lbs (8.4 kg) |
| T30004R   | One T104M             | None / SPST | NA / 240                 | 18.6 lbs (8.4 kg) |
| T30401R   | T104M & T101M         | DPST / SPST | 240 / 120                | 18.6 lbs (8.4 kg) |
| T30404R   | Two T104M             | DPST / DPST | 240 / 240                | 18.6 lbs (8.4 kg) |
| T30604R*  | T106M & T104M         | SPDT / DPST | 240 / 240                | 18.6 lbs (8.4 kg) |
| T32404R** | T104M201 & T104M      | DPST / DPST | 240 / 240                | 18.6 lbs (8.4 kg) |

<sup>\*</sup> For 2 speed pump applications.



T30000R5



T30004R



T32404R

<sup>\*\*</sup> The heater protection switch (fireman switch) is closed when the time switch contacts are open to allow remote operation of the heater.

A flow or pressure switch therefore must always be part of the heater control circuit.

For additional trippers (1 "ON" 1 "OFF" per pack), order No. 156T1978A.

For additional "OFF" trippers (25 "OFF" per pack), order No. PA115.

For Stand offs for décor knockouts (4 stand-offs per pack), order No. 21T156A.



# **Quality Pool & Spa Controls**

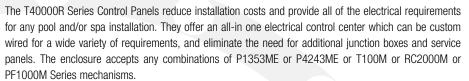








### 125 Amp Pool/Spa Control Panels



### **Applications**

- Filter Pumps
- Booster Pumps
- · Heating Systems
- Lights
- · Cleaning Systems

- Security Systems
- Fountains
- · Sprinkler Systems
- · Yard Lights

### Specifications

Case - 20-3/4" (52.7 cm) high x 12-3/4" (32.4 cm) wide x 4-1/4" (10.8 cm) deep, 0.048" steel with electrostatically applied light beige finish

**Knockouts** – Seven combination 1/2"-3/4" and three combination 3/4"-1" knockouts on the bottom.

Five combination 1/2"-3/4" on the left side. One 1-3/4" x 2-3/4" knockout on the right side for mounting switches and

### Panel Rating - 1

Timer Switch Rating - 30 Amp Resistive Inductive, Tungsten or 1000 VA pilot duty each pole 120/208/240 VAC; 2 HP (24 FLA) - 120 VAC; 5 HP (28 FLA) - 240 VAC

Shipping Weight - See table.

Agency Approval - CSA/C-US

| Model # | Description/Mechanism | Switch | Clock Supply Volts 60 Hz | Shipping Weight   |
|---------|-----------------------|--------|--------------------------|-------------------|
| T40000R | Enclosure Only        | None   | NA                       | 16.0 lbs (7.2 kg) |
| T40004R | One T104M             | DPST   | NA / 240                 | 20.5 lbs (9.2 kg) |
| T40404R | Two T104M             | DPST   | 240 / 240                | 21.2 lbs (9.5 kg) |

For additional trippers (1 "ON" 1 "OFF" per pack), order No. 156T1978A.

For additional "OFF" trippers (25 "OFF" per pack), order NO. PA115.

For additional stand-offs for décor knockouts (4 stand-offs per pack), order No. 21T156A.

### T40000R Series 100 Amp Specialty Control Panels

These specialty Control Panels are the same as the T40000R Series, except they have been designed for specialty applications. Models include a factory installed GFCI, or stainless steel panel for high corrosive environments or an inside wiring compartment for two devices. These enclosures accept any combinations of T100M, P1353ME, P4243ME or T100M or RC2000M or PF1000M Series mechanisms.

Applications - Same as above.

### Specifications

Case, Knockouts, Timer Switch Rating & Agency Approval - Same as above Panel Rating - 115 Amp. 120-240 VAC or 120-208 VAC single phase - 60 Hz. Shipping Weight - See table.

| Model #     | Description/Mechanism      | Switch      | Clock Supply Volts 60 Hz | Shipping Weight    |
|-------------|----------------------------|-------------|--------------------------|--------------------|
| T40000R4*   | Inside Compartment         | None / None | NA / NA                  | 19.4 lbs (8.7 kg)  |
| T40004RSS** | One T104M                  | None / DPST | NA / 240                 | 20.5 lbs (9.2 kg)  |
| T40004R5    | One T104M & GFCI Installed | None / DPST | NA / 240                 | 21.6 lbs (9.7 kg)  |
| T40404R5    | Two T104M & GFCI Installed | DPST / DPST | 240 / 240                | 24.6 lbs (11.0 kg) |

<sup>\*</sup> Enclosure only with inside wiring compartment for twist-lock receptacle and GFCI.

For additional trippers (1 "ON" 1 "OFF" per pack), order No. 156T1978A.

For additional "OFF" trippers (25 "OFF" per pack), order NO. PA115.

For additional stand-offs for décor knockouts (4 stand-offs per pack), order No. 21T156A.





<sup>\*\*</sup> Stainless Steel Enclosure.

**Safety Transformers** 





These Safety Transformers are specifically designed to supply 12 volts to pool/spa lights, submersible fixtures and outdoor garden lights. A grounded shield between the primary and secondary windings assures safe operation and the built-in circuit protection will disconnect power to the transformer in case of defect or overload.

### Applications

• Pool Lights

· Spa Lights

Garden Lights

• Fountain Lights

### Specifications - PX100/S, PX300/S

**Enclosure** - 7.25" (19.4 cm) H x 5.25" (13.3 cm) W x 4.5" (11.4 cm) D. Stainless steel or steel with electrostatically applied light beige finish. Mounting brackets top and bottom.

Knockouts - Total of ten combination 1/2"-3/4" knockouts, (2) right side, (2) left side, (2) back, (4) bottom.

**Electrical Rating -** See table.

Shipping Weight - See table.

### Specifications – PX600/S

**Enclosure** – 10" (25.4 cm) high x 10" (25.4 cm) wide x 5" (12.7 cm) deep. Stainless steel or steel with electrostatically applied light beige finish. Mounting brackets top and bottom.

**Knockouts –** Two combination 1/2"-3/4", and 4 combination 3/4"-1" knockouts on the bottom. Total of six combination 1/2"-3/4" knockouts, (2) right side, (2) left side, (2) back.

**Electrical Rating –** See table.

Shipping Weight - See table.

| Model # | Description                        | Input      | Output       | Shipping Weight    |
|---------|------------------------------------|------------|--------------|--------------------|
| PX100   | 100 Watt Beige Steel Enclosure     | 120V, 1AMP | 12 or 13V    | 7.0 lbs (3.2 kg)   |
| PX100S  | 100 Watt Stainless Steel Enclosure | 120V, 1AMP | 12 or 13V    | 7.0 lbs (3.2 kg)   |
| PX300   | 300 Watt Beige Steel Enclosure     | 120V, 3AMP | 12,13 or 14V | 13.0 lbs (5.9 kg)  |
| PX300S  | 300 Watt Stainless Steel Enclosure | 120V, 3AMP | 12,13 or 14V | 13.0 lbs (5.9 kg)  |
| PX600   | 600 Watt Beige Steel Enclosure     | 120V, 6AMP | 12,13 or 14V | 26.0 lbs (11.7 kg) |
| PX600S  | 600 Watt Stainless Steel Enclosure | 120V 6AMP  | 12 13 or 14V | 26 0 lbs (11 7 kg) |





# **Safety Transformers**







PE45343RCT3

# T10000RT, T40000RT & PE45343RCT Series Pool Panels with Transformer



These Panels with Transformer offer an all-in-one, easy to wire and extremely cost effective electrical control center for any pool or spa installation. Inside the enclosure are the time switch, the transformer and other components needed for the completion of this installation. The T40000RT Series panels will accept additional Intermatic mechanisms and/or components.

The PE45343RCT Series includes all the features of the PE Series Digital Controls plus two PE24VA valve actuators, Wireless Panel Mounted Transceiver (PE650), and Hand-Held Transceiver (PE950), which allows the system to display the status of each of the five circuits (3 timed and 2 on demand), pool and spa water temperature, pool and spa thermostat set point, heating status and overall communication status.

### Applications

- Filter Pumps
- Blowers
  - Fountains
- Low Voltage Pool/Spa Lighting

### Specifications

· Low Voltage Outdoor Lighting

### T10000RT Series

Case - 12" (30.5 cm) H x 12" (30.5 cm) W x 4-1/4" (10.8 cm) D, 0.048" steel with electrostatically applied light beige finish

**Knockouts** – Five combination 1/2"-3/4" and two combination 3/4"-1" knockouts on the bottom. One combination 1/2"-3/4" on the left side and one combination 3/4"-1" on the back. One knockout 1-3/4" x 2-3/4" on the right side for mounting switches or GFCI

Center Rating - 92 Amp per leg, 168 Amp Max. 120-240 VAC or 120-208 VAC single phase - 60 Hz.

### **T40000RT Series**

 $\textbf{Case} - 20\text{-}3/4\text{" (52.7 cm) high x 12-}3/4\text{" (32.4 cm) wide x 4-}1/4\text{" (10.8 cm) deep, 0.048\text{" steel with electrostatically applied light beige finish.}$ 

**Knockouts** – Seven combination 1/2"-3/4" and three combination 3/4"-1" knockouts on the bottom. Five combination 1/2"-3/4" on the left side. One 1-3/4" x 2-3/4" knockout on the right side for mounting switches and GFCI.

Panel Rating - T40000RT Series - 100 Amp 120-240 VAC or 120-208 VAC single phase - 60 HZ

Time Switch Rating – 30 Amp Resistive Inductive, Tungsten or 1000 VA pilot duty each pole 120/208/240 VAC; 2 HP (24 FLA) - 120 VAC; 5 HP (28 FLA) - 240 VAC

### PE45343RCT Series

 ${\bf Case-12}$ " (30.5 cm) H x 12" (30.5 cm) W x 4-1/4" (10.8 cm) D, 0.048" steel with electrostatically applied light beige finish

**Knockouts** – Five combination 1/2"-3/4" and two combination 3/4"-1" knockouts on the bottom.

One combination 1/2"-3/4" on the left side and one combination 3/4"-1" on the back. One knockout 1-3/4" x 2-3/4" on the right side for mounting switches or GFCI

Panel Rating - T40000RT Series - 100 Amp 120-240 VAC or 120-208 VAC single phase - 60 HZ Agency Approval - CSA/C-US

| Model #     | Transformer | Input 60 Hz | Output        | Mechanism         | Shipping Weight    |
|-------------|-------------|-------------|---------------|-------------------|--------------------|
| T10004RT1   | 100 Watt    | 120V, 1 Amp | 12V, 13V,     | T104M             | 14.0 lbs (6.3 kg)  |
| T10004RT3   | 300 Watt    | 120V, 3 Amp | 12V, 13V, 14V | T104M             | 20.0 lbs (9.0 kg)  |
| T40003RT3   | 300 Watt    | 120V, 3 Amp | 12V, 13V, 14V | T103M             | 32.0 lbs (14.4 kg) |
| T40004RT1   | 100 Watt    | 120V, 1 Amp | 12V, 13V,     | T104M             | 26.0 lbs (11.7 kg) |
| T40004RT3   | 300 Watt    | 120V, 3 Amp | 12V, 13V, 14V | T104M             | 32.0 lbs (14.4 kg) |
| PE45343RCT1 | 100 Watt    | 120V, 1 Amp | 12V, 13V      | P1353ME & P4243ME | 56.0 lbs (25.2 kg) |
| PE45343RCT3 | 300 Watt    | 120V, 3 Amp | 12V, 13V, 14V | P1353ME & P4243ME | 61.0 lbs (27.5 kg) |

For additional trippers (1 "ON" 1 "OFF" per pack), order No. 156T1978A.

For additional "OFF" trippers (25 "OFF" per pack), order No. PA115.

For stand-offs for décor knockouts (4 stand-offs per pack), order No. 21T156A.

Note: See pages 121 and 127 for a detailed list of replacement mechanisms and page 122 for PE650 and PE950 specifications

# **Freeze Protection Controls**



# PF1100 Series Single Circuit Freeze Protection Controls



These Freeze Protection Controls are designed to protect the pool and spa equipment and plumbing against freeze damage. They turn the pump and the heater ON when the outdoor temperature drops below the temperature set by the user-adjustable thermostat.

Models without timer connect to a timing or switching device and together, they control operation of the equipment as well as protect it against freeze damage. Models with timer provide both automation and protection for the equipment.

### **Applications**

- Filter Pumps
- Filter Pump/Booster Pump Combinations
- Waterfalls
- Water Features

### Specifications

**Case** - 0.034 inch drawn steel, electrostatically coated, beige color. Hasp, with hole for lock, holds permanently attached side-hinged door closed. 9-3/8" (23.8 cm) high x 5-1/4" (14.0 cm) wide x 3-5/8" (9.2 cm) deep.

**Knockouts -** 1/2" - 3/4" combination knockouts, one back, one on each side, two bottom.

Thermostat Range - 45°F - 32°F with 5 degrees differential.

**Electrical Rating -** See table **Shipping Weight -** See table. **Agency Approval -** CSA/C-US

| Model #  | Description                                      | Input     | Rating H.P. | Shipping Weight  |
|----------|--|-----------|-------------|------------------|
| PF1102   | Thermostat only. For 240V installation.          | 240V      | 3           | 3.7 lbs (1.7 kg) |
| PF1102M  | Same as above, mechanism only.                   | 240V      | 3           | 2.0 lbs (0.9 kg) |
| PF1102T  | Timer with thermostat. For 240V installation.    | 240V      | 3           | 4.5 lbs (2.0 kg) |
| PF1102MT | Same as above, mechanism only.                   | 240V      | 3           | 2.5 lbs (1.1 kg) |
| PF1103   | Thermostat only. For 120/240V installation.      | 120/240V* | 1.5/3       | 3.7 lbs (1.7 kg) |
| PF1103M  | Same as above, mechanism only.                   | 120/240V* | 1.5/3       | 2.0 lbs (0.9 kg) |
| PF1103T  | Timer with thermostat. For 120/240V installation | 120/240V* | 1.5/3       | 4.5 lbs (2.0 kg) |
| PF1103MT | Same as above, mechanism only.                   | 120/240V* | 1.5/3       | 2.5 lbs (1.1 kg) |

<sup>\*</sup> Neutral must be installed.



PF1102M





**PF1103MT** 





PF1112T

# **Freeze Protection Controls**

### **PF1100 & PF1200 Series**



### Multi Circuit Freeze Protection Control Centers & Panels

These heavy-duty Freeze Protection Controls are designed specifically for pools requiring one or two time switches and protect the pool and spa equipment and plumbing against freeze damage. They turn the pump and the heater ON when the outdoor temperature drops below the temperature set by the user-adjustable thermostat. In addition, they have a provision to install switches inside or GFCI receptacle on the side of enclosure.

Fountains

### **Applications**

- Filter Pumps
- Filter Pump-Booster Pump

- Combinations
  - · Pool-Spa Combinations

### Specifications

### PF1112T, PF1202T

Case - 12" (30.5 cm) H x 12" (30.5 cm) W x 4-1/4" (10.8 cm) D, 0.048" steel with electrostatically applied light beige

**Knockouts** – Five combination 1/2"-3/4" and two combination 3/4"-1" knockouts on the bottom. One combination 1/2"-3/4" on the left side and one combination 3/4"-1" on the back. One knockout 1-3/4" x 2-3/4" on the right side for mounting switches or GFCI

Center Rating - 92 Amp per leg, 168 Amp Max. 120-240 VAC or 120-240 VAC single phase - 60 Hz.

Electrical Rating - See table.

Thermostat Range - 44°F - 32°F with 5 degrees differential.

Shipping Weight - See table.

Agency Approval - CSA/C-US

### PF1222TB

Case - 16-1/2" (41.9 cm) H x 10-7/8" (27.6 cm) W x 4-1/4" (10.8 cm) D, 0.048" steel with electrostatically applied

Knockouts - Two 1/2", three combination 1/2"-3/4", and two combination 3/4"-1" knockouts on the bottom. Four 1/2", three combination 1/2"-3/4" on the back. One combination 3/4"-1" on the left side. One 1-3/4" x 2-3/4" knockout on the right side for mounting switches and GFCI.

Panel Rating - 100 Amp max., 120-240 VAC or 120-208 VAC single phase - 60 Hz.

Electrical Rating - See table.

Thermostat Range - 44°F - 32°F with 5 degrees differential.

Shipping Weight - See table.

Agency Approval - CSA/C-US



PF1202T

**PF1222TB** 

| Model #  | Description   | Electrical Input | Rating HP | Shipping Weight   |
|----------|---|------------------|-----------|-------------------|
| PF1112T  | For pools requiring one time switch                           | 240V             | 3         | 8.0 lbs (3.6 kg)  |
| PF1202T  | For pools with cleaner, requiring two time switches           | 240V             | 3         | 10.0 lbs (4.5 kg) |
| PF1222TB | Same as a PF1202T with 4/8 breaker base and heater protection | on 240V          | 3         | 17.0 lbs (7.7 kg) |

For additional trippers (1 "ON" 1 "OFF" per pack), order No. 156T1978A.

For additional "OFF" trippers (25 "OFF" per pack), order NO. PA115.

For additional stand-offs for décor knockouts (4 stand-offs per pack), order No. 21T156A.

# **Air Operated Controls**



### RC2000 Series Multi-Function Air Switch Mechanisms

These Air Switches provide remote control for one, two or three separate loads. A push button connected to the mechanism with a flexible air hose enables the user for example, to operate a pump a blower and a light up to 75 feet away. In addition, models with a "T" suffix have a 24-hour digital, multiple program timer that turns a single or two-speed pump ON-OFF several times per day. The air buttons and air hose are not included and must be purchased separately.

The RC2403RT model controls a single speed or two-speed filter pump, a blower and an independent 30 Amp circuit. Comes complete with 2 air buttons and 75' air hoses.

### **Applications**

- Filter pumps
- Jet pumpsBlowers
- Lights
- Booster pumps

Heaters

### **Specifications**

**Case:** For indoor/outdoor installation, beige plastic, 9-3/8" (23.8 cm) high x 5-1/2" (14.0 cm) wide x 3-3/4" (9.5 cm) deep. RC2403RT, 12.0" (30.5 cm) high x 12.0" (30.5 cm) wide x 4.25" (10.8 cm) deep.

**Knockouts:** Plastic Enclosure: Four combination 1/2"-3/4", one on each side of case and two on bottom. RC2403RT - Five combination 1/2"-3/4" and two combination 3/4"-1" knockouts on the bottom. One combination 1/2"-3/4" on the left side and one combination 3/4"-1" on the back. One knockout 1-3/4" x 2-3/4" on the right side for mounting switches or GFCI

**Electrical Rating:** 20 Amp resistive 120-240 VAC, 1 HP, 120 VAC, 2 HP, 240 VAC each circuit. **Voltage:** All models operate on 120 VAC (Line and Neutral) or 240 VAC (Line 1, Line 2 and Neutral).

**Shipping Weight:** 4.4 lbs (2.0 kg): RC2403RT; 19 lbs. (8.6 kg)

Agency Approval: CSA/C-US

| Model #  | Description                                       | Switch      | Clock Supply Volts 60Hz |
|----------|---|-------------|-------------------------|
| RC2133P  | ON/OFF or HIGH LOW                                | DPDT        | 120/240                 |
| RC2133M  | ON/OFF or HIGH LOW, mechanism only                | DPDT        | 120/240                 |
| RC2123PT | ON/OFF or HIGH LOW with timer                     | SPDT        | 120/240                 |
| RC2123MT | ON/OFF or HIGH LOW, with timer mechanism only     | SPDT        | 120/240                 |
| RC2233P  | Two circuit ON/OFF                                | DPDT & DPST | 120/240                 |
| RC2233M  | Two circuit ON/OFF, mechanism only                | DPDT & DPST | 120/240                 |
| RC2343P  | Two circuit sequential                            | 4-function  | 120/240                 |
| RC2343M  | Two circuit sequential, mechanism only            | 4-function  | 120/240                 |
| RC2343PT | Two circuit sequential with timer                 | 4-function  | 120/240                 |
| RC2343MT | Two circuit sequential with timer, mechanism only | 4-function  | 120/240                 |

### **RC2403RT Specifications/Features**

| Voltage      |   | 120/240          |
|--------------|---|------------------|
| Remote Cont  | rol   | Air - Sequential |
| Filter Pump  | Timer Controlled in Pool Mode                       | YES              |
|              | Single or Two Speed                                 | YES              |
| Heater Contr | ol  | NO               |
| Heater Prote | ction (Fireman Switch)                              | NO               |
| Blower       |   | YES              |
| Independent  | Circuit (20 Amp R, 1.5 HP - 120V; 3 HP - 240V) DPST | Air - ON/OFF     |



RC2133M



RC2133P



**RC2123MT** 



**RC2343PT** 



**RC2403RT** 



# **Air Operated Controls**





# RC2100 & RC2200 Series Air or Remote Operated Pool/Spa Controls

This line of Air or Remote Operated Controls is specially designed to control pool/spa combinations economically and reliably away from the equipment. With one touch, these units automatically override the 24 HR. timer and turn ON the filter pump, switch the valves from pool-filter mode to the spa/water feature mode and switch the compatible dual thermostat on the heater/heat pump from the pre-set pool temperature to the pre-set spa temperature. Comes complete with two PE24VA 24-Volt valve actuators.

### **Applications**

Pool/spa combinations

Pool/water feature combinations

### **Specifications**

### RC2163E, RC2163FE, RC2263E

**Case:** 12" (30.5 cm) H x 12" (30.5 cm) W x 4-1/4" (10.8 cm) D, 0.048" steel with electrostatically applied light beige finish. **Knockouts:** Five combination 1/2"-3/4" and two combination 3/4"-1" knockouts on the bottom. One combination 1/2"-3/4" on the left side and one combination 3/4"-1" on the back. One knockout 1-3/4" x 2-3/4" on the right side for mounting switches or GFCI.

Electrical Rating: See table below. Actuator Circuit: 24V. - 40 Amp Max.

RC2163BE, RC2163BFE, RC2263BE

Case: 16-1/2" (41.9 cm) H x 10-7/8" (27.6 cm) W x 4-1/4" (10.8 cm) D, 0.048" steel with electrostatically applied beige finish

**Knockouts:** Two 1/2", three combination 1/2"-3/4", and two combination 3/4"-1" knockouts on the bottom. Four 1/2", three combination 1/2"-3/4" on the back. One combination 3/4"-1" on the left side. One 1-3/4" x 2-3/4" knockout on the right side for mounting switches and GFCI.

Panel Rating: 100 Amp 120-240 VAC. or 120-208 VAC single phase - 60 HZ. Electrical Rating: See table below. Actuator Circuit: 24V. - 40 Amp Max.

**Shipping Weight:** See table below. **Agency Approval:** CSA/C-US

| Specification | ns/Features  | RC2163E       | RC2163FE      | RC2263E        |
|---------------|--|---------------|---------------|----------------|
| Voltage       |  | 120/240       | 120/240       | 120/240        |
| Remote Com    | mand   | 1-Air         | Any Switch*   | 1-Air          |
| Filter Pump   | Timer Controlled in Pool Mode  | Υ             | Υ             | Υ              |
|               | Single Speed Only 1.5 HP - 120V; 3HP - 240V. Single or Two Speed 1 HP - 120V; 2 HP - 240V. |               | Y<br>NA       | NA<br>Y        |
| Heater Contr  | ol   | Υ             | Υ             | Υ              |
| Number of V   | alve Actuator Connections  | 3             | 3             | 3              |
| Blower        | 1 HP - 120V; 2 HP - 240V.  | NO            | NO            | Y              |
| Shipping We   | ight (lbs)   | 20.0 (9.0 kg) | 20.0 (9.0 kg) | 23.7 (10.7 kg) |
| Reference Pi  | cture  | RC2163E       | RC2163E       | RC2163E        |

<sup>\*</sup>Can use spring wound timer, toggle switch or wireless receiver (RC613) with transmitter (RC939) to operate equipment

| Specification | ns/Features                                 | RC2163BE       | RC2163BFE      | RC2263BE       |
|---------------|---|----------------|----------------|----------------|
| Voltage       |   | 120/240        | 120/240        | 120/240        |
| Remote Com    | mand  | 1-Air          | Any Switch*    | 1-Air          |
| Filter Pump   | Timer Controlled in Pool Mode               | Υ              | Υ              | Υ              |
|               | Single Speed Only 1.5 HP - 120V; 3HP - 240  | V. Y           | Y              | NA             |
|               | Single or Two Speed 1 HP - 120V; 2 HP - 240 | V. NA          | NA             | Υ              |
| Heater Contr  | ol  | Υ              | Υ              | Υ              |
| Number of V   | alve Actuator Connections                   | 3              | 3              | 3              |
| Blower        | 1 HP - 120V; 2 HP - 240V.                   | NO             | NO             | Υ              |
| Number of B   | reaker Space                                | 8/16           | 8/16           | 8/16           |
| Shipping We   | ight (lbs)                                  | 24.3 (10.9 kg) | 24.3 (10.9 kg) | 28.0 (12.6 kg) |
| Reference Pi  | cture                                       | RC2263BE       | RC2263BE       | RC2263BE       |

\*Can use spring wound timer, toggle switch or wireless receiver (RC613) with transmitter (RC939) to operate equipment

## **Radio Remote Controls**



# RC600 & RC900 Series Outdoor Radio Remote Controls



These Modular Radio Receivers are one half of a two part remote control system. They operate as ordinary ON/OFF switches but they also respond to the signals of a hand held transmitter — the other half of the system. The modules are designed for indoor or outdoor use, and can handle a variety of switching applications, typical around the house or farm. By the push of a button on the face of the transmitter, the user is able to turn ON-OFF the connected load (lights, pump, etc.) from any remote location, inside or outside of the house, safely and conveniently. In addition, a single transmitter can operate up to three receivers and is able to "teach" each module a different code (Transmitter model RC939 sold separately).

### **Applications**

- · Pool/Spa Pumps, Lights and Heaters
- Fountain Pumps
- Outdoor Lighting
- Motorized Valves

- Air Blowers
- Signs
- Motorized Gates

### Specifications

Enclosure - Beige outdoor grade plastic.

Maximum Range - 100 ft. See transmitter model RC939 for details.

| Model # | Description                   | Electrical Rating                  | Size                             | Shipping Weight  |
|---------|-------------------------------|------------------------------------|----------------------------------|------------------|
| RC613   | Receiver with ON/OFF Button   | 15 Amp Resistive, 10 Amp (1200 W)  | 4-1/2" H (11.4 cm)               | 0.5 lbs (0.2 kg) |
|         |                               | Tungsten, 1 HP, Motor Load - 120 V | 3" W (7.6 cm), 1-1/4" D (4.0 cm) |                  |
| RC613L  | RC613 with (3) 36" Long Leads | Same as RC613                      | Same as RC613                    | 0.7 lbs (0.3 kg) |
| RC613R  | Heavy Duty Receiver Module    | 30 Amp Resistive, 120/240 V        | 7-3/4" H (19.7 cm)               | 1.4 lbs (0.6 kg) |
|         |                               | 12.5 Amp (1500 W), 1.5 HP - 140 V  | 4" W (10.7 cm)                   |                  |
|         |                               | 1.5 HP - 140 V, 3 HP - 240 V,      | 3-1/2" D (8.9 cm)                |                  |
|         |                               | Double Pole, Single Throw Contacts |                                  |                  |
| RC615   | Timer Interface Module        | Same as RC613                      | Same as RC613                    | 0.5 lbs (0.2 kg) |
|         | without Manual Button         |                                    |                                  |                  |

### Hand Held Radio Transmitter

This hand held radio transmitter operates the shared equipment of a pool/spa combination by the touch of a button. In addition, more buttons are available on the transmitter to turn ON-OFF a booster pump, a blower and lights.

### **Applications**

• Pool-Spa Combinations

Water Features

### Specifications

Enclosure - Beige plastic, 4-3/8" (11.1 cm) H, 2-3/4" (7.0 cm) W and 1" (2.5 cm) D.

| Model # | Description                 | Range*  | Battery            | Shipping Weight  |
|---------|-----------------------------|---------|--------------------|------------------|
| RC939   | 3 Channel Radio Transmitter | 100 ft. | 9V Transistor type | 0.5 lbs (0.2 kg) |

<sup>\*</sup> The range is 100 feet but depends on many factors like the age of the battery, proximity of large metal objects, the location of the receiver and environmental conditions at the time of transmission.



**RC613R** 





**RC939** 





# **Portable Outdoor Timers**







### P1200 Series Two-Circuit Portable Outdoor Timer



These Portable Two-circuit Above Ground Pool Timers incorporate a plug in for a timed circuit (normally used for a pool pump) and a plug in for a live circuit (typically used for a pool light). GFCl protected circuits and a three-prong grounded plug for the time switch supply are also built-in.

### **Applications**

- · Above ground pool pumps
- Above ground pool lights

### Specifications

Case - NEMA 3R rated for indoor-outdoor installation.

9-3/8" (23.8 cm) high x 5-1/2" (14.0 cm) wide x 3-5/8" (9.2 cm) deep

**Knockouts** – Combination 1/2" - 3/4" nominal knockouts, one on the back and each side of case, two pre-cut on bottom

**Timer** – 24 hour with 23-1/2 hour maximum ON time. Two ON, two OFF trippers - standard. Dial will accept up to 12 sets of trippers.

Shipping Weight - 2.8 lbs. (1.3kg)

| Model # | Description             | Electrical  | Plug & Receptacle |  |  |
|---------|-------------------------|---|-------------------|--|--|
| P1261P  | PB913N84 Timer          | 15 Amp (1800 W), Resistive or<br>Tungsten 1 HP, 15 FLA (96 LRA)<br>Motor Load | 5-15              |  |  |
| P1261PE | PB313E Electronic Timer | 15 Amp (1800 W), Resistive or<br>Tungsten 1 HP, 15 FLA (96 LRA)<br>Motor Load | 5-15              |  |  |

For additional trippers (2 "ON" 2 "OFF" per pack), order No. 156PB10398A

# P1100 Series Portable Outdoor Timers — Heavy Duty Outdoor Timers

These Portable Outdoor Timers are specially designed to control the filter pump of a portable pool or spa, but they can also be used to turn ON and OFF (in off-season) outdoor decoration, engine block heaters and other appliances, indoors or outdoors.

### **Applications**

- Filter Pumps
- Air Conditioners

Signs

- Lights
- Engine Block Heaters
- Fans

### Specifications

 $\textbf{Case} - \textbf{Outdoor grade plastic.} \ 5" \ (12.7 \ \text{cm}) \ \textbf{H} \ \textbf{x} \ 5\text{-}1/2" \ (13.97 \ \text{cm}) \ \textbf{W} \ \textbf{x} \ 3\text{-}3/4" \ (9.52 \ \text{cm}) \ \textbf{D}. \ \ \textbf{Cord} \ - \ 3 \ \text{wire, outdoor grade, } 22" \ \text{long.}$ 

Timer – 24 hour with 23-1/2 hour maximum ON time. Two ON, two OFF trippers - standard. Dial will accept up to 12 sets of trippers.

Shipping Weight - 1.7 lbs (0.7 kg)

| Model # | Description                                       | Electrical  | Plug & Receptacle |  |
|---------|---|---|-------------------|--|
| P1101   | Timer   | 15 Amp (1800 W), Resistive or Tungsten            | •                 |  |
|         |   | 1 HP Air Conditioner, 15 FLA (96 LRA), Motor Load | 5-15              |  |
| P1121   | Timer   | 15 Amp (1800 W), Resistive or Tungsten            | 5-15              |  |
|         |   | 1 HP Air Conditioner, 15 FLA (96 LRA), Motor Load | 5-15              |  |
| P1131   | Heavy-Duty Timer with                             | Resistive, 1 HP, 16 FLA (96 LRA) Motor Load       | 5L-20             |  |
|         | Twist-Lock Plug & Receptacle                      |   | W                 |  |
| P1161   | Safety Timer with Ground Fault Circuit Protection | 15 Amp (1800 W) Resistive, Tungsten               |                   |  |
|         |   | 15 FLA (90 LRA) Motor                             | 5-15              |  |

For additional trippers (2 "ON" 2 "OFF" per pack), order No. 156PB10398A

P1161

P1131

# **Pool/Spa Junction Boxes**



### **PJB Series**

### Pool/Spa Junction Box & Mounting Bracket

These polymeric, water tight, multi-fixture Junction Boxes are especially designed for pools, pool-spa combinations and landscape applications. The PJB4175 provides a safe and reliable connection for up to four lights, while the PJB2175 supports up to two lights. They will accommodate flexible cords from #16-3 up to #12-3 and #10-3 in any combination and non-metallic conduits from 1/2 to 1 inch, including one for supply conductor feed. An optional wall/post mounting bracket is also available.

### Applications

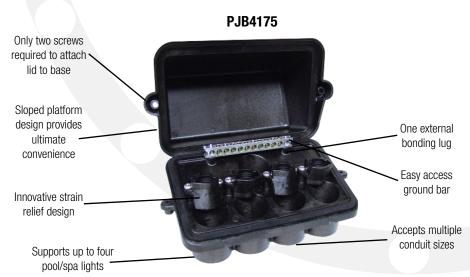
- Pool Lights
- Spa Lights
- Landscape Lights

### Specifications

Case — Outdoor grade plastic. PJB4175 - 7.5" L x 4.75" W x 5.0" D. PJB2175 - 7.0" L x 3.0" W x 4.0" D Note: Bracket sold separately.

| Model # | Description                 | <b>Light Connection</b> | Case Qty. | Shipping Weight   |
|---------|-----------------------------|-------------------------|-----------|-------------------|
| PJB2175 | Pool/Spa Light Junction Box | 2                       | 24        | 19.2 lbs (8.6 kg) |
| PJB4175 | Pool/Spa Light Junction Box | 4                       | 12        | 13.2 lbs (6.0 kg) |
| PA114   | Wall/Post Mounting Bracket  | _                       | 10        | 5 lbs (2.3 kg)    |









PJB2175





# **Valves & Actuators**





**PAV215C** 

**PAV215** 





PAV220C

**PAV220** 





PAV315C

**PAV315** 





PAV320C

PAV320



### **PAV** Series

### Maintenance Free Water Valves

Intermatic's Maintenance Free Water Valves have been designed to provide reliable control of water flow to pools, spas, solar collectors, cleaners and water features. These 2-way and 3-way valves have excellent flow characteristics while maintaining back pressure. Manufactured with Intermatic's high quality standards, the PAV Series Water Valves offer long maintenance free performance.

### **Applications**

- Pools
- Fountains
- Spas
- Water Features

### Standard Features

- Teflon-coated diverter requires no lubrication and ensures maintenance free performance
- Innovative field adjustable stop ensures precise valve positioning
- 1-1/2" valves fit 1-1/2" and 2" plumbing, 2" valves fit 2" and 2-1/2" plumbing
- · Available in standard PVC and high temperature CPVC

### Specifications

Shipping Weight - See table.

Case Quantity - 12

| Model#  | Port Size | Configuration | Material | Shipping Weight Each |
|---------|-----------|---------------|----------|----------------------|
| PAV215  | 1-1/2"    | 2-WAY         | PVC      | 1.5 lbs (0.6 kg)     |
| PAV215C | 1-1/2"    | 2-WAY         | CPVC     | 1.5 lbs (0.6 kg)     |
| PAV220  | 2"        | 2-WAY         | PVC      | 1.6 lbs (0.7 kg)     |
| PAV220C | 2"        | 2-WAY         | CPVC     | 1.6 lbs (0.7 kg)     |
| PAV315  | 1-1/2"    | 3-WAY         | PVC      | 1.5 lbs (0.6 kg)     |
| PAV315C | 1-1/2"    | 3-WAY         | CPVC     | 1.5 lbs (0.6 kg)     |
| PAV320  | 2"        | 3-WAY         | PVC      | 1.6 lbs (0.7 kg)     |
| PAV320C | 2"        | 3-WAY         | CPVC     | 1.6 lbs (0.7 kg)     |

### 24-Volt Valve Actuator

Designed with quality in mind, Intermatic's 24-volt valve actuators provide reliable control of 2-way and 3-way diverter valves for pool/spa combinations and water features. The water flow can be altered for specific applications through the adjustable cam, which rotates diverter valves to multiple degree settings. The cam settings can be easily adjusted by simply removing the lid.

These valve actuators are compatible with all pool/spa valves currently offered in the industry and will retro fit into all pool/spa control systems.

### **Applications**

Pools

Spas

Fountains

Water features

### Standard Features

- · Automates compatible diverter valves for pool/spa & pool/water feature combinations
- Adjustable cam rotates diverter valves to multiple degree settings
- Retro fits into all pool/spa control systems on the market

### Specifications

Shipping Weight: See table.

Case Quantity: 6

| Model # | Description    | Voltage | Shipping Weight Each |
|---------|----------------|---------|----------------------|
| PE24VA  | Valve Actuator | 24 VAC  | 3.5 lbs (2.2 kg)     |

# SIRGE PROTECTION

# Setting a New Standard for Protection

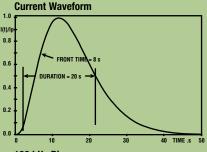
The same quality and coverage you've come to expect from Internatic controls can also be found in a complete line of panel-mount and point-of-use surge protection — from high current capacity industrial models to residential models, with integrated phone and coax protection.

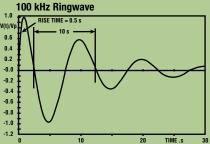
On average, the typical home or business gets hit with more than 2,000 electrical surges annually, costing home and business owners more than \$26 billion dollars. As more and more homes begin housing more elaborate home theater and entertainment systems, home offices and other appliances, it is becoming increasingly important to protect all electronic investments from transient voltage or "bad power."



# Why Every Facility Needs Surge Protection

**Voltage Waveform** 





### **System Voltage**

The wiring diagrams characterize common voltage configurations available for the products. Refer to individual product pages for models available in below configurations. Match the voltage configuration below with your voltage configuration at your Service Entrance, Distribution Panel or Panelboard location where you want protection.







120/240 Volt Three Phase HLD (High Leg Delta) 4 Wire plus Ground



Three Phase Delta 3 Wire plus Ground



120/240 Volt Single Phase 3 Wire plus Ground



240 Volt Three Phase Delta 3 Wire plus Ground



277/480 Volt

Three Phase Wye

4 Wire plus Ground

120/208 Volt

Three Phase Wye

4 Wire plus Ground

Three Phase Delta 3 Wire plus Ground

Electrical disturbances and downtime cost North American Companies more than \$26 billion every year. Every process within your building is controlled by electrical and electronic components which all require surge protection to function reliably.

ANSI/IEEE has defined common disturbances which occur in modern facilities per the waveforms to the left. Depending on the proximity of the equipment to your power entry points, the severity increases. As the transient event propagates throughout your building, it degrades your electronic components by stressing them with excess voltage and current.

Every modern facility is a strong candidate for protection. Intermatic has a broad line of Service Entrance, Panelboard and Point-of-Use Protection to select from.

### Service Entrance, Panelboard and Point-of-Use surge protection can be found in the following types of facilities and installations:

- Manufacturing
- · Healthcare/Medical
- Education/University
- · Data Centers
- Telecom/Cell Sites
- Utility

- Correctional
- Military Installations
- Airports
- · Broadcast Studios
- · Financial Institutions

- General Office
- Semiconductor Fabrication
- Wastewater Facilities
- Restaurants
- · Entertainment Facilities

### Virtually all devices which are powered by electricity are vulnerable. Surge Suppression is required for protection of the following types of systems:

- · Computer/Peripherals
- Network Servers/ Routers/Modems
- Telecom Equipment
- · Variable Frequency Drives
- Lighting Ballasts
- HVAC Controls
- Fire Alarm Systems
- · Security Systems
- · Lighting Control and Dimming Systems
- Automatic Test Equipment
- · Wafer Fabrication Equipment
- Uninterruptible Power Supplies
- · Bar Code Scanning Equipment
- Programmable Logic Controllers
- CNC Machines
- · Pumps, motors and related equipment which has electronic controls or starters

### **Surge Suppression Definitions**

Surge Current Capacity is the rated surge current that a design will withstand based on the standard 8 x 20 microsecond current waveform. NEMA LS-1 states that this should be given for each mode of a surge protection device, since devices can have different components in each mode.

**Modes of Protection** are the coupling paths that exist in a single or three phase system.

### In a three phase wye system there are 10 potential modes where a transient can be coupled:

L1 to Neutral L1 to Ground L2 to Neutral L2 to Ground L3 to Neutral L3 to Ground L1 to L2 L2 to L3 13 to 11 Neutral to Ground

### In a three phase delta system there are six potential modes where a transient can be coupled:

L1 to Ground L2 to Ground L3 to Ground L1 to L2 L2 to L3 L3 to L1

All modes must have suppression components coupled between them in order to be 100% effective.

MCOV (Maximum Continuous Operating Voltage) is the maximum steady state rms voltage at which the unit can safely operate. The recommended MCOV is 115% of nominal voltage for all voltage configurations.

EMI/RFI Noise Attenuation is a way to rate filter performance over a range of specific frequencies. IEEE characterizes line noise as less than two times peak voltage. Line noise can be somewhat attenuated by the capacitance found in MOVs, but typically requires the addition of capacitors to increase effectiveness. EMI/ RFI filters should be UL1283 Listed for safety.

Three Phase Wye

4 Wire plus Ground

### **Standards and Guidelines**

· Outlets and long branch circuits



ANSI/IEEE C62.41.1-2002 and ANSI/IEEE C62.41.2-2002 are the recognized American National Standards for establishing the surge withstand capability of equipment connected to utility power circuits in residential, commercial or industrial applications. The standard has established the following Location Categories which can be applied to virtually any type of facility.

| Categor | γC |
|---------|----|
|         |    |

### Category B Category A

- Outside and Service Entrance
- Any underground lines
- · Overhead line to detached building
- · Feeders and short branch circuits
- · Distribution panel devices
- · Lighting systems in large buildings

The following values and waveforms are recognized within Categories C, B and A. Location Category C is the Outside and Service Entrance and the harshest surge environment.

| Combinat             | ion Waves                                  |             | Ring Waves           |                        |                   |  |  |
|----------------------|--|-------------|----------------------|------------------------|-------------------|--|--|
| 1.2 x 50 m           | nicrosecond / 8 x 20                       | microsecond | 100KHz 0.5           | 100KHz 0.5 microsecond |                   |  |  |
| Location<br>Category | 3. ( ) , , , , , , , , , , , , , , , , , , |             | Location<br>Category | Voltage<br>(peak)      | Current<br>(peak) |  |  |
| Α                    | 6,000 Volt                                 | 500 Amp     | А                    | 6,000 Volts            | 200 Amp           |  |  |
| В                    | 6,000 Volt                                 | 3,000 Amp   | В                    | 6,000 Volts            | 500 Amp           |  |  |
| C low                | 6,000 Volt                                 | 3,000 Amp   |                      |                        |                   |  |  |
| C high               | 10,000 Volt                                | 10,000 Amp  |                      |                        |                   |  |  |

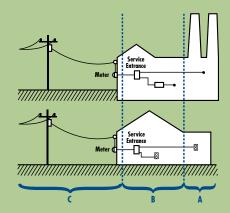
### Product Selection Chart — Surge Suppression Recommendations

The following quidelines can be followed for Intermatic products:

Choose Model by Voltage and distance from incoming Service

| Location      | 480 VAC                    | 277/480 VAC   | 120/208 VAC Wye | Refer to Page |
|---------------|----------------------------|---------------|-----------------|---------------|
| Large Service | e Entrance (2000 to 4000 A | Amperes)      |                 |               |
| Best          | PG5001-480-3DLL            | PG5001-480-3Y | PG5001-208-3Y   | 146           |
| Better        | PG4501-480-3DLL            | PG4501-480-3Y | PG4501-208-3Y   | 147           |
| Good          | PG4001-480-3DLL            | PG4001-480-3Y | PG4001-208-3Y   | 148           |
| Small Service | e Entrance (Less than 1600 | O Amperes)    |                 |               |
| Best          | PG4501-480-3DLL            | PG4501-480-3Y | PG4501-208-3Y   | 147           |
| Better        | PG4001-480-3DLL            | PG4001-480-3Y | PG4001-208-3Y   | 148           |
| Good          | PG100-480-3DLL             | PG100-480-3Y  | PG100-208-3Y    | 149           |
| Large Distrib | ution Panel (1000 to 1600  | Amperes)      |                 |               |
| Best          | PG4001-480-3DLL            | PG4001-480-3Y | PG4001-208-3Y   | 148           |
| Better        | PG100-480-3DLL             | PG100-480-3Y  | PG100-208-3Y    | 149           |
| Good          | PG80-480-3DLL              | PG80-480-3Y   | PG80-208-3Y     | 151           |
| Small Distrib | ution Panel (600 to 1000 A | imperes)      |                 |               |
| Best          | PG100-480-3DLL             | PG100-480-3Y  | PG100-208-3Y    | 149           |
| Better        | PG80-480-3DLL              | PG80-480-3Y   | PG80-208-3Y     | 151           |
| Good          | PG60-480-3DLL              | PG60-480-3Y   | PG60-208-3Y     | 153           |
| Large Panelb  | oard (225 to 400 Amperes   | )             |                 |               |
| Best          | PG80-480-3DLL              | PG80-480-3Y   | PG80-208-3Y     | 151           |
| Better        | PG60-480-3DLL              | PG60-480-3Y   | PG60-208-3Y     | 153           |
| Good          | PG40-480-3D                | PG40-480-3Y   | PG40-208-3Y     | 156           |
| Small Panelb  | oard (60 to 200 Amperes)   |               |                 |               |
| Best          | PG60-480-3DLL              | PG60-480-3Y   | PG60-208-3Y     | 153           |
| Better        | PG40-480-3D                | PG40-480-3Y   | PG40-208-3Y     | 156           |
| Good          | PG20-480-3D                | PG20-480-3Y   | PG20-208-3Y     | 158           |

Note for the PG 60/80/100 models equivalent models are available in NEMA 3R enclosures for outdoor applications (see PG2500, PG3000, PG3500 Series).



**ANSI/IEEE C62.45** is the American National Standard for uniform testing of surge suppression devices. All Intermatic testing follows these guidelines.

**Nema Standard LS-1** is the National Electrical Manufacturers Association specification guideline for low voltage surge protection devices.

Underwriters Laboratories – UL1449 has recently been revised (August 1998) and requires surge suppression devices to safely pass overvoltage tests, abnormal overvoltage tests, short circuit withstand tests as well as assigns suppress voltage ratings based on a 6 KV, 500 Amp combination wave or impulse.

**UL1283** – The safety standard for EMI/RFI noise attenuation filters. While this device does not rate filters or performance – it does provide a level of testing to ensure the filter is safe for commercial application.

# There are four main factors to consider when specifying the appropriate device for your facility:

- What is the amperage (size) of the Switchboard or Panelboard at the point of installation?
- What is the geographic location of the facility? (i.e. the relative level of lightning exposure and utility grid switching activity)
- 3. What is the density of electronic equipment and how critical is the application?
  (i.e. a 7 x 24 computer data center would require a higher level of protection than a retail store)
- 4. What is the level of transient and noise producing loads within your facility? (i.e. a heavy industrial manufacturing environment or a densely populated computer data center would require a higher level of protection)

### NOTES:

- Pick appropriate model to match the voltage of your Service Entrance. Distribution Panel or Panelboard.
- See individual product pages for other available voltages.
- A facility without any Service Entrance protection would warrant a higher level of protection at downstream locations.





# **Surge Suppression System**





The PG5000 Series is a hardwired suppression device (installed in parallel) and recommended for all ANSI/IEEE Category locations.

### **Dimensions:**

28.66"H x 15.11"W x 8.05"D

Weight: 65 lbs.

### PG5000 Series

### Features

- All mode Protection (L-N, L-G, N-G, L-L)
- 40 kA Brute Force MOVs
- 200 KAIC Surge Rated Fuses
- Fault Current Tested to 200 KAIC
- Easily Replaceable Master Surge Module
- NEMA 3R Style Enclosure
- Redundant Protection per mode
- Safety Interlocked Disconnect
- Thermally Protected MOVs for maximum safety
- EMI/RFI Filtration Up to 54 dB from 20 kHz to 100 MHz
- cETLus Listed to UL1449, 2nd Edition
- Lugs accept #10 to #2 AWG
- 10 year product warranty

### Integral Diagnostics

- LED Indicator Lights
- Form C Contacts
- · Intermatic Thermal Monitoring System
- Digital Surge Counter
- Audible Alarm

|            |          |          | Surge Current Capacity<br>(8 x 20 usec) (per mode) <sup>2</sup> |            |          | Per<br>Phase <sup>3</sup> | UL 1449 Clamping Voltage (SVR)<br>6 kV, 500 Amp (8 x 20 usec) <sup>4</sup> |         |         |       |
|------------|----------|----------|---|------------|----------|---------------------------|--|---------|---------|-------|
| Intermatic | MCOV1    |          |   |            |          |                           |  |         |         |       |
| Model      | L-G      | L-N      | L-G   | N-G        | L-L      |                           | L-N  | L-G     | N-G     | L-L   |
| PG5001-240 | -2S 120/ | 240 VAC  | Single Ph   | ase (split | :)       |                           |  |         |         |       |
|            | 115%     | 200 kA   | 200 kA  | 200 kA     | 200 kA   | 400 kA                    | 400 V  | 400 V   | 330 V   | 700 V |
| PG5001-208 | -3Y 120/ | 208 VAC  | Three Pha   | ase Wye    |          |                           |  |         |         |       |
|            | 115%     | 200 kA   | 200 kA  | 200 kA     | 200 kA   | 400 kA                    | 400 V  | 400 V   | 330 V   | 700 V |
| PG5001-240 | -3HLD 12 | 20/240 V | C Three   | Phase Hig  | jh Leg D | elta                      |  |         |         |       |
|            | 115%     | 200 kA   | 200 kA  | 200 kA     | 200 kA   | 400 kA                    | 400 V /  | 400 V / | 330 V   | 900 V |
|            |          |          |   |            |          |                           | (700 V)  | (700 V) |         |       |
| PG5001-480 | -3Y 277/ | 480 VAC  | Three Pha   | ase Wye    |          |                           |  |         | 7       |       |
|            | 115%     | 200 kA   | 200 kA  | 200 kA     | 200 kA   | 400 kA                    | 800 V  | 700 V   | 700 V   | 1,500 |
| V          |          |          |   |            |          |                           |  |         |         |       |
| PG5001-480 | -3DLL 48 | O VAC T  | hree Phas   | e Delta    |          |                           |  |         |         |       |
|            | 115%     | _        | _   | _          | 200 kA   | 200 kA                    | _  | _       | _       | 1,500 |
| V          |          |          |   |            |          |                           |  |         |         |       |
| PG5001-600 | -3Y 347/ | 600 VAC  | Three Pha   | ase Wye    |          |                           |  |         |         |       |
|            | 115%     | 200 kA   | 200 kA  | 200 kA     | 200 kA   | 400 kA                    | 1,000 V  | 1,000 V | 1,000 V | 1,800 |
| V          |          |          |   |            |          |                           |  |         |         |       |
| PG5001-600 | -3D 600  | VAC Thre | ee Phase  | Delta      |          |                           |  |         |         |       |
|            | 115%     | _        | 200 kA  | _          | 200 kA   | 400 kA                    | _  | 1,500 V | _       | 1,800 |
| V          |          |          |   |            |          |                           |  |         |         |       |
|            |          |          |   |            |          |                           |  |         |         |       |

<sup>&</sup>lt;sup>1</sup> MCOV is Maximum Continuous Operating Voltage expressed in percentage of nominal voltage.

<sup>&</sup>lt;sup>2</sup> All surge currents listed above are independently tested and verified per NEMA LS-1.

<sup>&</sup>lt;sup>3</sup> Per Phase is defined as L-N + L-G for three phase 4-wire wye systems; L-G + L-L for three phase 3-wire delta systems.

<sup>&</sup>lt;sup>4</sup> Let-Through Voltage measured with 6 inch lead lengths per UL Standard 1449, 2nd Edition.



## PG4500 Series

#### Features

- All mode Protection (L-N, L-G, N-G, L-L)
- 40 kA Brute Force MOVs
- 200 KAIC Surge Rated Fuses
- Fault Current Tested to 200 KAIC
- Easily Replaceable Master Surge Module
- NEMA 3R Style Enclosure
- Redundant Protection per mode
- · Safety Interlocked Disconnect
- Thermally Protected MOVs for maximum safety
- EMI/RFI Filtration Up to 54 dB from 20 kHz to 100 MHz
- cETLus Listed to UL1449, 2nd Edition
- Lugs accept #10 to #2 AWG
- 10 year product warranty

#### **Integral Diagnostics**

- LED Indicator Lights
- Form C Contacts
- Intermatic Thermal Monitoring System
- Digital Surge Counter
- Audible Alarm

|            |          | Sur       | ge Curren  | t Capacity | /              | Per                | UL 1449 | Clamping | Voltage   | (SVR)            |
|------------|----------|-----------|------------|------------|----------------|--------------------|---------|----------|-----------|------------------|
|            |          | (8 x 2    | 20 usec) ( | per mode   | ) <sup>2</sup> | Phase <sup>3</sup> | 6 kV, 5 | 00 Amp ( | 8 x 20 us | ec) <sup>4</sup> |
| Intermatic | MCOV1    |           |            |            |                |                    |         |          |           |                  |
| Model      | L-G      | L-N       | L-G        | N-G        | L-L            |                    | L-N     | L-G      | N-G       | L-L              |
| PG4501-240 | -2S 120/ | 240 VAC   | Single Ph  | ase (split | )              |                    |         |          |           |                  |
|            | 115%     | 150 kA    | 150 kA     | 150 kA     | 150 kA         | 300 kA             | 400 V   | 400 V    | 330 V     | 700 V            |
| PG4501-208 | -3Y 120/ | 208 VAC   | Three Pha  | ase Wye    |                |                    |         |          |           |                  |
|            | 115%     | 150 kA    | 150 kA     | 150 kA     | 150 kA         | 300 kA             | 400 V   | 400 V    | 330 V     | 700 V            |
| PG4501-240 | -3HLD 12 | 20/240 VA | C Three    | Phase Hig  | jh Leg D       | elta               |         |          |           |                  |
|            | 115%     | 150 kA    | 150 kA     | 150 kA     | 150 kA         | 300 kA             | 400 V / | 400 V /  | 330 V     | 900 V            |
|            |          |           |            |            |                |                    | (700 V) | (700 V)  |           |                  |
| PG4501-480 | -3Y 277/ | 480 VAC   | Three Pha  | ase Wye    |                |                    | , ,     |          |           |                  |
|            | 115%     | 150 kA    | 150 kA     | 150 kA     | 150 kA         | 300 kA             | 800 V   | 700 V    | 700 V     | 1,500            |
| V          |          |           |            |            |                |                    |         |          |           |                  |
| PG4501-480 | -3DLL 48 | O VAC TI  | hree Phas  | e Delta    |                |                    |         |          |           |                  |
|            | 115%     | _         | _          | _          | 150 kA         | 150 kA             | _       | _        | _         | 1,500            |
| V          |          |           |            |            |                |                    |         |          |           |                  |
| PG4501-600 | -3Y 347/ | 600 VAC   | Three Pha  | ase Wye    |                |                    |         |          |           |                  |
|            | 115%     | 150 kA    | 150 kA     | 150 kA     | 150 kA         | 300 kA             | 1,000 V | 1,000 V  | 1,000 V   | 1,800            |
| V          |          |           |            |            |                |                    | ,       | ,        | •         | •                |
| PG4501-600 | -3D 600  | VAC Thre  | ee Phase   | Delta      |                |                    |         |          |           |                  |
|            | 115%     | _         | 150 kA     | _          | 150 kA         | 300 kA             | _       | 1.500 V  | _         | 1.800            |
| V          | 7        |           |            |            |                |                    |         | ,        |           | ,,,,,,           |
| NOTES:     |          |           |            |            |                |                    |         |          |           |                  |

#### NOTES:



The PG4500 Series is a hardwired suppression device (installed in parallel) and recommended for all ANSI/IEEE Category locations

**Dimensions:** 28.66"H x 15.11"W x 8.05"D

Weight: 65 lbs.

<sup>&</sup>lt;sup>1</sup> MCOV is Maximum Continuous Operating Voltage expressed in percentage of nominal voltage.

<sup>&</sup>lt;sup>2</sup> All surge currents listed above are independently tested and verified per NEMA LS-1.

<sup>&</sup>lt;sup>3</sup> Per Phase is defined as L-N + L-G for three phase 4-wire wye systems; L-G + L-L for three phase 3-wire delta systems.

<sup>&</sup>lt;sup>4</sup> Let-Through Voltage measured with 6 inch lead lengths per UL Standard 1449, 2nd Edition.







The PG4000 Series is a hardwired suppression device (installed in parallel) and recommended for all ANSI/IEEE Category locations.

#### **Dimensions:**

28.66"H x 15.11"W x 8.05"D

Weight: 65 lbs.

## PG4000 Series

#### **Features**

- All mode Protection (L-N, L-G, N-G, L-L)
- 40 kA Brute Force MOVs
- 200 KAIC Surge Rated Fuses
- Fault Current Tested to 200 KAIC
- Easily Replaceable Master Surge Module
- NEMA 3R Style Enclosure
- Redundant Protection per mode
- Safety Interlocked Disconnect
- · Thermally Protected MOVs for maximum safety
- EMI/RFI Filtration Up to 54 dB from 20 kHz to 100 MHz
- cETLus Listed to UL1449, 2nd Edition
- Lugs accept #10 to #2 AWG
- 10 year product warranty
- Redundant Protection per mode

#### **Integral Diagnostics**

- LED Indicator Lights
- Form C Contacts
- Intermatic Thermal Monitoring System
- Digital Surge Counter
- Audible Alarm

|            |           | Sur       | ge Curren  | t Capacity | 1          | Per                | UL 1449 | Clamping | Voltage   | (SVR)            |
|------------|-----------|-----------|------------|------------|------------|--------------------|---------|----------|-----------|------------------|
|            |           | (8 x      | 20 usec) ( | per mode   | <b>)</b> ² | Phase <sup>3</sup> | 6 kV, 5 | 00 Amp ( | 8 x 20 us | ec) <sup>4</sup> |
| Intermatic | MCOV1     |           |            |            |            |                    |         | 7        |           |                  |
| Model      | L-G       | L-N       | L-G        | N-G        | L-L        |                    | L-N     | L-G      | N-G       | L-L              |
| PG4001-240 | -2S 120/  | 240 VAC   | Single Ph  | ase (split | )          |                    |         |          |           |                  |
|            | 115%      | 125 kA    | 125 kA     | 125 kA     | 125 kA     | 250 kA             | 400 V   | 400 V    | 330 V     | 700 V            |
| PG4001-208 | 3-3Y 120/ | 208 VAC   | Three Pha  | ase Wye    |            |                    |         |          |           |                  |
|            | 115%      | 125 kA    | 125 kA     | 125 kA     | 125 kA     | 250 kA             | 400 V   | 400 V    | 330 V     | 700 V            |
| PG4001-240 | -3HLD 12  | 20/240 VA | C Three    | Phase Hig  | h Leg D    | elta               |         |          |           |                  |
|            | 115%      | 125 kA    | 125 kA     | 125 kA     | 125 kA     | 250 kA             | 400 V / | 400 V /  | 330 V     | 900 V            |
|            |           |           |            |            |            |                    | (700 V) | (700 V)  |           |                  |
| PG4001-480 | -3Y 277/  | 480 VAC   | Three Pha  | ase Wye    |            |                    |         |          |           |                  |
|            | 115%      | 125 kA    | 125 kA     | 125 kA     | 125 kA     | 250 kA             | 800 V   | 700 V    | 700 V     | 1,500            |
| V          |           |           |            |            |            |                    |         |          |           |                  |
| PG4001-480 | )-3DLL 48 | O VAC T   | hree Phas  | e Delta    |            |                    |         |          |           |                  |
|            | 115%      | _         | _          | _          | 125 kA     | 125 kA             | _       | _        | _         | 1,500            |
| V          |           |           |            |            |            |                    |         |          |           |                  |
| PG4001-600 | -3Y 347/  | 600 VAC   | Three Pha  | ase Wye    |            |                    |         |          |           |                  |
|            | 115%      | 125 kA    | 125 kA     | 125 kA     | 125 kA     | 250 kA             | 1,000 V | 1,000 V  | 1,000 V   | 1,800            |
| V          |           |           |            |            |            |                    | ,       | •        |           | •                |
| PG4001-600 | -3D 600   | VAC Thre  | ee Phase   | Delta      |            |                    |         |          |           |                  |
|            | 115%      | _         | 125 kA     | _          | 125 kA     | 250 kA             | _       | 1.500 V  | _         | 1.800            |
| V          |           |           |            |            |            |                    |         | ,        |           | , , , ,          |
| <u></u>    |           |           |            |            |            |                    |         |          |           | /                |

#### NOTES

<sup>&</sup>lt;sup>1</sup> MCOV is Maximum Continuous Operating Voltage expressed in percentage of nominal voltage.

<sup>&</sup>lt;sup>2</sup> All surge currents listed above are independently tested and verified per NEMA LS-1.

<sup>&</sup>lt;sup>3</sup> Per Phase is defined as L-N + L-G for three phase 4-wire wye systems; L-G + L-L for three phase 3-wire delta systems.

<sup>&</sup>lt;sup>4</sup> Let-Through Voltage measured with 6 inch lead lengths per UL Standard 1449, 2nd Edition.



## **PG100 Series**

#### Features

- Panel Extension design for mounting above or below 20" wide panel
- Available wiring space on each side for branch circuit or main input conductors
- All mode Protection (L-N, L-G, N-G, L-L)
- Redundant Protection per mode, replaceable master module
- Integral 200 KAIC fusing and thermal protection
- Fault Current Tested to 200 KAIC

- cETLus Listed to UL1449, 2nd Edition
- NEMA 3R Style Enclosure
- Lugs accept #10 to #2 AWG
- · Available with flush mount cover PG1-FMP
- 10 year product warranty
- $\bullet$  EMI/RFI Filtration Up to 54 dB from 20 kHz to

#### Integral Diagnostics

- LED Indicator Lights for each mode
- Form C Contacts
- Audible Alarm

|            |          | Surg     | ge Curren  | t Capacity | <b>y</b>       | Per                | UL 1449 | Clamping  | y Voltage | (SVR)             |
|------------|----------|----------|------------|------------|----------------|--------------------|---------|-----------|-----------|-------------------|
|            |          | (8 x 2   | 20 usec) ( | per mode   | ) <sup>2</sup> | Phase <sup>3</sup> | 6 kV, 5 | 600 Amp ( | 8 x 20 u  | sec) <sup>4</sup> |
| Intermatic | MCOV1    |          |            |            |                |                    |         |           |           |                   |
| Model      | L-G      | L-N      | L-G        | N-G        | L-L            |                    | L-N     | L-G       | N-G       | L-L               |
| PG100-240- | 2S 120/2 | 40 VAC S | ingle Pha  | se (split) |                |                    |         |           |           |                   |
|            | 115%     | 100 kA   | 100 kA     | 100 kA     | 100 kA         | 200 kA             | 330 V   | 330 V     | 330 V     | 600 V             |
| PG100-208- | 3Y 120/2 | 08 VAC T | hree Phas  | se Wye     |                |                    |         |           |           |                   |
|            | 115%     | 100 kA   | 100 kA     | 100 kA     | 100 kA         | 200 kA             | 330 V   | 330 V     | 330 V     | 600 V             |
| PG100-240- | 3HLD 120 | /240 VAC | Three Ph   | ase High   | Leg Deli       | ta                 |         |           |           |                   |
|            | 115%     | 100 kA   | 100 kA     | 100 kA     | 100 kA         | 200 kA             | 330 V   | 330 V     | 330 V     | 900 V             |
|            |          |          |            |            |                |                    | (600 V) | (700 V)   |           |                   |
| PG100-480- | 3Y 277/4 | 80 VAC T | hree Phas  | se Wye     |                |                    |         |           |           |                   |
|            | 115%     | 100 kA   | 100 kA     | 100 kA     | 100 kA         | 200 kA             | 800 V   | 800 V     | 700 V     | 1,500             |
| V          |          |          |            |            |                |                    |         |           |           |                   |
| PG100-480- | 3DLL 480 | VAC Thr  | ee Phase   | Delta      |                |                    |         |           |           |                   |
|            | 115%     | _        | _          | _          | 100 kA         | 100 kA             | _       | _         | _         | 1,200             |
| V          |          |          |            |            |                |                    |         |           |           |                   |
| NOTES:     |          |          |            |            |                |                    |         |           |           |                   |



The PG100 Series is a hard wired suppression device installed in parallel) and recommended for all ANSI/IEEE Category locations.

#### **Dimensions:**

16.0"H x 20.0"W x 6.0"D

Weight: 40 lbs



Flush Mount Plate PG1-FMP



<sup>&</sup>lt;sup>1</sup> MCOV is Maximum Continuous Operating Voltage expressed in percentage of nominal voltage.

<sup>&</sup>lt;sup>2</sup> All surge currents listed above are independently tested and verified per NEMA LS-1.

<sup>&</sup>lt;sup>3</sup> Per Phase is defined as L-N + L-G for three phase 4-wire wye systems; L-G + L-L for three phase 3-wire delta systems.

<sup>&</sup>lt;sup>4</sup> Let-Through Voltage measured with 6 inch lead lengths per UL Standard 1449, 2nd Edition.





The PG3500 Series is a hardwired suppression device (installed in parallel) and recommended for all ANSI/IEEE Category locations. Dimensions: 28.66"H x 15.11"W x 8.05"D Weight: 60 lbs.

## PG3500 Series

#### Features

- All mode Protection (L-N, L-G, N-G, L-L)
- 40 kA Brute Force MOVs
- 200 KAIC Surge Rated Fuses
- Fault Current Tested to 200 KAIC
- Easily Replaceable Master Surge Module
- NEMA 3R Style Enclosure
- Redundant Protection per mode
- Thermally Protected MOVs for maximum safety
- EMI/RFI Filtration Up to 54 dB from 20 kHz to 100 MHz
- cETLus Listed to UL1449, 2nd Edition
- Lugs accept #10 to #2 AWG
- 10 year product warranty

#### Integral Diagnostics

- LED Indicator Lights
- Intermatic Thermal Monitoring System
- Audible Alarm
- Form C Contacts

|            |           |           | ge Current<br>20 usec) (j |            |         | Per<br>Phase <sup>3</sup> |         | Clamping<br>00 Amp ( |         | ` '   |
|------------|-----------|-----------|---------------------------|------------|---------|---------------------------|---------|----------------------|---------|-------|
| Intermatic | MCOV1     |           |                           |            |         |                           |         |                      |         | \     |
| Model      | L-G       | L-N       | L-G                       | N-G        | L-L     |                           | L-N     | L-G                  | N-G     | L-L   |
| PG3500-240 | -2S 120/  | 240 VAC   | Single Ph                 | ase (split | )       |                           |         |                      |         |       |
|            | 115%      | 100 kA    | 100 kA                    | 100 kA     | 100 kA  | 200 kA                    | 400 V   | 400 V                | 330 V   | 700 V |
| PG3500-208 | -3Y 120/  | 208 VAC   | Three Pha                 | se Wye     |         |                           |         |                      |         |       |
|            | 115%      | 100 kA    | 100 kA                    | 100 kA     | 100 kA  | 200 kA                    | 400 V   | 400 V                | 330 V   | 700 V |
| PG3500-240 | -3HLD 12  | 20/240 VA | C Three F                 | Phase Hig  | h Leg D | elta                      |         |                      |         |       |
|            | 115%      | 100 kA    | 100 kA                    | 100 kA     | 100 kA  | 200 kA                    | 400 V / | 400 V /              | 330 V   | 900 V |
|            |           |           |                           |            |         |                           | (700 V) | (700 V)              |         |       |
| PG3500-480 | -3Y 277/  | 480 VAC   | Three Pha                 | se Wve     |         |                           | (1001)  | (1001)               |         |       |
|            | 115%      | 100 kA    | 100 kA                    | •          | 100 kA  | 200 kA                    | 800 V   | 700 V                | 700 V   | 1.500 |
| V          | 11070     | 100 101   | 100 101                   | 100 101    | 100 101 | 200 101                   | 000 V   | 700 1                | 700 1   | 1,000 |
| PG3500-480 | 2011 40   | O VAC TI  | aroo Dhao                 | n Dolto    |         |                           |         |                      |         |       |
| PG3000-460 |           | U VAC II  | iree Pilasi               | e Della    | 1001.4  | 1001.4                    |         |                      |         | 1 500 |
|            | 115%      | _         | _                         | _          | TUU KA  | 100 kA                    | _       | _                    | _       | 1,500 |
| <u>V</u>   |           |           |                           |            |         |                           |         |                      |         |       |
| PG3500-600 | -3Y 347/  | 600 VAC   | Three Pha                 | ise Wye    |         |                           |         |                      |         |       |
|            | 115%      | 100 kA    | 100 kA                    | 100 kA     | 100 kA  | 200 kA                    | 1,000 V | 1,000 V              | 1,000 V | 1,800 |
| V          |           |           |                           |            |         |                           |         |                      |         |       |
| PG3500-600 | -3D 600 V | VAC Thre  | e Phase                   | Delta      |         |                           |         |                      |         |       |
|            | 115%      | _         | 100 kA                    | _          | 100 kA  | 200 kA                    | _       | 1,500 V              | _       | 1,800 |
| V          |           |           |                           |            |         |                           |         | ,                    |         |       |

#### NOTES:

MCOV is Maximum Continuous Operating Voltage expressed in percentage of nominal voltage.

<sup>&</sup>lt;sup>2</sup> All surge currents listed above are independently tested and verified per NEMA LS-1.

<sup>&</sup>lt;sup>3</sup> Per Phase is defined as L-N + L-G for three phase 4-wire wye systems; L-G + L-L for three phase 3-wire delta systems.

<sup>&</sup>lt;sup>4</sup> Let-Through Voltage measured with 6 inch lead lengths per UL Standard 1449, 2nd Edition.



## **PG80 Series**

#### Features

- Panel Extension design for mounting above or below 20" wide panel
- Available wiring space on each side for branch circuit or main input conductors
- All mode Protection (L-N, L-G, N-G, L-L)
- Redundant Protection per mode, replaceable master module
- Integral 200 KAIC fusing and thermal protection
- EMI/RFI Filtration Up to 54 dB from 20 kHz to 100 MHz

- cETLus Listed to UL1449, 2nd Edition
- NEMA 3R Style Enclosure
- Lugs accept #10 to #2 AWG
- · Available with flush mount cover PG1-FMP
- 10 year product warranty
- Fault Current Tested to 200 KAIC

#### Integral Diagnostics

- · LED Indicator Lights for each mode
- Form C Contacts
- Audible Alarm

|             |          | Sur      | ge Curren  | ıt Capacit | у               | Per                | UL 1449 | Clamping  | 30 V 330 V<br>30 V 330 V<br>30 V 330 V<br>700 V) | ` '    |
|-------------|----------|----------|------------|------------|-----------------|--------------------|---------|-----------|--|--------|
|             |          | (8 x     | 20 usec)   | (per mode  | e) <sup>2</sup> | Phase <sup>3</sup> | 6 kV, 5 | 600 Amp ( | 8 x 20 us  | Sec)4  |
| Intermatic  | MCOV1    |          |            |            |                 |                    |         |           |  |        |
| Model       | L-G      | L-N      | L-G        | N-G        | L-L             |                    | L-N     | L-G       | N-G  | L-L    |
| PG80-240-2S | 120/24   | O VAC Si | ingle Phas | se (split) |                 |                    |         |           |  |        |
|             | 115%     | 80 kA    | 80 kA      | 80 kA      | 80 kA           | 160 kA             | 330 V   | 330 V     | 330 V  | 600 V  |
| PG80-208-3Y | 120/20   | 8 VAC TI | ree Phas   | e Wye      |                 |                    |         |           |  |        |
|             | 115%     | 80 kA    | 80 kA      | 80 kA      | 80 kA           | 160 kA             | 330 V   | 330 V     | 330 V  | 600 V  |
| PG80-240-3H | LD 120/2 | 240 VAC  | Three Ph   | ase High I | Leg Delt        | a                  |         |           |  |        |
|             | 115%     | 80 kA    | 80 kA      | 80 kA      | 80 kA           | 160 kA             | 330 V   | 330 V     | 330 V  | 900 V  |
|             |          |          |            |            |                 |                    | (600 V) | (700 V)   |  |        |
| PG80-480-3Y | 277/48   | O VAC TI | ree Phas   | e Wye      |                 |                    |         |           |  |        |
|             | 115%     | 80 kA    | 80 kA      | 80 kA      | 80 kA           | 160 kA             | 800 V   | 800 V     | 700 V  | 1500 V |
| PG80-480-3D | LL 480   | VAC Thre | ee Phase   | Delta      |                 |                    |         |           |  |        |
|             | 115%     | _        | 80 kA      | _          | 80 kA           | 80 kA              | _       | _         | _  | 1,200  |
| V           |          |          |            |            |                 |                    |         |           |  |        |
| NOTEO       |          |          |            |            |                 |                    |         |           |  |        |

#### NOTES:



The PG80 Series is a hardwired suppression device (installed in parallel) and recommended for all ANSI/IEEE Category locations.

#### **Dimensions:**

16.0"H x 20.0"W x 6.0"D

Weight: 40 lbs.



Flush Mount Plate PG1-FMP



MCOV is Maximum Continuous Operating Voltage expressed in percentage of nominal voltage.

<sup>&</sup>lt;sup>2</sup> All surge currents listed above are independently tested and verified per NEMA LS-1.

<sup>&</sup>lt;sup>3</sup> Per Phase is defined as L-N + L-G for three phase 4-wire wye systems; L-G + L-L for three phase 3-wire delta systems.

<sup>&</sup>lt;sup>4</sup> Let-Through Voltage measured with 6 inch lead lengths per UL Standard 1449, 2nd Edition.





The PG3000 Series is a hardwired suppression device (installed in parallel) and recommended for all ANSI/IEEE Category locations.

#### **Dimensions:**

28.66"H x 15.11"W x 8.05"D

Weight: 60 lbs.

## PG3000 Series

#### Features

- All mode Protection (L-N, L-G, N-G, L-L)
- 40 kA Brute Force MOVs
- Thermally Protected MOVs for maximum safety
- EMI/RFI Filtration Up to 54 dB from 20 kHz to 100 MHz
- cETLus Listed to UL1449, 2nd Edition
- 10 year product warranty

- Redundant Protection per mode
- 200 KAIC Surge Rated Fuses
- Fault Current Tested to 200 KAIC
- Easily Replaceable Master Surge Module
- NEMA 3R Style Enclosure

#### Integral Diagnostics

- LED Indicator Lights
- Intermatic Thermal Monitoring System
- · Audible Alarm
- Form C Contacts

|             |          |          | ge Curren<br>20 usec) | •          | •        | Per<br>Phase <sup>3</sup> |         | Clamping<br>00 Amp ( |         | ` '   |
|-------------|----------|----------|-----------------------|------------|----------|---------------------------|---------|----------------------|---------|-------|
| Intermatic  | MCOV1    |          |                       |            |          |                           |         |                      |         | ١     |
| Model       | L-G      | L-N      | L-G                   | N-G        | L-L      |                           | L-N     | L-G                  | N-G     | L-L   |
| PG3000-240  | -2S 120/ | 240 VAC  | Single Pl             | nase (spli | t)       |                           |         |                      |         |       |
|             | 115%     | 80 kA    | 80 kA                 | 80 kA      | 80 kA    | 160 kA                    | 400 V   | 400 V                | 330 V   | 700 V |
| PG3000-208  | -3Y 120/ | 208 VAC  | Three Ph              | ase Wye    |          |                           |         |                      |         |       |
|             | 115%     | 80 kA    | 80 kA                 | 80 kA      | 80 kA    | 160 kA                    | 400 V   | 400 V                | 330 V   | 700 V |
| PG3000-240  | -3HLD 12 | 20/240 V | AC Three              | Phase High | gh Leg I | Delta                     |         |                      |         |       |
|             | 115%     | 80 kA    | 80 kA                 | 80 kA      | 80 kA    | 160 kA                    | 400 V / | 400 V /              | 330 V   | 900 V |
|             |          |          |                       |            |          |                           | (700 V) | (700 V)              |         |       |
| PG3000-480  | -3Y 277/ | 480 VAC  | Three Ph              | ase Wve    |          |                           | (1001)  | (1001)               |         |       |
| 1 40000 100 | 115%     | 80 kA    | 80 kA                 | 80 kA      | 80 kA    | 160 kA                    | 800 V   | 700 V                | 700 V   | 1.500 |
| V           | 11070    | 00 104   | 00 104                | 00 NA      | 00 IVA   | 100 104                   | 000 V   | 700 V                | 700 V   | 1,000 |
| PG3000-480  | 2011 40  | O VAC T  | huaa Dhaa             | no Dolto   |          |                           |         |                      |         |       |
| Pu3000-400  |          | U VAG I  | iiree Piias           | se Della   | 00.1.4   | 00.1.4                    |         |                      |         | 4 500 |
|             | 115%     | _        | _                     | _          | 80 kA    | 80 kA                     | _       | _                    | _       | 1,500 |
| V           |          |          |                       |            |          |                           |         |                      |         |       |
| PG3000-600  | -3Y 347/ | 600 VAC  | Three Ph              | ase Wye    |          |                           |         |                      |         |       |
|             | 115%     | 80 kA    | 80 kA                 | 80 kA      | 80 kA    | 160 kA                    | 1,000 V | 1,000 V              | 1,000 V | 1,800 |
| V           |          |          |                       |            |          |                           |         |                      |         |       |
| PG3000-600  | -3D 600  | VAC Thr  | ee Phase              | Delta      |          |                           |         |                      |         |       |
|             | 115%     | _        | 80 kA                 | _          | 80 kA    | 160 kA                    | _       | 1.500 V              | _       | 1,800 |
| V           |          |          |                       |            |          |                           |         | ,                    |         | ,     |

#### NOTES:

<sup>&</sup>lt;sup>1</sup> MCOV is Maximum Continuous Operating Voltage expressed in percentage of nominal voltage.

 $<sup>^{2}</sup>$  All surge currents listed above are independently tested and verified per NEMA LS-1.

<sup>&</sup>lt;sup>3</sup> Per Phase is defined as L-N + L-G for three phase 4-wire wye systems; L-G + L-L for three phase 3-wire delta systems.

<sup>&</sup>lt;sup>4</sup> Let-Through Voltage measured with 6 inch lead lengths per UL Standard 1449, 2nd Edition.



## **PG60 Series**

#### Features

- Panel Extension design for mounting above or below 20" wide panel
- Available wiring space on each side for branch circuit or main input conductors
- All mode Protection (L-N, L-G, N-G, L-L)
- · Redundant Protection per mode, replaceable master module
- Integral 200 KAIC fusing and thermal protection
- EMI/RFI Filtration Up to 54 dB from 20 kHz to 100 MHz
- cETLus Listed to UL1449, 2nd Edition
- NEMA 3R Style Enclosure
- Lugs accept #10 to #2 AWG
- · Available with flush mount cover PG1-FMP
- 10 year product warranty
- Fault Current Tested to 200 KAIC

#### Integral Diagnostics

- LED Indicator Lights for each mode
- Form C Contacts
- Audible Alarm

|             |                   | Sur     | ge Curren  | t Capacit  | у               | Per                | UL 1449 | Clamping | <b>Voltage</b> | (SVR)             |
|-------------|-------------------|---------|------------|------------|-----------------|--------------------|---------|----------|----------------|-------------------|
|             |                   | (8 x    | 20 usec) ( | (per mode  | <del>2</del> )2 | Phase <sup>3</sup> | 6 kV, 5 | 00 Amp ( | 8 x 20 us      | sec) <sup>4</sup> |
| Intermatic  | MCOV <sup>1</sup> |         |            |            |                 |                    |         |          |                |                   |
| Model       | L-G               | L-N     | L-G        | N-G        | L-L             |                    | L-N     | L-G      | N-G            | L-L               |
| PG60-240-2S | 120/240           | VAC S   | ingle Phas | se (split) |                 |                    |         |          |                |                   |
|             | 115%              | 60 kA   | 60 kA      | 60 kA      | 60 kA           | 120 kA             | 330 V   | 330 V    | 330 V          | 600 V             |
| PG60-208-3Y | 120/20            | B VAC T | hree Phas  | e Wye      |                 |                    |         |          |                |                   |
|             | 115%              | 60 kA   | 60 kA      | 60 kA      | 60 kA           | 120 kA             | 330 V   | 330 V    | 330 V          | 600 V             |
| PG60-240-3H | LD 120/2          | 40 VAC  | Three Pha  | ase High   | Leg Delt        | ta                 |         |          |                |                   |
|             | 115%              | 60 kA   | 60 kA      | 60 kA      | 60 kA           | 120 kA             | 330 V   | 330 V    | 330 V          | 900 V             |
|             |                   |         |            |            |                 |                    | (600 V) | (700 V)  |                |                   |
| PG60-480-3Y | 277/480           | VAC T   | hree Phas  | e Wye      |                 |                    |         |          |                |                   |
|             | 115%              | 60 kA   | 60 kA      | 60 kA      | 60 kA           | 120 kA             | 800 V   | 800 V    | 700 V          | 1,500             |
| V           |                   |         |            |            |                 |                    |         |          |                |                   |
| PG60-480-3D | LL 480 \          | AC Thr  | ee Phase   | Delta      |                 |                    |         |          |                |                   |
|             | 115%              | —       | _          | _          | 60 kA           | 60 kA              | _       | _        | _              | 1,200             |
| V           |                   |         |            |            |                 |                    |         |          |                |                   |

#### NOTES



The PG60 Series is a hardwired suppression device (installed in parallel) and recommended for all ANSI/IEEE Category locations.

#### **Dimensions:**

16.0"H x 20.0"W x 6.0"D

Weight: 40 lbs.



Flush Mount Plate PG1-FMP



<sup>&</sup>lt;sup>1</sup> MCOV is Maximum Continuous Operating Voltage expressed in percentage of nominal voltage.

<sup>&</sup>lt;sup>2</sup> All surge currents listed above are independently tested and verified per NEMA LS-1.

<sup>&</sup>lt;sup>3</sup> Per Phase is defined as L-N + L-G for three phase 4-wire wye systems; L-G + L-L for three phase 3-wire delta systems.

<sup>&</sup>lt;sup>4</sup> Let-Through Voltage measured with 6 inch lead lengths per UL Standard 1449, 2nd Edition.





The PG2500 Series is a hardwired suppression device (installed in parallel) and recommended for all ANSI/IEEE Category locations.

16.47"H x 10.59"W x 4.9"D 28 lbs.



Flush Mount Plate IG1FMP-PG

## PG2500 Series

#### Features

- All mode Protection (L-N, L-G, N-G, L-L)
- Redundant Protection per mode
- 200 KAIC Surge Rated Fuses
- Thermally Protected MOVs for maximum safety
- Fault Current Tested to 200 KAIC

- $\bullet$  EMI/RFI Filtration Up to 54 dB from 20 kHz to 100
- cETLus Listed to UL1449, 2nd Edition
- NEMA 3R Style Enclosure
- Pre-wired with 40" of #10 AWG wire leads
- 10 year product warranty

#### Integral Diagnostics

- LED Indicator Lights for each mode
- Form C Contacts
- Audible Alarm

|            |         | Sui    | rge Curren | t Capacit | у               | Per                | UL 1449 | Clamping | Voltage  | (SVR) |
|------------|---------|--------|------------|-----------|-----------------|--------------------|---------|----------|----------|-------|
|            |         | (8 x   | 20 usec) ( | per mode  | <del>2</del> )2 | Phase <sup>3</sup> | 6 kV, 5 | 00 Amp ( | 8 x 20 u | sec)4 |
| Intermatic | MCOV1   |        |            |           |                 |                    |         |          |          |       |
| Model      | L-G     | L-N    | L-G        | N-G       | L-L             |                    | L-N     | L-G      | N-G      | L-L   |
| IG2401SECA | 120/240 | VAC Si | ngle-Phase | (Split)   |                 |                    |         |          |          |       |
|            | 115%    | 60 kA  | 60 kA      | 60 kA     | 60 kA           | 120 kA             | 400 V   | 400 V    | 330 V    | 600 V |
| IG2083YECA | 120/208 | VAC Th | ree Phase  | Wye       |                 |                    |         |          |          |       |
|            | 115%    | 60 kA  | 60 kA      | 60 kA     | 60 kA           | 120 kA             | 400 V   | 400 V    | 330 V    | 600 V |
| IG2403DECA | 120/240 | VAC Th | ree Phase  | High Le   | g Delta         |                    |         |          |          |       |
|            | 115%    | 60 kA  | 60 kA      | 60 kA     | 60 kA           | 120 kA             | 400 V / | 400 V /  | 330 V    | 700 V |
|            |         |        |            |           |                 |                    | (600 V) | (700 V)  |          |       |
| IG4803YECA | 277/480 | VAC Th | ree Phase  | Wye       |                 |                    |         |          |          |       |
|            | 115%    | 60 kA  | 60 kA      | 60 kA     | 60 kA           | 120 kA             | 800 V   | 800 V    | 400 V    | 1,500 |
| V          |         |        |            |           |                 |                    |         |          |          |       |
| IG4803DECA | 480 VAC | Three  | Phase Del  | ta        |                 |                    |         |          |          |       |
|            | 115%    | _      | 120 kA     | _         | 60 kA           | 180 kA             | _       | 1,500 V  | _        | 1,200 |
| V          |         |        |            |           |                 |                    |         |          |          |       |

#### VOTES:

- <sup>1</sup> MCOV is Maximum Continuous Operating Voltage expressed in percentage of nominal voltage.
- <sup>2</sup> All surge currents listed above are independently tested and verified per NEMA LS-1.
- <sup>3</sup> Per Phase is defined as L-N + L-G for three phase 4-wire wye systems; L-G + L-L for three phase 3-wire delta systems.
- <sup>4</sup> Let-Through Voltage measured with 6 inch lead lengths per UL Standard 1449, 2nd Edition.

Good while quantities last in stock. To be obsoleted in 2008.



## PG2000 Series

#### Features

- All mode Protection (L-N, L-G, N-G, L-L)
- Redundant Protection per mode
- 200 KAIC Surge Rated Fuses
- Thermally Protected MOVs for maximum safety
- Fault Current Tested to 200 KAIC
- EMI/RFI Filtration Up to 54 dB from 20 kHz to 100 MHz
- cETLus Listed to UL1449, 2nd Edition
- NEMA 3R Style Enclosure
- Pre-wired with 40" of #10 AWG wire leads
- 10 year product warranty

#### Integral Diagnostics

- LED Indicator Lights
- Form C Contacts
- Intermatic Thermal Monitoring System

|            |           | Sur      | ge Currer   | nt Capacit | y     | Per   | UL 1449 | Clamping | Voltage | (SVR) |
|------------|-----------|----------|---|------------|-------|-------|---------|----------|---------|-------|
|            |           | (8 x 2   | 20 usec) (per mode) <sup>2</sup> Phase <sup>3</sup> 6 kV, 500 Amp (8 x 20 used) (per mode) <sup>2</sup> Phase <sup>3</sup> 6 kV, 500 Amp (8 x 20 used) (per mode) <sup>2</sup> Phase (Split)  30 kA 30 kA 30 kA 60 kA 500 V 400 V 400 V  20 Phase Wye  30 kA 30 kA 30 kA 60 kA 400 V 500 V 400 V  20 Phase High Leg Delta  30 kA 30 kA 30 kA 60 kA 400 V 700 V 330 V (700 V)  20 Phase Wye  30 kA 30 kA 30 kA 60 kA 800 V 800 V 400 V |            |       |       |         |          | Sec)4   |       |
| Intermatic | MCOV1     |          |   |            |       |       |         |          |         |       |
| Model      | L-G       | L-N      | L-G   | N-G        | L-L   |       | L-N     | L-G      | N-G     | L-L   |
| IG2401ECS  | 120/240   | /AC Sing | le-Phase  | (Split)    |       |       |         |          |         |       |
|            | 115%      | 30 kA    | 30 kA   | 30 kA      | 30 kA | 60 kA | 500 V   | 400 V    | 400 V   | 700 V |
| IG2083ECY  | 120/208   | AC Thre  | e Phase   | Wye        |       |       |         |          |         |       |
|            | 115%      | 30 kA    | 30 kA   | 30 kA      | 30 kA | 60 kA | 400 V   | 500 V    | 400 V   | 700 V |
| IG2403ECD  | 120/240 V | AC Three | Phase   | High Leg   | Delta |       |         |          |         |       |
|            | 115%      | 30 kA    | 30 kA   | 30 kA      | 30 kA | 60 kA | 400 V / | 400 V /  | 330 V   | 700 V |
|            |           |          |   |            |       |       | (700 V) | (700 V)  |         |       |
| IG4803ECY  | 277/480   | AC Thre  | e Phase   | Wye        |       |       |         |          |         |       |
|            | 115%      | 30 kA    | 30 kA   | 30 kA      | 30 kA | 60 kA | 800 V   | 800 V    | 400 V   | 1,500 |
| V          |           |          |   |            |       |       |         |          |         |       |
| IG4803ECD  | 480 VAC   | Three Ph | ase Delt  | a          | -     | -     |         |          |         |       |
|            | 115%      | _        | 60 kA   | _          | 30 kA | 90 kA | _       | 1,500 V  | _       | 1,500 |
| V          |           |          |   |            |       |       |         |          |         |       |

#### NOTES

Good while quantities last in stock. To be obsoleted in 2008.



The PG2000 Series is a hardwired suppression device (installed in parallel) and recommended for all ANSI/IEEE Category locations.

#### **Dimensions:**

16.47"H x 10.59"W x 4.9"D

Weight: 28 lbs.



Flush Mount Plate IG1FMP-PG



MCOV is Maximum Continuous Operating Voltage expressed in percentage of nominal voltage.

<sup>&</sup>lt;sup>2</sup> All surge currents listed above are independently tested and verified per NEMA LS-1.

<sup>&</sup>lt;sup>3</sup> Per Phase is defined as L-N + L-G for three phase 4-wire wye systems; L-G + L-L for three phase 3-wire delta systems.

<sup>&</sup>lt;sup>4</sup> Let-Through Voltage measured with 6 inch lead lengths per UL Standard 1449, 2nd Edition.





The PG40 Series is a hardwired suppression device (installed in parallel) and recommended for all ANSI/IEEE Category locations.

#### **Dimensions:**

11.0"H x 5.875"W x 3.75"D

Weight: 22 lbs.



Flush Mount Plate PG2-FMP

## **PG40 Series**

#### Features

- All mode Protection (L-N, L-G, N-G, L-L)
- Redundant Protection per mode
- Integral 200 KAIC fusing and thermal protection
- Thermally protected MOVs for maximum safety
- Fault current tested to 200 KAIC
- EMI/RFI Filtration Up to 54 dB from 20 kHz to 100 MHz
- cETLus Listed to UL1449, 2nd Edition
- NEMA 3R style enclosure
- Pre-wired with 30" of #10 AWG wire leads
- · Available with flush mount cover PG2-FMP
- 10 year product warranty

#### Integral Diagnostics

- · LED indicator lights for each mode
- Form C Contacts
- Audible alarm

|             |         |          | ge Currer  | •          | •               | Per                |         | Clamping |          | ` '   |
|-------------|---------|----------|------------|------------|-----------------|--------------------|---------|----------|----------|-------|
|             |         | (8 x     | 20 usec)   | (per mode  | e) <sup>2</sup> | Phase <sup>3</sup> | 6 kV, 5 | 00 Amp ( | 8 x 20 u | sec)4 |
| Intermatic  | MCOV1   |          |            |            |                 |                    |         |          |          |       |
| Model       | L-G     | L-N      | L-G        | N-G        | L-L             |                    | L-N     | L-G      | N-G      | L-L   |
| PG40-240-2S | 120/24  | O VAC S  | ingle Phas | se (split) |                 |                    |         |          |          |       |
|             | 115%    | 40 kA    | 40 kA      | 40 kA      | 40 kA           | 80 kA              | 330 V   | 330 V    | 400 V    | 700 V |
| PG40-208-3Y | 120/20  | 8 VAC Th | ree Phase  | e Wye      |                 |                    |         |          |          |       |
|             | 115%    | 40 kA    | 40 kA      | 40 kA      | 40 kA           | 80 kA              | 330 V   | 330 V    | 400 V    | 700 V |
| PG40-240-3H | LD 120/ | /240 VAC | Three Ph   | ase High   | Leg Delt        | ta                 |         |          |          |       |
|             | 115%    | 40 kA    | 40 kA      | 40 kA      | 40 kA           | 80 kA              | 330 V   | 330 V    | 400 V    | 900 V |
|             |         |          |            |            |                 |                    | (600 V) | (600 V)  |          |       |
| PG40-480-3Y | 277/48  | 0 VAC Th | ree Phase  | e Wye      |                 |                    |         |          |          |       |
|             | 115%    | 40 kA    | 40 kA      | 40 kA      | 40 kA           | 80 kA              | 800 V   | 800 V    | 800 V    | 1,500 |
| V           |         |          |            |            |                 |                    |         |          |          |       |
| PG40-480-3D | 480 VA  | C Three  | Phase De   | lta        |                 |                    |         |          |          |       |
|             | 115%    | _        | 40 kA      | _          | 40 kA           | 80 kA              | _       | 1,200 V  | _        | 1,200 |
|             |         |          |            |            |                 |                    |         |          |          |       |

#### NOTES

<sup>&</sup>lt;sup>1</sup> MCOV is Maximum Continuous Operating Voltage expressed in percentage of nominal voltage.

<sup>&</sup>lt;sup>2</sup> All surge currents listed above are independently tested and verified per NEMA LS-1.

<sup>&</sup>lt;sup>3</sup> Per Phase is defined as L-N + L-G for three phase 4-wire wye systems; L-G + L-L for three phase 3-wire delta systems.

<sup>&</sup>lt;sup>4</sup> Let-Through Voltage measured with 6 inch lead lengths per UL Standard 1449, 2nd Edition.



## **EH Series**

#### Features

- All mode Protection (L-N, L-G, N-G, L-L)
- Redundant Protection per mode
- 200 KAIC Surge Rated Fuses
- Thermally Protected MOVs for maximum safety
- Fault Current Tested to 200 KAIC
- EMI/RFI Filtration 20 to 30 dB from 20 kHz to 100 MHz
- cETLus Listed to UL1449, 2nd Edition
- NEMA 3R Style Enclosure
- Pre-wired with 30" of #10 AWG wire leads
- 10 year product warranty

#### Integral Diagnostics

- LED Indicator Lights
- Intermatic Thermal Monitoring System

| IG1201EH   120 VAC   Single Phase   115%   26 kA   26 kA   26 kA   — 52 kA   500 V   500 V   —   |            |           | Sur        | ge Currei | nt Capacit | у               | Per                | UL 1449 | Clamping | <b>Voltage</b> | (SVR) |
|--|------------|-----------|------------|-----------|------------|-----------------|--------------------|---------|----------|----------------|-------|
| Model   L-G   L-N   L-G   N-G   L-L   L-N   L-G   N-G   L-L  |            |           | (8 x       | 20 usec)  | (per mode  | e) <sup>2</sup> | Phase <sup>3</sup> | 6 kV, 5 | 00 Amp ( | 8 x 20 us      | sec)4 |
| IG1201EH   120 VAC   Single Phase   115%   26 kA   26 kA   26 kA   — 52 kA   500 V   500 V   —   | Intermatic | MCOV1     |            |           |            |                 |                    |         |          |                |       |
| 115%   26 kA   26 kA   26 kA     52 kA   500 V   500 V   | Model      | L-G       | L-N        | L-G       | N-G        | L-L             |                    | L-N     | L-G      | N-G            | L-L   |
| Columbia   Columbia  | IG1201EH 1 | 120 VAC S | Single Pha | ase       |            |                 |                    |         |          |                |       |
| 115%   26 kA   26 kA   26 kA   26 kA   52 kA   400 V   400 V   400 V   700   |            | 115%      | 26 kA      | 26 kA     | 26 kA      | _               | 52 kA              | 500 V   | 500 V    | 500 V          | _     |
| IG2083YEH   120/208 VAC   Three Phase   Wye   115%   26 kA   26 kA   26 kA   26 kA   52 kA   400 V   400 V   400 V   700     IG2403DEH   120/240 VAC   Three Phase   High Leg   Delta   115%   26 kA   26 kA   26 kA   26 kA   52 kA   400 V   400 V   400 V   700     IG4803YEH   277/480 VAC   Three Phase   Wye   115%   26 kA   26 kA   26 kA   26 kA   52 kA   800 V   800 V   400 V   1,50 V     IG4803DEH   480 VAC   Three Phase   Delta   120/240 VAC   Three Phase   Delta   120/240 VAC   120/2 | IG2401EH 1 | 120/240 V | AC Single  | e Phase ( | split)     |                 |                    |         |          |                |       |
| 115%   26 kA   26 kA   26 kA   26 kA   26 kA   52 kA   400 V   400 V   400 V   700 V   |            | 115%      | 26 kA      | 26 kA     | 26 kA      | 26 kA           | 52 kA              | 400 V   | 400 V    | 400 V          | 700 V |
| 120/240 VAC Three Phase High Leg Delta   115%   26 kA   26 kA   26 kA   26 kA   52 kA   400 V / 400 V / 400 V   700 V   15%   26 kA   26 kA   26 kA   26 kA   52 kA   800 V   800 V   400 V   1,50 V   164803DEH   480 VAC   Three Phase   Delta   15%   26 kA   26 kA   26 kA   26 kA   26 kA   52 kA   800 V   800 V   400 V   1,50 V   164803DEH   480 VAC   Three Phase   Delta   15%   15 | IG2083YEH  | 120/208   | VAC Thre   | e Phase   | Wye        |                 |                    |         |          |                |       |
| 115% 26 kA 26 kA 26 kA 26 kA 52 kA 400 V / 400 V / 400 V 700 (700 V)  IG4803YEH 277/480 VAC Three Phase Wye 115% 26 kA 26 kA 26 kA 26 kA 52 kA 800 V 800 V 400 V 1,50 V  IG4803DEH 480 VAC Three Phase Delta   |            | 115%      | 26 kA      | 26 kA     | 26 kA      | 26 kA           | 52 kA              | 400 V   | 400 V    | 400 V          | 700 V |
| (700 V) (700 V)  | IG2403DEH  | 120/240   | VAC Thre   | e Phase   | High Leg   | Delta           |                    |         |          |                |       |
| IG4803YEH 277/480 VAC Three Phase Wye 115% 26 kA 26 kA 26 kA 26 kA 52 kA 800 V 800 V 400 V 1,50 V IG4803DEH 480 VAC Three Phase Delta  |            | 115%      | 26 kA      | 26 kA     | 26 kA      | 26 kA           | 52 kA              | 400 V / | 400 V /  | 400 V          | 700 V |
| 115% 26 kA 26 kA 26 kA 26 kA 52 kA 800 V 800 V 400 V 1,50 V IG4803DEH 480 VAC Three Phase Delta  |            |           |            |           |            |                 |                    | (700 V) | (700 V)  |                |       |
| V<br>IG4803DEH 480 VAC Three Phase Delta   | IG4803YEH  | 277/480   | VAC Thre   | e Phase   | Wye        |                 |                    |         |          |                |       |
| IG4803DEH 480 VAC Three Phase Delta  |            | 115%      | 26 kA      | 26 kA     | 26 kA      | 26 kA           | 52 kA              | 800 V   | 800 V    | 400 V          | 1,500 |
|  | V          |           |            |           |            |                 |                    |         |          |                |       |
| 115% — 52 kA — 26 kA 78 kA — 1,200 V — 1,50  | IG4803DEH  | 480 VAC   | Three Ph   | nase Delt | a          |                 |                    |         |          |                |       |
|  |            | 115%      | _          | 52 kA     | _          | 26 kA           | 78 kA              | _       | 1,200 V  | _              | 1,500 |
| V  | V          |           |            |           |            |                 |                    |         |          |                |       |

#### NOTES



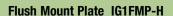
The EH Series is a hardwired suppression device (installed in parallel) and recommended for all ANSI/IEEE Category locations.

#### **Dimensions:**

7.5"H x 4.25"W x 4.0"D

Weight: 5.5 lbs.





<sup>&</sup>lt;sup>1</sup> MCOV is Maximum Continuous Operating Voltage expressed in percentage of nominal voltage.

<sup>&</sup>lt;sup>2</sup> All surge currents listed above are independently tested and verified per NEMA LS-1.

 $<sup>^3</sup>$  Per Phase is defined as L-N + L-G for three phase 4-wire wye systems; L-G + L-L for three phase 3-wire delta systems.

<sup>&</sup>lt;sup>4</sup> Let-Through Voltage measured with 6 inch lead lengths per UL Standard 1449, 2nd Edition.





The PG20 Series is a hardwired suppression device (installed in parallel) and recommended for all ANSI/IEEE Category locations.

**Dimensions:** 11.0"H x 5.875"W x 3.75"D

Weight: 22 lbs.



Flush Mount Plate PG2-FMP

## **PG20 Series**

#### Features

- All mode Protection (L-N, L-G, N-G, L-L)
- Redundant Protection per mode
- Integral 200 KAIC fusing and thermal protection
- Thermally protected MOVs for maximum safety
- Fault current tested to 200 KAIC
- EMI/RFI Filtration Up to 54 dB from 20 kHz to 100 MHz
- cETLus Listed to UL1449, 2nd Edition
- NEMA 3R style enclosure
- Pre-wired with 30" of #10 AWG wire leads
- · Available with flush mount cover PG2-FMP
- 10 year product warranty

#### Integral Diagnostics

- LED indicator lights for each mode
- Form C Contacts
- Audible alarm

|             |         |           | ge Curren<br>20 usec) ( | -          | -        | Per<br>Phase <sup>3</sup> |         | Clamping |       | ` '          |
|-------------|---------|-----------|-------------------------|------------|----------|---------------------------|---------|----------|-------|--------------|
| Intermatic  | MCOV1   |           |                         | ··         | <u> </u> |                           | ,       |          |       | <del>\</del> |
| Model       | L-G     | L-N       | L-G                     | N-G        | L-L      |                           | L-N     | L-G      | N-G   | L-L          |
| PG20-240-2S | 120/24  | 0 VAC Si  | ngle Phas               | se (split) |          |                           |         |          |       |              |
|             | 115%    | 20 kA     | 20 kA                   | 20 kA      | 20 kA    | 40 kA                     | 330 V   | 330 V    | 400 V | 700 V        |
| PG20-208-3Y | 120/20  | 8 VAC Th  | ree Phase               | Wye        |          |                           |         |          |       |              |
|             | 115%    | 20 kA     | 20 kA                   | 20 kA      | 20 kA    | 40 kA                     | 330 V   | 330 V    | 400 V | 700 V        |
| PG20-240-3H | LD 120/ | 240 VAC   | Three Pha               | ase High I | Leg Delt | a                         |         |          |       |              |
|             | 115%    | 20 kA     | 20 kA                   | 20 kA      | 20 kA    | 40 kA                     | 330 V   | 330 V    | 400 V | 900 V        |
|             |         |           |                         |            |          |                           | (600 V) | (600 V)  |       |              |
| PG20-480-3Y | 277/48  | 0 VAC Th  | ree Phase               | Wye        |          |                           |         |          |       |              |
|             | 115%    | 20 kA     | 20 kA                   | 20 kA      | 20 kA    | 40 kA                     | 800 V   | 800 V    | 800 V | 1,500        |
| V           |         |           |                         |            |          |                           |         |          |       |              |
| PG20-480-3D | 480 VA  | C Three I | Phase De                | lta        |          |                           |         |          |       |              |
|             | 115%    | _         | 20 kA                   | _          | 20 kA    | 40 kA                     | _       | 1,200 V  | _     | 1,200        |
| V           |         |           |                         |            |          |                           |         |          |       |              |

#### NOTES

<sup>&</sup>lt;sup>1</sup> MCOV is Maximum Continuous Operating Voltage expressed in percentage of nominal voltage.

<sup>&</sup>lt;sup>2</sup> All surge currents listed above are independently tested and verified per NEMA LS-1.

<sup>&</sup>lt;sup>3</sup> Per Phase is defined as L-N + L-G for three phase 4-wire wye systems; L-G + L-L for three phase 3-wire delta systems.

<sup>&</sup>lt;sup>4</sup> Let-Through Voltage measured with 6 inch lead lengths per UL Standard 1449, 2nd Edition.



## LH Series

#### Features

- All mode Protection (L-N, L-G, N-G, L-L)
- 200 KAIC Surge Rated Fuses
- Thermally Protected MOVs for maximum safety
- Fault Current Tested to 200 KAIC
- EMI/RFI Filtration 20 to 30 dB from 20 kHz to 100 MHz
- cETLus Listed to UL1449, 2nd Edition
- NEMA 3R Style Enclosure
- Pre-wired with 30" of #10 AWG wire leads
- 10 year product warranty

#### Integral Diagnostics

- LED Indicator Lights
- Intermatic Thermal Monitoring System

|            |           | Sur       | ge Currei | nt Capacit | y     | Per                | UL 1449 | Clamping | <b>Voltage</b> | (SVR) |
|------------|-----------|-----------|-----------|------------|-------|--------------------|---------|----------|----------------|-------|
|            |           | (8 x      | 20 usec)  | (per mode  | e)²   | Phase <sup>3</sup> | 6 kV, 5 | 00 Amp ( | 8 x 20 us      | sec)4 |
| Intermatic | MCOV1     |           |           |            |       |                    |         |          |                |       |
| Model      | L-G       | L-N       | L-G       | N-G        | L-L   |                    | L-N     | L-G      | N-G            | L-L   |
| IG1201LH 1 | 20 VAC S  | ingle Ph  | ase       |            |       |                    |         |          |                |       |
|            | 115%      | 13 kA     | 13 kA     | 13 kA      |       | 26 kA              | 500 V   | 500 V    | 400 V          | _     |
| IG2401LH 1 | 20/240 V  | AC Single | e Phase ( | split)     |       |                    |         |          |                |       |
|            | 115%      | 13 kA     | 13 kA     | 13 kA      | 13 kA | 26 kA              | 400 V   | 500 V    | 400 V          | 700 V |
| IG2083LYH  | 120/208 \ | AC Thre   | e Phase   | Wye        |       |                    |         |          |                |       |
|            | 115%      | 13 kA     | 13 kA     | 13 kA      | 13 kA | 26 kA              | 500 V   | 500 V    | 400 V          | 700 V |
| IG2403LDH  | 120/240   | VAC Thre  | e Phase   | High Leg   | Delta |                    |         |          |                |       |
|            | 115%      | 13 kA     | 13 kA     | 13 kA      | 13 kA | 26 kA              | 500 V / | 500 V /  | 500 V          | 700 V |
|            |           |           |           |            |       |                    | (700 V) | (700 V)  |                |       |
| IG4803LYH  | 277/480 V | VAC Thre  | e Phase   | Wye        |       |                    |         |          |                |       |
|            | 115%      | 13 kA     | 13 kA     | 13 kA      | 13 kA | 26 kA              | 800 V   | 800 V    | 500 V          | 1,500 |
| V          |           |           |           |            |       |                    |         |          |                |       |
| IG4803LDH  | 480 VAC   | Three Ph  | nase Delt | a          |       |                    |         |          |                |       |
|            | 115%      | _         | 26 kA     | _          | 13 kA | 39 kA              | _       | 1,500 V  | _              | 1,500 |
| V          |           |           |           |            |       |                    |         |          |                |       |
|            |           |           |           |            |       |                    |         |          |                |       |

#### NOTES.



The LH Series is a hardwired suppression device (installed in parallel) and recommended for ANSI/IEEE Category locations for A and B.

#### **Dimensions:**

7.5"H x 4.25"W x 4.0"D

Weight: 5.5 lbs.





Flush Mount Plate IG1FMP-H



<sup>&</sup>lt;sup>1</sup> MCOV is Maximum Continuous Operating Voltage expressed in percentage of nominal voltage.

<sup>&</sup>lt;sup>2</sup> All surge currents listed above are independently tested and verified per NEMA LS-1.

<sup>&</sup>lt;sup>3</sup> Per Phase is defined as L-N + L-G for three phase 4-wire wye systems; L-G + L-L for three phase 3-wire delta systems.

<sup>&</sup>lt;sup>4</sup> Let-Through Voltage measured with 6 inch lead lengths per UL Standard 1449, 2nd Edition.





The PG1500 Series is a hardwired suppression device (installed in parallel) and recommended for all ANSI/IEEE Category locations.

#### **Dimensions:**

11.0"H x 5.875"W x 3.75"D

Weight: 22 lbs.



Flush Mount Plate PG2-FMP

## PG1500 Series

#### **Features**

- L-N, N-G protection modes (4 mode)
- Redundant protection per mode
- Integral 200 KAIC fusing and thermal protection
- Thermally protected MOVs for maximum safety
- Fault current tested to 200 KAIC
- EMI/RFI filtration Up to 54 dB from 20 kHz to 100 MHz
- cETLus Listed to UL1449, 2nd Edition
- NEMA 3R style enclosure
- Pre-wired with 30" of #10 AWG wire leads
- Available with flush mount cover PG2-FMP
- 10 year product warranty

#### **Integral Diagnostics**

- LED indicator lights for each mode
- Form C Contacts
- Audible alarm

|            |           |          | ge Curren<br>20 usec) ( | •         | •     | Per<br>Phase <sup>3</sup> | UL 1449 Clamping Voltage (SVR)<br>6 kV, 500 Amp (8 x 20 usec) <sup>4</sup> |         |       |             |  |
|------------|-----------|----------|-------------------------|-----------|-------|---------------------------|--|---------|-------|-------------|--|
| Intermatic | MCOV1     | (0.11    |                         |           | -,    |                           |  |         |       | <del></del> |  |
| Model      | L-N       | L-N      | L-G                     | N-G       | L-L   |                           | L-N  | L-G     | N-G   | L-L         |  |
| PG1500-240 | -2S 120/2 | 240 VAC  | Single Ph               | ase (spli | t)    |                           |  |         |       |             |  |
|            | 115%      | 80 kA    | _                       | 40 kA     | 80 kA | 80 kA                     | 330 V  | 700 V   | 400 V | 600 V       |  |
| PG1500-208 | -3Y 120/2 | 208 VAC  | Three Pha               | se Wye    |       |                           |  |         |       |             |  |
|            | 115%      | 80 kA    | _                       | 40 kA     | 80 kA | 80 kA                     | 330 V  | 700 V   | 400 V | 600 V       |  |
| PG1500-480 | -3Y 277/4 | 180 VAC  | Three Pha               | se Wye    |       |                           |  |         |       |             |  |
|            | 115%      | 80 kA    | _                       | 40 kA     | 80 kA | 80 kA                     | 800 V  | 1,500 V | 800 V | 1,500       |  |
| V          |           |          |                         |           |       |                           |  |         |       |             |  |
| PG1500-480 | -3D 480 \ | /AC Thre | e Phase                 | Delta     |       |                           |  |         |       |             |  |
|            | 115%      | _        | 80 kA                   | _         | 80 kA | 160 kA                    | _  | 1,200 V | _     | 1,200       |  |
| V          |           |          |                         |           |       |                           |  |         |       |             |  |

#### NOTES

- MCOV is Maximum Continuous Operating Voltage expressed in percentage of nominal voltage.
- <sup>2</sup> All surge currents listed above are independently tested and verified per NEMA LS-1.
- <sup>3</sup> Per Phase is defined as L-N + L-G for three phase 4-wire wye systems; L-G + L-L for three phase 3-wire delta systems.
- <sup>4</sup> Let-Through Voltage measured with 6 inch lead lengths per UL Standard 1449, 2nd Edition.



## PG1000 Series

#### Features

- L-N, N-G protection modes (4 mode)
- Redundant protection per mode
- Integral 200 KAIC fusing and thermal protection
- Thermally protected MOVs for maximum safety
- Fault current tested to 200 KAIC
- EMI/RFI filtration Up to 54 dB from 20 kHz to 100 MHz
- cETLus Listed to UL1449, 2nd Edition
- NEMA 3R style enclosure
- Pre-wired with 30" of #10 AWG wire leads
- · Available with flush mount cover PG2-FMP
- 10 year product warranty

#### Integral Diagnostics

- LED indicator lights for each mode
- Form C Contacts
- Audible alarm

|            |           | Surge Current Capacity<br>(8 x 20 usec) (per mode) <sup>2</sup> |          |            |  | Per<br>Phase <sup>3</sup> | UL 1449 Clamping Voltage (SVR)<br>6 kV, 500 Amp (8 x 20 usec) <sup>4</sup> |         |       |       |  |
|------------|-----------|---|----------|------------|--|---------------------------|--|---------|-------|-------|--|
| Intermatic | MCOV1     |   |          | <u>u</u>   | <u>,                                      </u> |                           |  |         |       |       |  |
| Model      | L-N       | L-N   | L-G      | N-G        | L-L  |                           | L-N  | L-G     | N-G   | L-L   |  |
| PG1000-240 | -2S 120/  | 240 VAC   | Single P | hase (spli | t)   |                           |  |         |       |       |  |
|            | 115%      | 40 kA   | _        | 40 kA      | 40 kA  | 40 kA                     | 330 V  | 700 V   | 400 V | 600 V |  |
| PG1000-208 | -3Y 120/  | 208 VAC   | Three Ph | ase Wye    |  |                           |  |         |       |       |  |
|            | 115%      | 40 kA   | _        | 40 kA      | 40 kA  | 40 kA                     | 330 V  | 700 V   | 400 V | 600 V |  |
| PG1000-480 | -3Y 277/  | 480 VAC   | Three Ph | ase Wye    |  |                           |  |         |       |       |  |
|            | 115%      | 40 kA   | _        | 40 kA      | 40 kA  | 40 kA                     | 800 V  | 1,500 V | 800 V | 1,500 |  |
| V          |           |   |          |            |  |                           |  |         |       |       |  |
| PG1000-480 | -3D 480 V | VAC Thre  | e Phase  | Delta      |  |                           |  |         |       |       |  |
| V          | 115%      | _   | 40 kA    | _          | 40 kA  | 80 kA                     | _  | 1,200 V | _     | 1,200 |  |

#### NOTES:

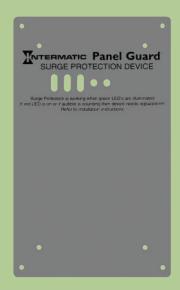


The PG1000 Series is a hardwired suppression device (installed in parallel) and recommended for all ANSI/IEEE Category locations.

#### **Dimensions:**

11.0"H x 5.875"W x 3.75"D

Weight: 22 lbs.



Flush Mount Plate PG2-FMP



<sup>&</sup>lt;sup>1</sup> MCOV is Maximum Continuous Operating Voltage expressed in percentage of nominal voltage.

<sup>&</sup>lt;sup>2</sup> All surge currents listed above are independently tested and verified per NEMA LS-1.

<sup>&</sup>lt;sup>3</sup> Per Phase is defined as L-N + L-G for three phase 4-wire wye systems; L-G + L-L for three phase 3-wire delta systems.

<sup>&</sup>lt;sup>4</sup> Let-Through Voltage measured with 6 inch lead lengths per UL Standard 1449, 2nd Edition.



# **Modular Protection System**





Ine SG32U Series is a modular hardwired suppression device and recommended for all ANSI/IEEE Category locations. Contains one bolt-on module per phase for easy maintenance.

Dimensions: 16"H x 14"W x 6"D

Weight: 29 lbs.

#### REPLACEMENT MODULE INFORMATION

| System Number:  | Quantity & Part Number |
|-----------------|------------------------|
| SG320K-208-3Y   | (3) SG160-120V-M       |
| SG320K-240-3HLD | (2) SG160-120V-M       |
|                 | (1) SG160-240V-M       |
| SG320K-480-34   | (3) SG160-277V-M       |
| SG320K-480-3D   | (3) SG160-480V-M       |

## SG320 Series

#### Features

- All mode Protection (L-N, L-G, N-G, L-L)
- Fault Current Tested to 100 KAIC
- EMI/RFI Filtration Up to 50 dB from 20 kHz to 100 MHz
- Replaceable Modules for low MTTR
- NEMA 12 Enclosure

- 40 kA Brute Force MOVs
- Redundant Protection per mode
- Thermally Protected MOVs for maximum safety
- cETLus Listed to UL1449, 2nd Edition
- 5 year product warranty

#### Installation:

• Recommended installation is with 30-100 Amp breaker

#### **Integral Diagnostics**

- LED Indicator Lights
- Form C Contacts

- Audible Alarm
- Digital Surge Counter

|            |          | •        | ge Current<br>20 usec) ( |          |   | Per<br>Phase <sup>2</sup> | 3rd Edition<br>UL 1449 Clamping Voltage (SVR)<br>6 kV, 3,000 Amp (8 x 20 usec) <sup>3</sup> |          |         |       |  |
|------------|----------|----------|--------------------------|----------|---|---------------------------|---|----------|---------|-------|--|
| Intermatic | MCOV1    | •        |                          | •        | <u>,                                     </u> |                           |   |          |         |       |  |
| Model      | L-G      | L-N      | L-G                      | N-G      | L-L   |                           | L-N   | L-G      | N-G     | L-L   |  |
| SG320K-208 | -3Y 120/ | 208 VAC  | Three Pha                | se Wye   |   |                           |   |          |         |       |  |
|            | 115%     | 150 kA   | 150 kA                   | 100 kA   | 150 kA  | 300 kA                    | 600 V   | 600 V    | 600 V   | 1,200 |  |
| V          |          |          |                          |          |   |                           |   |          |         |       |  |
| SG320K-240 | -3HLD 12 | 0/240 VA | C Three P                | hase Hig | h Leg D                                       | elta                      |   |          |         |       |  |
|            | 115%     | 150 kA   | 150 kA                   | 100 kA   | 150 kA  | 300 kA                    | 600 V /   | 600 V /  | 600 V   | 2,000 |  |
| V          |          |          |                          |          |   |                           |   |          |         |       |  |
|            |          |          |                          |          |   |                           | (1,000 V)   | (1,000 V | )       |       |  |
| SG320K-480 | -3Y 277/ | 480 VAC  | Three Pha                | ase Wye  |   |                           |   |          |         |       |  |
|            | 115%     | 150 kA   | 150 kA                   | 100 kA   | 150 kA  | 300 kA                    | 1,000 V   | 1,000 V  | 1,000 V | 2,000 |  |
| V          |          |          |                          |          |   |                           |   |          |         |       |  |
| SG320K-480 | -3D 480  | VAC Thre | e Phase                  | Delta    |   |                           |   |          |         |       |  |
|            | 115%     | _        | 150 kA                   | _        | 150 kA  | 300 kA                    | _   | 1,500 V  | _       | 3,000 |  |
| V          |          |          |                          |          |   |                           |   |          |         |       |  |

NOTES:

<sup>&</sup>lt;sup>1</sup> MCOV is Maximum Continuous Operating Voltage expressed in percent of nominal voltage.

 $<sup>^2</sup>$  Per Phase is defined as L-N + L-G for three phase 4-wire wye systems; L-G + L-L for three phase 3-wire delta systems.

# **Modular Protection System**



## SG240 Series

#### Features

- All mode Protection (L-N, L-G, N-G, L-L)
- Fault Current Tested to 100 KAIC
- EMI/RFI Filtration Up to 50 dB from 20 kHz to 100 MHz
- Replaceable Modules for low MTTR
- NEMA 12 Enclosure

#### Installation:

• Recommended installation is with 30-100 Amp breaker

## Integral Diagnostics

- LED Indicator Lights
- Form C Contacts

- 40 kA Brute Force MOVs
- Redundant Protection per mode
- Thermally Protected MOVs for maximum safety

**3rd Edition** 

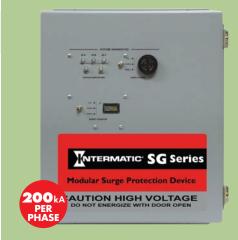
- cETLus Listed to UL1449, 2nd Edition
- 5 year product warranty

• Audible Alarm

• Digital Surge Counter

|            |          | Surge Current Capacity<br>(8 x 20 usec) (per mode) |           |          |         | Per<br>Phase <sup>2</sup> | UL 1449 Clamping Voltage (SVR)<br>6 kV, 3,000 Amp (8 x 20 usec) <sup>3</sup> |          |         |       |  |
|------------|----------|--|-----------|----------|---------|---------------------------|--|----------|---------|-------|--|
| Intermatic | MCOV1    |  |           |          |         |                           |  |          |         |       |  |
| Model      | L-G      | L-N  | L-G       | N-G      | L-L     |                           | L-N  | L-G      | N-G     | L-L   |  |
| SG240K-208 | -3Y 120/ | 208 VAC  | Three Pha | ase Wye  |         |                           |  |          |         |       |  |
|            | 115%     | 100 kA   | 100 kA    | 100 kA   | 100 kA  | 200 kA                    | 600 V  | 600 V    | 600 V   | 1,200 |  |
| V          |          |  |           |          |         |                           |  |          |         |       |  |
| SG240K-240 | -3HLD 12 | 0/240 VA   | C Three P | hase Hig | h Leg D | elta                      |  |          |         |       |  |
|            | 115%     | 100 kA   | 100 kA    | 100 kA   | 100 kA  | 200 kA                    | 600 V /  | 600 V /  | 600 V   | 2,000 |  |
| V          |          |  |           |          |         |                           |  |          |         |       |  |
|            |          |  |           |          |         |                           | (1,000 V   | (1,000 V | )       |       |  |
| SG240K-480 | -3Y 277/ | 480 VAC  | Three Pha | ase Wye  |         |                           |  |          |         |       |  |
|            | 115%     | 100 kA   | 100 kA    | 100 kA   | 100 kA  | 200 kA                    | 1,000 V  | 1,000 V  | 1,000 V | 2,000 |  |
| V          |          |  |           |          |         |                           |  |          |         |       |  |
| SG240K-480 | -3D 480  | VAC Thre   | e Phase   | Delta    |         |                           |  |          |         |       |  |
|            | 115%     | _  | 100 kA    | _        | 100 kA  | 200 kA                    | _  | 1,500 V  | _       | 3,000 |  |
| V          |          |  |           |          |         |                           |  | •        |         | -     |  |

#### NOTES





The SG240 Series is a modular hardwired suppression device and recommended for all ANSI/IEEE Category locations. Contains one bolt-on module per phase for easy maintenance.

## **Dimensions:**

16"H x 14"W x 6"D

Weight: 28 lbs.

#### REPLACEMENT MODULE INFORMATION

| System Number:  | Quantity & Part Number |
|-----------------|------------------------|
| SG240K-208-3Y   | (3) SG120-120V-M       |
| SG240K-240-3HLD | (2) SG120-120V-M       |
|                 | (1) SG120-240V-M       |
| SG240K-480-34   | (3) SG120-277V-M       |
| SG240K-480-3D   | (3) SG120-480V-M       |



<sup>&</sup>lt;sup>1</sup> MCOV is Maximum Continuous Operating Voltage expressed in percent of nominal voltage.

<sup>&</sup>lt;sup>2</sup> Per Phase is defined as L-N + L-G for three phase 4-wire wye systems; L-G + L-L for three phase 3-wire delta systems.

<sup>&</sup>lt;sup>3</sup> Let-Through Voltage measured with 6 inch lead lengths per UL Standard 1449, 2nd Edition.



# **Modular Protection System**





The SG160 Series is a modular hardwired suppression device and recommended for all ANSI/IEEE Category locations. Contains one bolt-on module per phase for easy maintenance.

**Dimensions:** 16"H x 14"W x 6"D

Weight: 27 lbs.

#### REPLACEMENT MODULE INFORMATION

| System Number:  | Quantity & Part Number |
|-----------------|------------------------|
| SG160K-208-3Y   | (3) SG80-120V-M        |
| SG160K-240-3HLD | (2) SG80-120V-M        |
|                 | (1) SG80-240V-M        |
| SG160K-480-34   | (3) SG80-277V-M        |
| SG160K-480-3D   | (3) SG80-480V-M        |

## SG160 Series

#### Features

- All mode Protection (L-N, L-G, N-G, L-L)
- Fault Current Tested to 100 KAIC
- EMI/RFI Filtration Up to 50 dB from 20 kHz to 100 MHz
- Replaceable Modules for low MTTR
- NEMA 12 Enclosure

- 40 kA Brute Force MOVs
- Redundant Protection per mode
- Thermally Protected MOVs for maximum safety
- cETLus Listed to UL1449, 2nd Edition
- 5 year product warranty

#### Installation:

• Recommended installation is with 30-100 Amp breaker

#### **Integral Diagnostics**

- LED Indicator Lights
- Form C Contacts

- Audible Alarm
- Digital Surge Counter

|            |           | Sur                      | ge Curren | t Capacity | /      | Per                | UL 1449                                  | Clamping   | Voltage | (SVR) |  |
|------------|-----------|--------------------------|-----------|------------|--------|--------------------|--|------------|---------|-------|--|
|            |           | (8 x 20 usec) (per mode) |           |            |        | Phase <sup>2</sup> | 6 kV, 500 Amp (8 x 20 usec) <sup>3</sup> |            |         |       |  |
| Intermatic | MCOV1     |                          |           |            |        |                    |  |            |         |       |  |
| Model      | L-G       | L-N                      | L-G       | N-G        | L-L    |                    | L-N                                      | L-G        | N-G     | L-L   |  |
| SG160K-208 | 3-3Y 120/ | 208 VAC                  | Three Ph  | ase Wye    |        |                    |  |            |         |       |  |
|            | 115%      | 50 kA                    | 50 kA     | 100 kA     | 50 kA  | 100 kA             | 600 V                                    | 600 V      | 600 V   | 1,200 |  |
| V          |           |                          |           |            |        |                    |  |            |         |       |  |
| SG160K-240 | -3HLD 12  | 0/240 VA                 | C Three I | Phase Hig  | jh Leg | Delta              |  |            |         |       |  |
|            | 115%      | 50 kA                    | 50 kA     | 100 kA     | 50 kA  | 100 kA             | 600 V /                                  | 600 V /    | 600 V   | 1,200 |  |
| V          |           |                          |           |            |        |                    |  |            |         |       |  |
|            |           |                          |           |            |        |                    | (1,000 V                                 | ) (1,000 V | )       |       |  |
| SG160K-480 | -3Y 277/  | 480 VAC                  | Three Ph  | ase Wye    |        |                    |  |            |         |       |  |
|            | 115%      | 50 kA                    | 50 kA     | 100 kA     | 50 kA  | 100 kA             | 1,000 V                                  | 1,000 V    | 1,000 \ | 2,000 |  |
| V          |           |                          |           |            |        |                    |  |            |         |       |  |
| SG160K-480 | -3D 480   | VAC Thr                  | ee Phase  | Delta      |        |                    |  |            |         |       |  |
|            | 115%      | _                        | 50 kA     | _          | 50 kA  | 100 kA             | _  | 1,500 V    | _       | 3,000 |  |
| V          |           |                          |           |            |        |                    |  |            |         |       |  |
|            |           |                          |           |            |        |                    |  |            |         |       |  |

#### NOTES

<sup>&</sup>lt;sup>1</sup> MCOV is Maximum Continuous Operating Voltage expressed in percent of nominal voltage.

<sup>&</sup>lt;sup>2</sup> Per Phase is defined as L-N + L-G for three phase 4-wire wye systems; L-G + L-L for three phase 3-wire delta systems.

<sup>&</sup>lt;sup>3</sup> Let-Through Voltage measured with 6 inch lead lengths per UL Standard 1449, 2nd Edition.

# **Industrial Point-of-Use Protection**



## F20 Series

#### Features

- All mode Protection
- Thermally Protected MOVs for maximum safety
- cETLus Listed to UL1449, 2nd Edition
- NEMA 4 Enclosure
- EMI/RFI Filtration 26 to 39 dB
- 5 year product warranty

#### Integral Diagnostics

- LED Indicator Lights
- . Intermatic Thermal Monitoring System
- Form C Contacts

| Surge Current Capacity   | UL 1449 Clamping Voltage (SVR)           |
|--------------------------|--|
| (8 x 20 usec) (per mode) | 6 kV, 500 Amp (8 x 20 usec) <sup>3</sup> |
| MCOV1                    | Per                                      |

| Intermatic | MCOV1                      |           |       |       |       | Per                |       |       |       |       |  |  |
|------------|----------------------------|-----------|-------|-------|-------|--------------------|-------|-------|-------|-------|--|--|
| Model      | L-G                        | L-N       | L-G   | N-G   | L-L   | Phase <sup>2</sup> | L-N   | L-G   | N-G   | L-L   |  |  |
| IG1201F20  | 120 VAC                    | Single Ph | iase  |       |       |                    |       |       |       |       |  |  |
|            | 115%                       | 16 kA     | 16 kA | 16 kA | _     | 32 kA              | 500 V | 500 V | 500 V | _     |  |  |
| IG2401F20  | 01F20 240 VAC Single Phase |           |       |       |       |                    |       |       |       |       |  |  |
|            | 115%                       | _         | 32 kA | _     | 16 kA | 48 kA              | _     | 700 V | _     | 700 V |  |  |

#### NOTES

Good while quantities last in stock. To be obsoleted in 2008.



The F20 Series is a hardwired in line suppression device for protection of loads up to 20 Amps including fire alarm circuits, industrial controls, PLC's and any other sensitive electronic equipment.

#### **Dimensions:**

4.54"H x 3.5"W x 2.2"D

Weight: 2.5 lbs.



**Din Rail Adapter Kit IG1DIN-F20** 

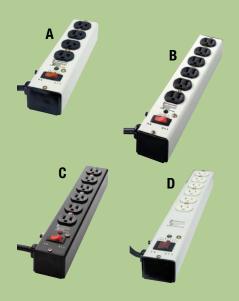
<sup>&</sup>lt;sup>1</sup> MCOV is Maximum Continuous Operating Voltage expressed in percent of nominal voltage.

 $<sup>^2</sup>$  Per Phase is defined as L-N + L-G for three phase 4-wire wye systems; L-G + L-L for three phase 3-wire delta systems.

<sup>&</sup>lt;sup>3</sup> Let-Through Voltage measured with 6 inch lead lengths per UL Standard 1449, 2nd Edition.



# **Industrial Point-of-Use Protection**







#### **Features**

- · Designed for heavy industrial use
- 3-mode Surge Protection (L-N, L-G, N-G)
- UL1449, 2nd Edition, cULus
- EMI/RFI noise filtration

#### A. IG11246 (1)

- 4-outlets
- 6 ft. cord
- Lighted On/Off switch

#### B. IG11266 🕮

- 6-outlets
- 6 ft. cord
- Lighted On/Off switch

#### C. IG11266BLK10

- Black
- 6-outlets
- 10 ft. cord
- · Lighted On/Off switch

#### D. IG2066 & IG20615

- 6 specification-grade outlets
- Master On/Off switch
- Enhanced EMI/RFI noise filtration, UL1283
- 6 ft. cord (IG2066); 15 ft. cord (IG20615)

See chart on page 143 for UL1449 ratings and EMI/RFI filtration.

## **Computer Control Centers**

#### Features

- · 6 centralized switches
- One unswitched receptacle
- Metal housing
- · Static discharge pad
- 15 Amp, resettable circuit breaker

## G. IG141 🚇

Standard model

## H. IG143 🖭

- Enhanced EMI/RFI noise attenuation
- · Dual choke design for lower clamping

- 14 gauge SJT power cord with molded plug
- Protection monitoring circuitry with LED light indicator
- 15 amp resettable breaker
- · Ivory metal housing

### E. IG20B12 & IG2012B15

- 6 specification-grade outlets
- Master On/Off switch
- Enhanced EMI/RFI noise filtration, UL1283
- 6 ft. cord (IG20B12); 15 ft. cord (IG2012B15)

#### F. IG2086



- 8 specification-grade outlets
- · Master On/Off switch
- Enhanced EMI/RFI noise filtration, UL1283
- 6 ft. cord

- 9 ft., 14 gauge power cord
- LED Indicator Light monitors power on & protection status
- L-N, L-G and N-G surge protection
- cULus
- UL1449, 2nd Edition

# **Industrial Point-of-Use Protection**



# Mounting Bracket & Plate

#### O. 24EG5133

• Secures mounting bracket for all IG strips in extruded aluminum alloy housing (See models on chart with \*)

#### **Product Selection Chart - Point of Use Models**

|                  |           |        |            | Energy | Capacity |             | UL1449<br>Clamping | EMI-RFI Noise<br>Filtration |        |       |
|------------------|-----------|--------|------------|--------|----------|-------------|--------------------|-----------------------------|--------|-------|
|                  | Number    |        |            | Max.   | Max.     | Connected   | Voltage (SVR)      |                             |        | Prod. |
| Intermatic       | of        | Cord   | Electrical | Joule. | Surge.   | Equipment   | 6 kV, 500A         | Frequency                   | Max.   | Warr. |
| Model            | Outlets   | Length | Rating     | Rating | Amperage | \$ Coverage | (8 x 20 µ sec)     | Range (Hz)                  | Reduc. | (yrs) |
| Industrial Grade | ,         |        |            |        |          |             | L-N/L-G/N-G        |                             |        |       |
| IG11246*         | 4         | 6      | 120 V/15 A | 480    | 24,000 A | \$10,000    | 400/400/400        | 100k-20M                    | 25dB   | 5     |
| IG11266*         | 6         | 6      | 120 V/15 A | 480    | 24,000 A | \$10,000    | 400/400/400        | 100k-20M                    | 25dB   | 5     |
| IG11266BLK10*    | 6         | 10     | 120 V/15 A | 480    | 24,000 A | \$10,000    | 400/400/400        | 100k-20M                    | 25dB   | 5     |
| IG2066*          | 6         | 6      | 120 V/15 A | 960    | 48,000 A | \$25,000    | 330/330/330        | 100k-100M                   | 62dB   | 5     |
| IG20615*         | 6         | 15     | 120 V/15 A | 960    | 48,000 A | \$25,000    | 330/330/330        | 100k-100M                   | 62dB   | 5     |
| IG20B12*         | 6         | 6      | 120 V/15 A | 480    | 24,000 A | \$ 5,000    | 400/400/400        | 100k-20M                    | 25dB   | 5     |
| IG2012B15*       | 6         | 15     | 120 V/15 A | 480    | 24,000 A | \$ 5,000    | 400/400/400        | 100k-20M                    | 25dB   | 5     |
| IG2086*          | 8         | 6      | 120 V/15 A | 960    | 48,000 A | \$25,000    | 330/330/330        | 100k-100M                   | 62dB   | 5     |
| Computer Contr   | ol Center | s      |            |        |          |             |                    |                             |        |       |
| IG141            | 6         | 9      | 120 V/15 A | 480    | 24,000 A | \$10,000    | 400/400/400        | 100k-20M                    | 25dB   | 5     |
| IG143            | 6         | 9      | 120 V/15 A | 960    | 48,000 A | \$25,000    | 330/330/330        | 100k-100M                   | 62dB   | 5     |



NOTE: Cord lengths can be modified up to 25 feet. Consult Factory for pricing and availability.





# **Residential Hardwired Protection**













Flush Mount Plates IG1240FMP3

**IG3240FMP3** 

## **IG Series**

#### **Features**

- · Hardwired models provide greater capacity to handle surge energy (based on their close location to the service ground) compared to standard plug-in strips
- Designed for 120/240 volt single or (split-phase) panels
- Dual LED indicator(s) provides surge protection status on AC

#### A. IG1300-2T-1C

- 120/240 VAC Single (Split) Phase
- 6 Modes of Surge Protection (L1-N, L2-N, L1-G, L2-G, N-G, L1-L2)
- Provides protection for 2 Telephone Lines (Analog Phone Line, Modem, or DSL) and 1 Coax Line (Cable TV, Cable Internet or Satellite TV)
- cCSAus Listed to UL1449, 2nd Edition
- NEMA 3R Raintight Enclosure for indoor or outdoor installations (9.38"H x 5.25"W x 4.0"D)
- Tested to 65 kAIC per NEC Section 285
- 5 Year Product Warranty
- \$10,000 Connected Equipment Coverage

#### B. IG1300-4T-2C

- 120/240 VAC Single (Split) Phase
- 6 Modes of Surge Protection (L1-N, L2-N, L1-G, L2-G, N-G, L1-L2)
- Provides protection for 4 Telephone Lines (Analog Phone Line, Modem, or DSL) and 2 Coax Lines (Cable TV, Cable Internet or Satellite TV)
- cCSAus Listed to UL1449, 2nd Edition
- NEMA 3R Raintight Enclosure for indoor or outdoor installations (9.38"H x 5.25"W x 4.0"D)
- Tested to 65 kAIC per NEC Section 285
- 5 Year Product Warranty
- \$10,000 Connected Equipment Warranty (Appliances and Electronics) [5 year]

#### C. IG1240RC

- 120/240 VAC Single (Split) phase
- 6 Modes of Surge Protection (L1-N, L2-N, L1-G, L2-G, N-G, L1-L2)
- Green LED indicator provides status of protection; Red LED indicator indicates reduced protection
- Plastic housing (5.65"H x 4.18"W x 3.33"D)
- · 5 year product warranty
- UL Listed UL1449, 2nd edition, cULus
- Tested to 65 kAIC per NEC Section 285
- \$10,000 Connected Equipment Coverage (Appliances and Electronics) [5 year]

#### IG1240FMP3

• Includes faceplate, screws and mounting bracket for IG1240RC

#### D. IG3240RC

- 120/240 VAC Single (Split) phase
- 6 Modes of Surge Protection (L1-N, L2-N, L1-G, L2-G, N-G, L1-L2)
- Green LED indicator provides status of protection; Red LED indicator indicates reduced protection
- Metal housing (6.28"H x 4.4"W x 3.25"D)
- 10 year product warranty
- UL Listed UL1449, 2nd edition, cULus
- Tested to 65 kAIC per NEC Section 285
- \$25,000 Connected Equipment Coverage (Appliances and Electronics) [5 year]

#### IG3240FMP3

Includes faceplate, screws and mounting bracket for IG3240RC







# **Residential Hardwired Protection**



## **IG Series (continued)**

| Intermatic<br>Model | Service<br>Voltage | Phase | _ | eads<br>Length | Gauge | Wire<br>Config. | Peak Surge<br>Current<br>Per Phase/<br>System | UL 1449 Clamping<br>Voltage (SVR)<br>6 kV, 500 Amp<br>(8 x 20 µ sec)<br>L-N L-G N-G L-L |
|---------------------|--------------------|-------|---|----------------|-------|-----------------|---|---|
| IG1300-2T-1C        | 120/240            | 2     | 4 | 24             | 14    | L1, L2, N, GND  | 20 kA/60 kA                                   | 500 500 500 700   |
| IG1300-4T-2C        | 120/240            | 2     | 4 | 24             | 14    | L1, L2, N, GND  | 20 kA/60 kA                                   | 500 500 500 700   |
| IG1240RC            | 120/240            | 2     | 4 | 30             | 14    | L1, L2, N, GND  | 20 kA/60 kA                                   | 400 400 400 700   |
| IG3240RC            | 120/240            | 2     | 4 | 30             | 14    | L1, L2, N, GND  | 60 kA/180 kA                                  | 400 400 400 600   |

# Stand Alone Telephone / Modem / DSL Internet Lines

#### E. IG2TM

- Provides protection for 2 lines
- Tip to Ground, Tip to Ring and Ring to Ground Modes
- 40 kA surge protection per line
- Gas Tube Protection 350 Volt DC Breakdown
- UL497A
- Nema 1 Type Enclosure

|                     |                 |         |             | DC                 |           |             |  |
|---------------------|-----------------|---------|-------------|--------------------|-----------|-------------|--|
|                     |                 |         |             |                    | Breakdown |             |  |
| <b>Model Number</b> | Application     | Lines   | Gauge       | Wire Configuration | Voltage   | Application |  |
| IG2TM               | phone/modem/DSL | up to 2 | #24-#16 AWG | 4 wire             | 350 Vdc   | Indoor      |  |

#### F. IG4TM

- Protection same as IG2TM
- Protects 4 Lines

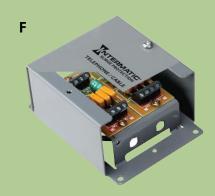
|              |                 |         |             | Breakdown          |         |             |  |
|--------------|-----------------|---------|-------------|--------------------|---------|-------------|--|
| Model Number | Application     | Lines   | Gauge       | Wire Configuration | Voltage | Application |  |
| IG4TM        | phone/modem/DSL | up to 4 | #24-#16 AWG | 8 wire             | 350 Vdc | Indoor      |  |

#### G. IG2T3R

- Protection same as IG2TM
- Provides protection for 2 lines (expandable to 12 Lines)
- Nema 3R Type Enclosure

| 21           |                 |            |             |                        | DC<br>Breakdow | n              |
|--------------|-----------------|------------|-------------|------------------------|----------------|----------------|
| Model Number | Application     | Lines      | Gauge       | Wire Configuration     | Voltage        | Application    |
| IG2T3R       | phone/modem/DSL | 2 standard | #24-#16 AWG | 4 wire (up to 24 wire) | 350 Vdc        | Indoor/Outdoor |
|              |                 | (up to 12) |             |                        |                |                |











# **Residential Hardwired Protection**



















# Stand Alone Local Antenna/Cable - Satellite/Cable Internet Protection

#### H. IG1CM

- Provides Protection for 1 Line (Expandable to 2 Lines)
- 10 kA surge protection per line
- Gas Tube Protection 90 Volt DC Breakdown

|              |                             |       |             | DC<br>Breakdown |             |
|--------------|-----------------------------|-------|-------------|-----------------|-------------|
| Model Number | Application                 | Lines | Thread Type | Voltage         | Application |
| IG1CM        | Cable TV/internet/satellite | 1     | F           | 90 Vdc          | Indoor      |

#### I. IG1C3R

- Protection same as IG1CM
- Provides Protection for 1 Line (Expandable to up to 6 Coax Lines)
- Nema 3R Type Enclosure

|                     |                             |                      |             | Breakdown |                |
|---------------------|-----------------------------|----------------------|-------------|-----------|----------------|
| <b>Model Number</b> | Application                 | Lines                | Thread Type | Voltage   | Application    |
| IG1C3R              | Cable TV/internet/satellite | 1 Standard (up to 6) | F           | 90 Vdc    | Indoor/Outdoor |

#### J. IG2T

• Spare Telephone / Modem / DSL Internet Protection Module

| Model Number | Lines | For Use In:                                |  |
|--------------|-------|--|--|
| IG2T Spare   | 2     | IG2TM, IG1CM, IG2T3R, IG1C3R, IG1300-2T-1C |  |

#### K. IG1C

• Spare Coax Cable Protection Module

| Model Number | Lines | For Use In:                         |
|--------------|-------|-------------------------------------|
| IG1C Spare   | 1     | IG1CM, IG1C3R, IG2TM, IG4TM, IG2T3R |

#### L. IGFlush Mount Kit

• Flush mount kit for IG2TM, IG4TM, and IG1CM

| Model Number       | For Use In:         |  |
|--------------------|---------------------|--|
| IG Flush Mount Kit | IG2TM, IG4TM, IG1CM |  |

# **Surge Arresters**



#### Features:

- · Designed for outdoor installations on service entrance and utility meter cabinets
- · Approved for outdoor applications such as irrigation equipment, pumps, lighting fixtures, traffic signaling devices, farm equipment, HVAC controls and motors
- Parallel metal oxide varistors (MOV) from each line to grounded neutral provide increased product capability
- Molded polycarbonate housing with 1/2" x 20 threaded nipple is weatherproof and UV resistant
- Epoxy encapsulation protects components from moisture, dirt and corrosion
- · Color coded 18" leads
- UL listed as a secondary surge arrester, ANSI/IEEE C62.11 for Category "C" locations "OWHX"
- · 2 year product warranty

## A. AG2401C | (1) | (1) | (1) | (2) | (3) |

- 120/240 single phase, 2 pole 3 wire device
- 18" 14 gauge leads

#### B. AG2083C

- 120/208 VAC, 3 pole 4 wire device
- 18" 12 gauge leads

## C. AG2403C

- 240 VAC, 3 pole 4 wire device
- 18" 12 gauge leads

#### D. AG4803C

- 277/480 VAC or 480 VAC, 3 pole 4 wire device
- 18" 12 gauge leads

## E. AG6503C & AG6503L 🚇 📵





- Up to 600 V three phase, 3 pole 4 wire device
- 18" 12 gauge leads (AG6503); 36" 10 gauge leads (AG6503L)

## F. AG4801 🕮

- 277/480 VAC single phase, 2 pole 3 wire device
- 18" 10 gauge leads
- 18" 6 gauge green ground lead

#### G. AG2401C-IND

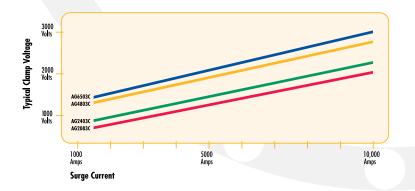
- 120/240 single phase, 2 pole 3 wire device
- 18" 14 gauge leads

## H. AG6503C-IND

- Up to 600 V three phase, 3 pole 4 wire device
- 18" 12 gauge leads

|              |                       |        | Number of Leads/ | Wire              | Actual (         | Actual Clamping Voltage |        |  |  |
|--------------|-----------------------|--------|------------------|-------------------|------------------|-------------------------|--------|--|--|
| Model        | Model Service Voltage |        | Length           | Configuration     | (Line to Ground) |                         |        |  |  |
| Standard (No | o LED's)              |        |                  |                   | 1500A            | 5000A                   | 10000A |  |  |
| AG2401C      | 120/240V              | 1 or 2 | 3/18"            | L1, L2, GND/N     | 490              | 980                     | 1410   |  |  |
| AG2083C      | 208V                  | 3      | 4/18"            | L1, L2, L3, GND/N | 490              | 980                     | 1410   |  |  |
| AG2403C      | 240V                  | 3      | 4/18"            | L1, L2, L3, GND/N | 740              | 1330                    | 1850   |  |  |
| AG4801       | 277V or 480V          | 1 or 2 | 3/18"            | L1, L2, GND       | 1450             | 2130                    | 2620   |  |  |
| AG4803C      | 480V                  | 3      | 4/18"            | L1, L2, L3, GND/N | 1450             | 2130                    | 2620   |  |  |
| AG6503C      | Up to 600V            | 3      | 4/18"            | L1, L2, L3, GND/N | 1640             | 2340                    | 2920   |  |  |
| AG6503L      | Up to 600V            | 3      | 4/36"            | L1, L2, L3, GND/N | 1640             | 2340                    | 2920   |  |  |
| Enhanced (w  | vith LED's)           |        |                  |                   |                  |                         |        |  |  |
| AG2401C-IND  | 120/240V              | 1 or 2 | 3/18"            | L1, L2, GND/N     | 490              | 980                     | 1410   |  |  |
| AG6503C-IND  | Up to 600V            | 3      | 4/18"            | L1, L2, L3, GND/N | 1640             | 2340                    | 2920   |  |  |
|              |                       |        |                  |                   |                  |                         |        |  |  |

Match the correct model to the voltage of your system/machine The chart below shows Typical Clamp Voltage for each model.







# **Surge Arresters**



# NTERMATIC

Surge Protection devices, with Connected Equipment Coverage, offer the user extended protection for sensitive equipment. In the unlikely event that a damaging transient surge passes through the surge device and damage occurs to the connected equipment, Intermatic will pay up to \$25,000 to repair or replace the equipment based on the specified model and coverage provided. Refer to the warranty document included with the product for specific coverage details and limitations.

## A. IG250LA 📵



- 120/240 V Surge Arrester for up to 600 Amp service
- · Designed for applications frequently subjected to high level surge energy
- Enclosure size (6.63"H x 3.75"W x 2.5"D)
- Epoxy encapsulation protects components from moisture, dirt and corrosion
- UL listed as a Secondary Surge Arrester (OWHX)
- LED indicator provides surge protection status
- 5 year product warranty

|         |         |       | Number |               | Peak Surge Current | Clamping  | Enclosure       |        |
|---------|---------|-------|--------|---------------|--------------------|-----------|-----------------|--------|
|         | Service |       | of 24" | Wire          | Per Phase/         | Voltage   | Size            | Weight |
| Model   | Voltage | Phase | Leads  | Configuration | Per System         | @500A     | (inches)        | Lbs    |
| IG250LA | 120/240 | 2     | 3      | L1, L2, N     | 48 kA/115 kA       | L-N: 555  | 6.0 x 3.5 x 3.0 | 2.4    |
|         |         |       |        |               |                    | L-L: 1028 |                 |        |

#### **Surge Protection Device Connected Equipment Coverage**

| Product Type                | Page # | Model Numbe | er           |              | Maximum Repair or<br>Replacement Coverage |
|-----------------------------|--------|-------------|--------------|--------------|---|
| Metal Multi-Outlet Strip    | 114    | IG2012B15   | IG20B12      |              | <b>\$55000</b>                            |
| Metal Multi-Outlet Strip    | 114    | IG11246     | IG11266      | IG11466      |   |
| Computer Control Center     | 114    | IG141       |              |              | TO SUBSTITUTE COLUMN                      |
| Residential Grade Protector | 116    | IG1240RC    | IG1300-2T-1C | IG1300-4T-2C | 10\$10 no                                 |
|                             | 117    | IG2TM       | IG4TM        | IG2T3R       | THE AUTO                                  |
|                             | 118    | IG1CM       | IG1C3R       |              |   |
| Metal Multi-Outlet Strip    | 114    | IG1866A     | IG2046       |              |   |
|                             | 114    | IG2066      | IG2086       |              | TION STATE FAIR                           |
| Computer Control Center     | 114    | IG143       |              |              | 76\$25000                                 |
| Residential Grade Protector | 116    | IG3240RC    |              |              | HRANT                                     |





# Entering a New Century of Energy Management and Home Security!

## **Indoor and Outdoor Timers**

Intermatic offers a wide variety of styles to meet today's application requirements.

Intermatic timers add convenience by turning lights ON when needed, and saves energy by turning lights OFF when not needed. They give homes a lived-in look providing an easy and economical way to improve home security.

Outdoor timers also let users control outside lights and holiday displays while staying comfortably inside.

## Wireless Home Lighting Control

Until now, the ability to reliably and cost efficiently control lighting and electronics and electrical devices in the home, using Radio Frequency, was extremely limited. Intermatic introduces a line of cost effective plug-in modules, in-wall receptacles and switches and easy-to-use controllers that allow fingertip control of multiple items in and around the house. Intermatic's Home Controls incorporate Z-Wave<sup>TM</sup> technology – the most advanced, low cost and highly efficient Radio Frequency based technology in the industry.

# Power Failure Lights & Photo Controls

Intermatic power failure lights have many practical applications in the home: in bedrooms, hallways, stairways, bathrooms, kitchens and more.

Photo controls are a simple solution to turning lights on when dark off when light.

## Do-it-Yourself Security Alarms

show that residential break-ins occur every 11 seconds.

Intermatic answers the demand for easy-toinstall, affordable security products with a full line of DIY portable security alarms that have superior features.

Intermatic Wireless Alarms provide economical home security. There are no monthly fees or setup charges. The wireless feature offers easy do-it-yourself installation at affordable prices.



Outdoor Digital Timers with light sensor to control outdoor lights & holiday displays



Heavy-Duty Digital 7-Day Wall Switch Timers to control fans, lights & appliances with "never set it again" feature



All purpose Heavy-Duty Lamp & Appliance Timers



24 Hr. Heavy-Duty Programmable Digital Timer for lamps, stereos, & appliances





# **Intermatic Home Controls**





Until now, the ability to reliably and cost efficiently control lighting and electronics and electrical devices in the home, using Radio Frequency, was extremely limited. Intermatic introduces a line of cost effective plug-in modules, in-wall receptacles and switches and easy-to-use controllers that allow fingertip control of multiple items in and around the house. Intermatic's Home Controls incorporate Z-Wave<sup>TM</sup> technology – the most advanced, low cost and highly efficient Radio Frequency based technology in the industry.

#### Innovative Features:

- All items wirelessly control Radio Frequency
- Easy DIY installation
- All products use unique Z-Wave<sup>™</sup> technology
- Two-way feedback lets you know if the system is properly set up and if the system is working properly
- The cost for this highly reliable system is priced much less than comparable systems that require contractor installation
- · All modules and in-wall products can be set for timing control
- Each module includes a "repeater" function, for unmatched reliability
- Controllers can control up to 192 devices and can create "scenes" to create the light level look wanted

#### A. HA01C Wall Receptacle

- Replaces standard wall receptacles
- · One receptacle is controlled
- LED shows feedback from controller during setup and that the controlled device is working
- · Use with decorator wall plate (not included)

#### Specifications:

- For indoor use only
- 15 Amps Resistive
- 8.3 Amps Tungsten
- 120VAC, 60 Hz
- Temperature operating range: 0°C to 60°C

#### B. HA02C Plug-In Appliance Module

- Controls appliances up to 15 Amps and lighting (including compact fluorescent bulbs)
- · Heavy-duty 3 prong plug and receptacle
- Manual override
- LED shows feedback from controller during setup and that the controlled device is working

#### Specifications:

- For indoor use only
- 15 Amps Resistive
- 1200 W Inductive
- 1/2 HP
- 8.3 Amps Tungsten
- 120VAC, 60 Hz
- Temperature operating range: 0°C to 60°C

#### C. HA03C Plug-In Indoor Lamp Module

- Controls ON/OFF/DIM for incandescent lamps
- Manual override
- LED shows feedback from controller during setup and that the controlled device is working

#### Specifications:

- For indoor use only 300 Watts
- 120VAC, 60 Hz
- Temperature operating range: 0°C to 60°C

#### D. HA04C Outdoor Lighting Module

- · Controls ON/OFF outdoor devices
- Weather resistant
- 6" cord
- Manual override
- LED shows feedback from controller during setup and that the controlled device is working

#### Specifications:

- 15 Amp Resistive
- 1/2 HP
- 1200 W Inductive
- 8.3 Amp Tungsten
- 120 VAC, 60 Hz
- Temperature operating range: -35°C to 60°C











# **Intermatic Home Controls**





#### E. HA05C Outdoor Lamp Screw-In Module

- For incandescent and PAR lamps
- · Fits most outdoor fixtures
- ON/OFF functions
- · Manual override
- LED shows feedback from controller during setup and that the controlled device is working

#### Specifications:

- 300 W Tungsten, 42 W compact fluorescent
- 120 VAC, 60 Hz
- Temperature operating range: -35° C to 60° C

#### F. HA06C Indoor Wall Switch

- · Rocker style uses decorative wall plate (not included)
- ON/OFF/DIM controls
- · Manual override
- LED shows feedback from controller during setup and that the controlled device is working

#### Specifications:

- · For indoor use only
- 300 Watts Tungsten
- 120 VAC, 60 Hz
- Temperature operating range: 0°C to 70°C

#### G. HA07 Master Remote Controller

- Controls all Intermatic Home Settings devices
- Large LCD screen shows all functions when set-up is successful, dim levels, channels and time functions
- · Easy to set up
- Attractive design can be set on a table or wall mounted
- ALL ON/ALL OFF buttons controls devices to warn would-be intruders
- . Controls up to 12 channels
- · Each channel can control up to 16 devices
- Timing controls for all devices include:
  - Set the Astronomic feature and you will never have to reset the timer for the everyday changes in SUNRISE and SUNSET times.
- Multiple time options: all week, 5 days, weekends or individual days
- RANDOM timing option for a "lived-in" look
- Optional automatic Daylight Savings Time function
- 8 dimming levels
- Requires 4 AA batteries (not included).

#### Specifications:

• Temperature operating range: 0°C to 60°C

#### H. HA09C Handy Remote Control

- Controls all Intermatic Home Controls devices with the touch of a button.
- · Easy to set up
- Attractive, easy to hold
- Controls up to 6 channels
- Each channel can control up to 16 devices
- 8 dimming levels
- Requires 4 AAA batteries (not included)

#### Specifications:

• Temperature operating range: 0°C to 60°C



# **Intermatic Home Controls**

#### I. HA14 3 Way In-Wall Switch/Dimmer

- Use with remote control or as a standard dimmer
- Fits decorator wall plates (not included)
- . ON/OFF and DIM settings
- Supports 3-way configurations

#### Specifications:

- For indoor use only
- 600W Tungsten
- 40W minimum
- 120 VAC, 50/60 Hz
- Temperature operating range: 0°C to 40°C

#### J. HA18 3 Way In-Wall Switch

- · Compatible with compact fluorescent bulbs
- Use with remote control or as a standard dimmer
- Fits decorator wall plates (not included)
- ON/OFF settings
- Supports 3-way configurations

#### Specifications:

- · For indoor use only
- 1800W, 15A Tungsten
- 15A Resistive/Inductive
- 0.5HP Motor
- 120 VAC, 50/60 Hz
- Temperature operating range: 0°C to 40°C

#### K. HA20 3 Way In-Wall Toggle Switch/Dimmer

- · Use with remote control or as a standard dimmer
- Fits toggle-style wall plates (not included)
- . ON/OFF and DIM settings
- Supports 3-way configurations

#### Specifications:

- For indoor use only
- 600W Tungsten
- 40W minimum
- 120 VAC, 50/60 Hz
- . Temperature operating range: 0°C to 40°C

#### L. HA23 USB Stick and Software

- For computer control of HomeSettings Products
- Contains Z-Wave USB Stick; CD with ThinkEssentials<sup>®</sup> control software; 6ft. USB extension cord

#### Specifications:

• Temperature operating range: 0°C to 40°C

#### M. HA24 Microsoft® Home Control Software/USB Kit

- For computer control of HomeSettings Products
- Contains Microsoft® Visual Studio® Express Edition;
   Z-Wave USB Stick; ThinkEssentials® control software;
   6ft. USB extension cord

#### Specifications:

• Temperature operating range: 0°C to 40°C









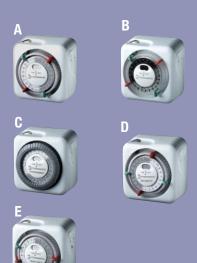
# **Indoor Plug-In Timers**



Unique "time of day" window - quickest and easiest to set

Oversized color-coded trippers - simplest to use











G

## **Heavy Duty Lamp & Appliance Timers**

#### A. TN111C

#### **Lamp & Appliance Timer**

- 2 ON / 2 OFF settings per day
- · Controls lamps & appliances
- · Ideal for all-purpose use
- Ratings: 15 Amp Resistive, 1750 Watts Tungsten, 1/3 HP, 125 VAC, 60 Hz

#### B. TN111GC

#### Lamp & Appliance Timer With Lighted Dial

- Transparent plastic dial acts as a night light
- 2 ON / 2 OFF settings per day
- · Ideal for all-purpose use
- Ratings: 15 Amp Resistive, 1750 Watts Tungsten, 1/3 HP, 125 VAC, 60 Hz

#### C. TN811C

#### **Multi-Setting Timer**

- 24 ON / 24 OFF settings per day
- · Convenient programmable settings
- Enhances safety & security by making home look more
  "lived in"

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- Ratings: 15 Amp Resistive, 1750 Watts Tungsten, 1/3 HP, 125 VAC, 60 Hz

#### D. TN711C

#### **Random Pattern Security Timer**

- 2 ON/2 OFF settings per day
- Turns lights on and off automatically within ±15 min. of the set times
- Eliminates the predictable "timer-controlled" look
- Ratings: 15 Amp Resistive, 1750 Watts Tungsten, 1/3 HP, 125 VAC, 60 Hz

#### E. TN311C

#### **Heavy-Duty Grounded Timer**

- 3 ON/3 OFF settings per day
- For air conditioners, heaters and other heavy electrical loads
- Ratings: 15 Amp Resistive, 1750 Watts Tungsten & Resistive, 125 VAC, 60 Hz, 12 FLA, 72 LRA, 120 VAC Motor (12 AMP Air Conditioner)

## **Digital Plug-in Timers**

#### F. DT17C

#### 7-Day Heavy-Duty Digital Timer

- Up to 14 ON / 14 OFF settings per day or 98 ON / 98 OFF settings per week
- Random setting option avoids predictable "timercontrolled" look
- 3-prong grounded plug and receptacle
- Controls lamps (including fluorescent), TVs, stereos and appliances
- Easy-to-set hand-held programming with battery backup
- · Manual override feature
- Ratings: 15 Amp Resistive & Inductive, 500 Watts Tungsten, 1/3 HP 120 VAC

#### G. DT121C

#### **Digital Lamp Timer**

- 2 ON / 2 OFF settings per day
- · Controls indoor lamps
- To-the-minute accuracy
- Large display, easy to read
- Manual override feature
- Ratings: 8.3 Amp Resistive and Inductive, 300 Watts Tungsten, 120 VAC, 60 Hz

#### H. DT27C

#### Heavy-Duty Digital Timer with Astronomic Feature

- Up to 7 ON/OFF settings per day
- Astronomic features allow setting it once without ever having to reset it again; follows daily changes in sunrise/ sunset times
- Random setting option avoids predictable "timer-controlled" look
- 3-prong grounded plug and receptacle
- Controls lamps (including fluorescent), TVs, stereos and appliances
- Easy to program
- · Battery backup
- Manual override feature
- 15 Amp Resistive and Inductive, 500 Watts Tungsten, 1/3 HP, 120 VAC, 60 Hz

#### I. TB121C

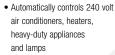
#### **Digital Table Top Timer**

- 2 ON / 2 OFF settings per day
- Attractive tabletop styling in decorative platinum
- 5 ft. cord
- · Easy to reach
- · Large display, easy to read
- To-the-minute accuracy
- Manual override feature
- Ratings: 8.3 Amp Resistive and Inductive, 300 Watts Tungsten, 120 VAC, 60 Hz

# **Appliance & Wall Switch Timers**

## **Heavy Duty Appliance Timers**

#### A. HB112C Air Conditioner & Appliance Timer



3750W/240V/ 2 H.P. 240V Max. Motor Load

- 3,750 watt capacity
- · Plugs directly into wall outlet
- 2 ON/2 OFF settings per day
- 3-prong 220-240 Volt grounded plug and receptacle
- Manual override ON/OFF switch

# B. HB114C Air Conditioner & Appliance Timer

- Same as HB112C except for the following:
- 5,000 Watt capacity



5000W/240V/ 2 H.P. 240V Max. Motor Load

# C. HB113C Air Conditioner & Appliance Timer

Same as HB112C except for the following:

- Automatically controls
   120 Volt air conditioners,
   heaters, heavy-duty appliances
   and lamps
- 2,500 Watt capacity



2500W/120V/ 1 H.P. 120V Max. Motor Load

# HEAVY DUTY TIME-ALL®

В,

## **Wall Switch Timers**

#### D. STO1C

#### Heavy Duty In-Wall Timer with Astronomic Feature

Can be used with four separate programming options: Same settings Monday through Friday, Saturday & Sunday, all 7 days of the week or individual daily settings.

- DST for 2006, 2007 and flexible for future changes, if needed.
- Set it once and never set it again; follows daily changes in sunrise/sunset times
- For single pole and three way applications up to 100 ft.
- For single pole and three way applications up to 100 if
   Controls lighting including fluorescent and heavy duty
- loads such as fans and appliances

  Up to 6 ON/OFF settings per 7-day period a total of 42
  ON/42 OFF settings per week
- · Easy-to-set 6 button programming
- · LCD digital clock and readout
- To-the-minute setting accuracy
- · Battery backup
- Random setting feature available to avoid predictable "timer controlled" look
- Manual override feature
- · Use with decorator-style wall plate (not included)
- Ratings:

Resistive: 15 A, 120-277 VAC
Tungsten: 15 A, 120 VAC, 6 A, 208-277 VAC
Ballast: 8 A, 120 VAC, 4 A, 208-277 VAC
Motor: 1 HP, 120 VAC, 2 HP, 240 VAC
DC Loads: 4 A, 12 VDS, 2 A, 28 VDS

# E. ST01AC Heavy Duty In-Wall Timer with Astronomic Feature

Same as ST01C except Almond color

#### F. EJ351C

#### Programmable 24-hour Security Timer

- Up to 24 ON/24 OFF settings per day
- Random setting turns light ON and OFF at slightly different times each day
- Self-learning feature: if not manually programmed, it will repeat the first 24 hr. ON/OFF pattern
- 15 minute memory guard protects against power failure
- Replaces any standard wall light switch
- Use with existing wall plate; standard (toggle) or decorator (rocker) styles
- Ratings: 500 Watts Incandescent, 120 VAC, 60 Hz

#### G. F.1500C

# Indoor Digital Wall Switch Timer with Astronomic Feature

- Flushmount design
- 6 ON/6 OFF settings per day
- Controls incandescent and fluorescent (class "P" ballast) lighting
- Easy to set programming
- Set it once and never set it again; follows daily changes in sunrise/sunset times
- Battery backup guards against memory loss
- Replaces any standard wall switch
- Use with decorative style wall plate (not included)
- Ratings: 500 Watts Incandescent, 120 VAC, 60 Hz

#### H. EJ500AC

# Indoor Digital Wall Switch Timer with Astronomic Feature

Same as EJ500C except Almond Color







# **Outdoor Timers**









#### A. HB31R Heavy Duty Outdoor Timer (15 Amp)

- Up to 2 ON / 2 OFF settings per day
- Full 15 Amp capacity controls lighting and heavy-duty loads such as motors and pool pumps
- Grounded plug
- Manual override ON/OFF switch
- · Waterproof cover
- Heavy-duty 12" grounded cord
- 120 VAC, 60 Hz

#### B. HB35R Outdoor Timer (10 Amp)

- 2 ON / 2 OFF settings per day
- Grounded plug
- Manual override ON/OFF switch
- · Waterproof cover
- Heavy-duty 15" cord
- 120 VAC, 60 Hz

#### C. HB51RC

#### **Outdoor Timer with Light Sensor**

- Highly versatile control with choice of operating modes
- Photo ON / Timer OFF mode provides automatic ON at dusk, OFF after owner's choice on 2, 4, 6 or 8 hours
- Photo ON / Photo OFF mode offers automatic ON at dusk, OFF at dawn
- 8.3 Amp lighting timer
- Manual override ON/OFF switch
- Grounded, compact 6" cord

#### D. HB61RC Digital Outdoor Timer with Light Sensor

- · Photo ON at dusk, OFF at dawn
- Photo ON at dusk, OFF at 1 hour increments from 1-9 hours
- Immediate ON/OFF at owner's selection in 1 hour increments for 1-9 hours
- Manual override
- Grounded 6" cord and receptacle

| Model<br>Number | Max. ON<br>Time | Min. ON<br>Time | Capacity   |
|-----------------|-----------------|-----------------|--|
| HB31R           | 23-1/2 hrs.     | 1/2 hr.         | 15 Amps, 1800 Watts Resistive; 15 Amps, 1800 Watts Tungsten,   |
|                 |                 |                 | 15 FLA, 90 LRA; 120 VAC Operating Temp.: -40°C to +40°C        |
| HB35R           | 23-1/2 hrs.     | 1/2 hr.         | 10 Amps, 1200 Watts Resistive; 10 Amps, 1200 Watts Tungsten;   |
|                 |                 |                 | 120 VAC Operating Temp.: -40°C to +40°C                        |
| HB51RC          | Dusk to 8 hr.   | Dusk to 2 hr.   | 8.3 Amps, 1000 Watts Resistive; 8.3 Amps, 1000 Watts Tungsten, |
|                 |                 |                 | 120 VAC Operating Temp.: -35°C to +40°C                        |
| HB61RC          | Dusk to 8 hr.   | Dusk to 2 hr.   | 8.3 Amps, 1000 Watts Resistive; 8.3 Amps, 1000 Watts Tungsten, |
|                 |                 |                 | 120 VAC Operating Temp.: -35°C to +40°C                        |

# **Outdoor Timers**



#### E. HB77R

#### **Digital Outdoor Timer**

- 15 Amp capacity controls lighting and heavy-duty loads such as motors and pool pumps
- 14 ON / OFF settings per day a total of 42 ON / OFF settings per week - can be used with 4 separate programming options
  - Same settings Monday through Friday
  - Same settings Saturday and Sunday
  - Same settings all 7 days of the week
  - Various daily settings
- Easy hand-held programming
- Replaceable button cell batteries (included) maintains program, during power failure

#### F. HB1116R

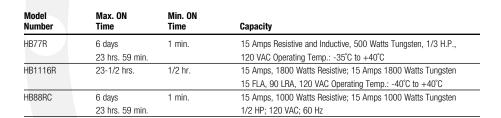
# 6 Outlet Electromechanical Timer with Stake

- 2 ON/OFF settings per day
- Full 15 Amp capacity controls lighting and heavy loads such as motors, engine block heaters and pool pumps
- · Weatherproof cover
- 24" grounded cord
- · Grounded receptacle
- · Circuit breaker
- Manual override ON/OFF switch
- · For wall mounting or stake mounting

#### G. HB88RC

#### **Programmable Outdoor Timer**

- 15 Amp capacity controls lighting and heavy duty loads such as engine block heaters, holiday and landscape lighting, pool/spa pumps and more
- 7 day / 7 event programming
- Multiple daily programming options
- Same settings Monday through Friday
- Same settings Saturday and Sunday
- Same settings all 7 days of the week
- Individual daily settings
- Two timed receptacles
- · Battery backup
- Ratings: 15 Amp Resistive and Tungsten, 1000W Inductive, 1/2 HP, 120 VAC, 60 Hz











# **Photo Controls Power Failure Light**





## **Safety Light Products**

#### A. NE1C

#### Screw-In Photo Control

- Automatically turns electrical load ON at dusk, OFF at dawn
- · Screws into any standard incandescent light socket
- . Controls interior and exterior lights

#### B. NE2C

#### Automatic Security Light Dual Photo Cell with Flicker Eliminator

- Automatically turns electrical load ON at dusk, OFF at dawn
- · Advanced technology circuit saves energy
- Screws into any standard incandescent light socket
- Controls interior and exterior lights

#### C. NE3BC

#### Digital Photo Control, Time Controlled

- Automatically turns light ON at dusk and OFF 6 hours later
- · Soft start extends bulb life
- . Controls incandescent lights up to 150 Watts
- Screw into any standard incandescent light socket
- Controls indoor and exterior lights
- Handles up to 150 Watt incandescent and 45 Watt fluorescent bulbs

#### D. NE200C

#### **Plug-In Photo Control**

- Automatically turns electrical load ON at dusk, OFF at dawn
- For outdoor spot and flood lamps, used on driveways and patios
- Also ideal for indoor or outdoor PL lamp fixtures (compact fluorescent)

#### E. NE250C

#### **Outdoor Photo Control**

- Automatically turns electrical load ON at dusk, OFF at dawn
- For outdoor spot and flood lamps, used on driveways and patios
- . Handles up to 150 Watt incandescent bulbs

#### F. NE5C

#### **Plug-In Photo Control**

- Automatically turns electrical load ON at dusk, OFF at dawn
- · Plugs into any polarized indoor wall socket
- Controls indoor devices such as table light, floor light, radio or TV

## **Power Failure Light**

#### G PR30

#### 3-in-1 Power Failure Light

- Light automatically comes on when power goes out
- · Automatic guide light
- Can be used as a handy rechargeable flashlight
- Screw-off cover with replaceable #14 flashlight bulb
- Plugs into any polarized indoor wall socket
- · Provides safety and security
- Unique receptacle for plugging in additional lamp or appliance
- 120 Volts, 60 Hz, 1 Watt

## **Intermatic Do-It-Yourself Security**



### **Security Alarms**

#### A. SP230B

#### **Wireless Alarm with Motion Sensor**

- · Place on wall, table or shelf
- · Piercing alarm activated when movement is detected
- · Warning sticker included
- Programmable code entered on keypad activates/deactivates alarm
- 110 dB siren

#### B. SP130B

#### Wireless Door Alarm with Programmable Keypad

- Piercing alarm activated when contact point is broken
- · Mounts on door
- Code entered on keypad activates/deactivates alarm
- 110 dB siren

#### C. SP440B

#### **Wireless Window Alarm**

- · Piercing alarm activated when contact point is broken
- Mounts on window
- ON/OFF switch activates/deactivates alarm
- 90 dB siren

#### D. SP500

#### **Window Stickers**

- Discourages intruders
- 4 pack

#### E. SP640B

#### **Personal Security Alarm**

- Piercing alarm sounds when pin is removed
- Small enough to hold in the palm of the hand
- · Alerts others that help is required
- Includes flashlight and belt clip
- 90 dB siren





A













### 12 volt fixtures provide important benefits not available with conventional

- day (when off)





Malibu<sup>®</sup>, the leading landscape lighting brand, has been making lighting systems to enhance the beauty, safety and security of American homes for almost 40 years. In that time we've learned a lot about how American consumers use their outdoor space, and we've seen the definition of "outdoor lifestyle" grow. People spend more time outdoors than ever before, and it's important to them to decorate their outdoor space. Malibu® helps them make their outdoors as beautiful, livable and enjoyable as their indoors.

### **Fixtures For Every Need**

The traditional approaches to outdoor lighting are to provide uplight to highlight trees or bushes and create a focal point for beauty; downlight to place along walkways and steps or outline driveways for safety; and backlight to illuminate walls or fences and light up a home's exterior for security. To fill these needs, Malibu® offers a wide variety of floodlights and decorative fixtures, path and garden lights. Traditional lighting approaches are still very relevant today, but the trend that expands gracious living to a home's outdoor space has led to a new approach, the creation of outdoor decorative elements that provide function and beauty in the daytime, as well as illumination at night. See the following pages for the widest selection of styles and finishes for all applications.

### **Market Leading Power Packs and Accessories**

Malibu® high quality Power Packs offer dependable power and integrated Intermatic timers to ensure that your customers' landscape lighting delivers bright reliable light in any weather, year in and year out. Malibu® bulbs and cable complete the picture to give you safe, weather-resistant installations.

### Malibu® Products are Affordable and Guaranteed

Malibu® is committed to building the best products available across several price ranges. We also offer one of the most comprehensive warranties in the industry; from 3 years to lifetime depending on the fixture, and 5 years on Power Packs.

For more information and to view the most up-to-date listing of Malibu® Landscape Lighting products, see our Landscape Lighting catalog, or visit our website at www.malibulights.com.



### **Garden Lights**



CL0830B

Metal Garden Light with 11W wedge base bulb and Oil Rubbed Bronze finish



CL086AB

Metal Garden Light with 10W halogen bi-pin bulb and Aged Brass finish



**CL3050B** 

Metal Garden Light with 11 watt wedge base bulb and Oil Rubbed Bronze finish



CL305P

Metal Garden Light with 11 watt wedge base bulb and Pewter finish





CL33V

Metal Garden Light with 11 watt wedge base bulb and Verde finish



**CL801BC8** 

Metal Garden Light with 4 and 11W wedge base bulbs, Black Chrome finish and Frosted Crackel Glass Globe



**CS110P** 

Metal Garden Light with 11W wedge base bulb and Pewter finish



CS110TA

Metal Garden Light with 11W wedge base bulb and Architectural Bronze finish





CS3300B

Metal Garden Light with 11W wedge base bulb and Oil Rubbed Bronze finish



CS501GR

Metal Garden Light with 11W wedge base bulb and Graphite finish



CS7E1

Metal Garden Light with 4W wedge base bulb and Black finish



**CS7Z6** 

Metal Garden Light with 11W wedge base bulb and Black finish



## MALIBU Lighting the Way to Outdoor Living







### **Garden Lights**



**CL191**Metal Tier Light with
11W wedge base bulb
and Black finish



**CL191K**Metal Tier Light with
11W wedge base bulb
and Antique Copper
finish



**CL1910B**Metal Tier Light with
11W wedge base bulb
and Oil Rubbed Bronze
finish



**CL191S**Metal Tier Light with
11W wedge base bulb
and Sand finish



**CL191V**Metal Tier Light with
11W wedge base bulb
and Verde finish



CS200C Copper Tier Light with 18W wedge base bulb



LT0870B Metal Walk Light with 11W wedge base bulb and Oil Rubbed Bronze finish



LT406 Metal Tier Light with 4W wedge base bulb and Black finish



LT406N Metal Tier Light with 4W wedge base bulb and Nickel finish



LT13
Metal Tier Light with
7W wedge base bulb
and Black finish



LT13S
Metal Tier Light with
7W wedge base bulb
and Sand finish



CL635P Metal Bollard Light with 20W MR11 bulb and Pewter finish



CL635R Metal Bollard Light with 20W MR11 bulb and Black Finish



CL635RK
Metal Bollard Light with
20W MR11 bulb and
Antique Copper finish



CL635RS
Metal Bollard Light
with 20W MR11 bulb
and Sand finish



**CL711**Metal Mushroom Light with 10W halogen bi-pin bulb and Black finish



**CS7AC1**Metal garden Light with
11W wedge base bulb
and Antique Copper and
Oil Rubbed bronze finish

### **Garden Lights**



CS120TA Metal Garden Light with 18W wedge base bulb and Architectural Bronze

finish



CS140K Metal Garden Light with 18W wedge base bulb and Antique Copper finish



CS14P Metal Garden Light with 11W wedge base bulb and Pewter finish



CS17K Metal Garden Light with 11W wedge base bulb and Antique Copper finish







Finishes & Colors

Choose from classic or contemporary designs in a variety of finishes and textures. Use Malibu® fixtures to blend into your landscape























**CS230R** 

Metal Garden Light with 18W wedge base bulb and Aged Brass finish



**CS240** 

Metal Garden Light with 18W wedge base bulb and Aged Brass finish



CS7CT4

Metal Garden Light with 4W wedge base bulb and Black finish



**CL802BSB6** 

Metal Garden Light with 4 and 11W wedge base bulbs, Black Satin Bronze finish and Mocha Marble Glass Globe



CL802P7

Metal Garden Light with 4 and 11W wedge base bulbs, Pewter finish and Square Frosted Glass Globe



**CL803BC9** 

Metal Garden Light with 4 and 11W wedge base bulbs and Black Chrome finish and Clear Crackle Glass Globe



CL803S2

Metal Garden Light with 4 and 11W wedge base bulbs. Sand finish and Frosted Ribbed Glass Globe



CL8041

Metal Garden Light with 4 and 11W wedge base bulbs, Black finish and Alabaster-Style Glass

it is possible that specifications and/or appearances of our products may have changed after the printing of this literature. See price list for the latest available product light sets.



# MALIBU Lighting the Way to Outdoor Living







### Flood Lights



**CL0822**Metal Floodlight with
50W halogen MR16
bulb and Black finish



**CL1**Metal Floodlight with
50W halogen bi-pin
bulb and Black finish



**CL115**Submersible Light with 20W halogen MR16 bulb



**CL507**Metal Floodlight with 20W halogen MR16 bulb and Black finish



CL508

Metal Floodlight with
35W halogen MR16
bulb and Black finish



CL509 Metal Wall Wash Floodlight with 20W halogen bi-pin bulb and Black finish



**CL9**Metal Floodlight with 20W halogen bi-pin bulb and Black finish



CL90B
Metal Floodlight with
20W halogen bi-pin
bulb and Oil Rubbed
Bronze finish



**CL9S**Metal Floodlight with 20W halogen bi-pin bulb and Sand finish



**CL9TA**Metal Floodlight with
20W halogen bi-pin
bulb and Architectural
Bronze finish



CS180C Copper Floodlight with 20W halogen MR16 bulb



CS508K Metal Floodlight with 35W halogen MR16 bulb and Antique Copper finish



CS508P

Metal Floodlight with
35W halogen MR16
bulb and Pewter finish



CS508S

Metal Floodlight with
35W halogen MR16
bulb and Sand finish



**CS508TA**Metal Floodlight with
35W halogen MR16
bulb and Architectural
Bronze finish



LT9
Metal Floodlight with
10W halogen bi-pin
bulb and Black finish

188



### Flood Lights



**CL501**Metal Well Uplight with 35 watt MR16 bulb and Black finish



**CL501S**Metal Well Uplight with
35 watt MR16 bulb and
Sand finish

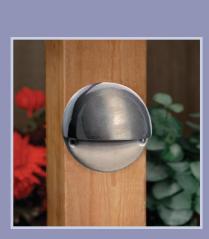


NA320 Natural Rock Floodlight with 20W MR11 bulb









### **Surface Lights**



**CL503TA**Metal Surface Light with 7 watt wedge base bulb and Architectural Bronze finish



CL905

Metal Half Brick Light
with 7W wedge base
bulb and Black finish



**CL905K**Metal Half Brick Light with 7W wedge base bulb and Antique Copper finish



LT401 Metal Surface Light with 11W wedge base bulb and Aged Brass finish



LT8
Metal Surface Light with
7W wedge base bulb
and Black finish



LT8K
Metal Surface Light with
7W wedge base bulb
and Antique Copper
finish





#### Low Voltage Polymer



Plastic Tier Light 7W wedge base bulb



LV103/ML91103
Plastic Floodlight



LV108/ML90708
Plastic Floodlight
7W wedge base bulb





**LX9Z/ML90401**Plastic Floodlight
4W wedge base bulb



### **Power Packs**

Intermatic offers the widest variety of Power Packs in any wattage and control option your system may require. Power Packs are available from 44 to 900 watts, allowing you to choose which power supply is right for your particular lighting plan.

All Power Packs are certified for safe operation and long life. Keyhole mountings are featured for ease of operation and installation. See chart below for available Power Packs and features.

| Models   | Max. Wattage Output | Specifications                                  |
|----------|---------------------|---|
| ML44T    | 44 Watt             | Timer with 2 sets of trippers                   |
| ML88T    | 88 Watt             | Timer with 2 sets of trippers                   |
| ML100T   | 100 Watt            | Timer with 2 sets of trippers                   |
| ML100THB | 100 Watt            | Electronic Timer and photo control              |
| ML121RT  | 121 Watt            | Timer with 2 sets of trippers                   |
| ML200RT  | 200 Watt            | Timer with 2 sets of trippers                   |
| ML200RTW | 200 Watt            | Timer with 2 sets of trippers and ground shield |
| ML300RTW | 300 Watt            | Timer with 2 sets of trippers and ground shield |
| ML600TW  | 600 Watt            | Timer with 2 sets of trippers and ground shield |
| ML900TW  | 900 Watt            | Timer with 2 sets of trippers and ground shield |

IMPORTANT: When planning your lighting and choosing a Power Pack, your total bulb wattage must not exceed maximum transformer wattage output rating.

### **Power Pack Models**



ML44T ML88T



ML100THB



ML100T ML121RT ML200RT ML200RTW



ML300RTW



ML600TW



ML900TW



Low Voltage Cable

For fast, easy installation of Malibu® light fixtures, use low voltage cable. It's safe, weather-resistant, self sealing and available in 16, 14 and 12 gauge sizes.

## Solar**SELECT**™

## Malibu® Solar-Powered Accent Lighting



Solar lighting is the simplest and safest way to brighten your home's walkways, decorate patios, and flower beds, or create an enchanting lake view. Solar lights use a solar panel to convert the power of the sun into electricity. The included rechargeable batteries store this energy to power the bright LED bulbs. The amount of on-time will be dependent on the amount of full sunlight your lights receive the previous day. In general, if your lights receive 8 hours of full sun, you can expect 6-8 hours of on-time. Malibu Solar lights will turn on automatically every evening as the sun sets. It is important to note that strong ambient lighting (porch/street lights) can prevent your lights from operating properly. If this occurs, eliminate or reduce the ambient light source or place the fixture in a darker locations.





12" height

#### LZ3001

Cast Aluminum Construction Walk Light with 2 White L.E.D's, Frosted Globe, and



#### LZ30050B

Cast Aluminum Construction Walk Light with 2 White L.E.D's, Frosted Globe, and Oil Rubbed Bronze finish



#### LZ3501DR

Cast Aluminum Construction Walk Light with 2 White L.E.D's, Seeded Glass Globe, and Dark Rust finish



#### LZ3003TC

Cast Aluminum Construction Walk Light with 2 White L.E.D's, Seeded Glass Globe, and New Tarnished Copper finish



#### LZ30080B

Cast Aluminum Construction Walk Light with 2 White L.E.D's, 2 Way Use, and Oil Rubbed Bronze finish



#### LZ80010B

Cast Aluminum Construction Post/Deck Light with 2 White L.E.D's, 4 Way Use, and Oil Rubbed Bronze finish

### SolarSelect Premium Metal Garden Lights

The Malibu SolarSelect series provide top performance and quality for all seasons. These stylish landscape lights feature a Summer/Winter adjustment switch located on the back of the solar panel. High setting delivers the brightest output and will deliver approximately 1 hour of on-time for every hour of full sun. Use this setting from Spring into early Fall. Low setting lengthens on-time during late Fall through early Spring. During this time most locations receive fewer hours of full sun per day. Each fixture has 2 True White LED's / fixture, which provide more uniform light distribution, and nearly 3X brighter output than Malibu's other solar fixtures





### Premium Metal Walk Light







LZ7CT4 Metal Contemporary Walk Light with White L.E.D.



LZ7FC4 Metal French Country Walk Light with White L.E.D.



LZ7Z6 Premium Cast Metal Zen style Walk Light with White L.E.D.



LZ601 Metal Lantern with Graphite Finish and White L.E.D.



LZ602 Metal Diamond Mission Light with Aged Brass Finish and White L.E.D.



Metal Pagoda Light with Black Finish and White L.E.D.



LZ111010B Metal Walklight with White L.E.D. and Oil Bronze finish.



LZ11101P Metal Walklight with White L.E.D. and Pewter finish.



LZ14001H Metal Lantern Light with White L.E.D. and Black finish LZ14001HP Pewter finish



**Understanding Solar-Powered** 

Solar lights are not for every lighting appli-

are perfect for for those applications where

the area has exposure to the full daylight

sunlight available to recharge the batteries. The

day. Solar Light performance will be dimin-

Lights will provide many hours of nighttime

**Accent Lighting** 



LZ11771H

Metal Prairie Style Light with White L.E.D. and Architectural Bronze finish



LZ11771HK

Metal Prairie Style Light



LZ21811K

Metal Fence Post Light with White L.E.D. and Antique Copper finish

with White L.E.D. and Antique Copper finish



LZ21811WH

Metal Fence Post Light with White L.E.D. and White finish



### Metal Walk Light



**LZ2004AS** LZ2004DR

Metal Walklight with Faceted Glass Globe, White L.E.D., Antique Silver and Dark Rust finish



LZ2005TC

Metal Walklight with Frosted Glass Globe, White L.E.D., and Tarnished Copper finish



**LZ2006WB** LZ20060B

Metal Walklight with Faceted Glass Globe, White L.E.D., Weathered Bronze and Oil Rubbed Bronze finish



LZ407

Metal Tier Light with White L.E.D. and Pewter finish





LZ418

Metal Walklight with Oil Rubbed Bronze Finish, White L.E.D.



LZ422WBR

Dark Brown Walklight with White L.E.D.

#### LZ422W

Black Walklight with White L.E.D.



LZ5130B

Metal Walklight with Globe. White LED and Oil Rubbed Bronze Finish



LZ10131

Metal Tier Light with White L.E.D.



### **Plastic Walk Lights**





**LZ1004BR** Plastic Walklight with Frosted Globe, White L.E.D. and Brown finish



LZ1008 Plastic Walklight with Faceted Globe, White L.E.D. and Black finish



LZ20070B Plastic Walklight with Frosted Globe, White L.E.D. and Oil Bronze finish



LZ2015DR Plastic Walklight with Frosted Globe, 2 Way Use, White L.E.D., and Dark Rust finish







LZ1 Plastic Tier Light with Amber L.E.D.



LZ4H Plastic Hanging Carriage Light with Amber L.E.D. LZ4HW White L.E.D.



LZ4MM0B Metal Carriage Light with White L.E.D. and Rubbed Bronze finish



LZ6 Table Top Accent Light with Amber L.E.D.





LZ701/LZ701W Plastic Walklight with White or Amber L.E.D. and Brown finish



LZ702/LZ702W Plastic Walklight with White or Amber L.E.D. and Black finish



LZ704/LZ704W Plastic Walklight with White or Amber L.E.D. and Brown finish



Post Top/Deck Light with 4 Way Use, White L.E.D. and Brown finish



### **Solar Flood Lights**



**LZ413**Plastic Flood Light Set
with Remote Panel and 3
White L.E.D's per Lamp



**LZ415**Flood Light with 3 White L.E.D's



**LZ419**Resin Flood Light with 3
White L.E.D's





**LZ605RP**Metal Flood Light with
12 White L.E.D's, Black
finish



Cast Aluminum Construction Flood Light with adjustable solar panel and 4 White L.E.D's, Black finish



Cast Aluminum Construction 3 Flood Light Kit with Remote panel and 4 White L.E.D's, Black finish



Solar Select technology delivers 2 times the brightness compared to our Plastic Flood Lights.



**LZ15004**Nickel Metal Hydride replacements



**LZ90004**Replacement Batteries





## **Specialty Solar Lights**











LZ303RB Metal Hanging Lantern with White L.E.D. and Rustic Brick finish



LZ314 Address Light with Amber L.E.D.



LZ511A,B,C,R Driveway Markers with Steady ON or Flash Modes



**LZ604B** Solar Island Torch with Flickering Amber L.E.D's



**LZ706** Resin Pagoda Light with Amber L.E.D. and Natural finish



LZ16220 Plastic Deck Light with Amber L.E.D.

### **Time Switch Motors**

| Model<br>(Carias)      |                        |                   | LIDC*          |
|------------------------|------------------------|-------------------|----------------|
| (Series)<br>to be used | Description            | Part #            | UPC*<br>Item # |
|                        | OLD STYLE T100         |                   |                |
| T100, T170             | 24V 60Hz               | N/A               |                |
| T100R201,              | 125V 50Hz              | N/A               |                |
| T1400BR,               | 125V 60Hz              | WG430-10D         | 11972 6        |
| T1800BR,               | 208/277V 50Hz          | WG434-20D§        | 11978*         |
| T180, T500,            | 208/277V 60Hz          | WG433-20D         | 11976 5        |
| WH10,30,               | 480V 60Hz              | WG436-20          | 11979*         |
| WH40,70,80             | 400 V 00112            | WG400 Z0          | 11070          |
|                        | NEW STYLE T100         |                   |                |
| T100, T170             | 24V 60Hz               | CW1570-10D        | 10828 8        |
| T180.                  | 125V 60Hz              | WG1570-10D        | 11915 4        |
| T100R201,              | 125V 50Hz              | WG1571-10D        | 11919 2        |
| T100R301,              | 208/277V 50Hz          | WG1574-10D        | 11932 1        |
| WH10,30,               | 208/277V 60Hz          | WG1573-10D        | 02012 2        |
| WH40,70,80             | 480V 60Hz              | WG1576-10D        | 11938 3        |
| MOTOR ONLY             |                        | WG1370-10D        | 11330 3        |
| T100CR,                | 24V 60Hz               | N/A               |                |
| T170CR,                |                        | WG1381-10§        | 11002*         |
| <del></del>            | 125V 50Hz<br>125V 60Hz |                   | 11903*         |
| T1400BCR,              |                        | WG1380-11§        | 11902*         |
| T1800BCR               | 208/277V 50Hz          | N/A<br>W01000 115 | 11004*         |
|                        | 208/277V 60Hz          | WG1383-11§        | 11904*         |
|                        | 480V 60Hz              | N/A               |                |
| _                      | ARRYOVER COMBINE       |                   |                |
| T100CR,                | 24V 60Hz               | N/A               |                |
| T170CR,                | 125V 50Hz              | 131T93GA          | 60090          |
| T1400BCR,              | 125V 60Hz              | 131T68GA          | 21170          |
| T1800BCR               | 208/277V 50Hz          | 131T70GA          | 60091          |
|                        | 208/277V 60Hz          | 131T69GA          | 21180          |
|                        | 480V 60Hz              | N/A               |                |
| MOTOR ONLY             |                        |                   |                |
| AT1300R                | 24V 60Hz               | N/A               |                |
|                        | 125V 50Hz              | N/A               |                |
|                        | 125V 60Hz              | WG430-20D         | 02009 2        |
| _                      | 208/277V 50Hz          | WG434-20§         | 11978*         |
|                        | 208/277V 60Hz          | WG433-20D         | 02010 8        |
|                        | 480V 60Hz              | WG436-20          | 11979*         |
| Malibu Repl.           | 125V 60Hz              | WG630D            | 02013*         |
| Motors                 | 125V 60Hz              | WG1750-10§        | 11911*         |
|                        | 125V 60Hz              | N/A               |                |
| MOTOR ONLY             |                        |                   |                |
| T1900,                 | 24V 60Hz               | N/A               |                |
| T8800,                 | 125V 50Hz              | N/A               |                |
| R8800                  | 125V 60Hz              | WG730-14D         | 12001*         |
|                        | 208/277V 50Hz          | N/A               |                |
|                        | 208/277V 60Hz          | WG733-14D         | 12005 1        |
|                        | 480V 60Hz              | WG736-14D         | 12008 2        |
| MOTOR ONLY             |                        |                   |                |
| T7400B                 | 24V 60Hz               | N/A               |                |
| T7800B                 | 125V 50Hz              | N/A               |                |
|                        | 125V 60Hz              | WG1600-11         | 11939 0        |
|                        | 208/277V 50Hz          | N/A               |                |
|                        | 208/277V 60Hz          | WG1603-11D        | 11951 2        |
|                        | 480V 60Hz              | WG1606-11§        | 11948 2        |
|                        |                        |                   |                |
|                        |                        |                   |                |

| (Series)<br>to be used | Description       | Part #            | UPC<br>Item : |
|------------------------|-------------------|-------------------|---------------|
| MOTOR ONLY             |                   |                   |               |
| T7400BC                | 24V 60Hz          | N/A               |               |
| T7800BC                | 125V 50Hz         | WG1381-10§        | 11903         |
| 1700000                | 125V 60Hz         | WG1380-11         | 11902         |
|                        | 208/277V 50Hz     | N/A               | 11002         |
|                        | 208/277V 60Hz     | WG1383-11         | 11905         |
|                        | 480V 60Hz         | N/A               | 11300         |
| MOTOR AND CA           | ARRYOVER COMBINED | 1071              |               |
| T7400BC                | 24V 60Hz          | N/A               |               |
| T7800BC                | 125V 50Hz         | 131T93GA          | 6009          |
| 1700000                | 125V 60Hz         | 131T68GA§         | 2117          |
|                        | 208/277V 50Hz     | N/A               |               |
|                        | 208/277V 60Hz     | 131T69GA          | 2118          |
|                        | 480V 60Hz         | N/A               | 2110          |
| MOTOR AND CA           | ARRYOVER COMBINED | TWA               |               |
| V41079CR               | 24V 60Hz          | N/A               |               |
| V45000                 | 125V 50Hz         | 131T93GA          | 6009          |
| V46100C                | 125V 60Hz         | 131T68GA§         | 2117          |
| V401000                | 208/277V 50Hz     | N/A               | 2117          |
|                        | 208/277V 50Hz     | -                 | 2118          |
|                        | 480V 60Hz         | 131T69GA<br>N/A   | 2110          |
| MOTOD ONLY             | 4007 0002         | IVA               |               |
| MOTOR ONLY             | 24// 6011-        | NI/A              |               |
| V45400                 | 24V 60Hz          | N/A<br>WC1201 108 | 11903         |
| V46400                 | 125V 50Hz         | WG1381-10§        |               |
|                        | 125V 60Hz         | WG1380-11§        | 11900         |
|                        | 208/277V 50Hz     | N/A               | 44004         |
|                        | 208/277V 60Hz     | WG1383-11§        | 11904         |
| MOTOR ONLY             | 480V 60Hz         | N/A               |               |
| MOTOR ONLY             | 24// 6011-        | CW700 108         | 10046         |
| T2000                  | 24V 60Hz          | CW720-10§         | 10846         |
|                        | 125V 50Hz         | N/A               | 44007         |
|                        | 125V 60Hz         | WG720-10D         | 11997         |
|                        | 208/277V 50Hz     | WG724-10§         | 12000         |
|                        | 208/277V 60Hz     | WG723-10D§        | 11999         |
|                        | 480V 60Hz         | N/A               |               |
| MOTOR ONLY             | 0.417.0011        | N1/A              |               |
| V47000                 | 24V 60Hz          | N/A               |               |
| V48000                 | 125V 50Hz         | N/A               | 44004         |
| V49000                 | 125V 60Hz         | WG690-10          | 11991         |
|                        | 208/277V 50Hz     | N/A               |               |
|                        | 208/277V 60Hz     | N/A               |               |
|                        | 480V 60Hz         | N/A               |               |
| MOTOR ONLY             |                   |                   |               |
| LS7000                 | 24V 60Hz          | CW190-10D         | 10839         |
|                        | 125V 50Hz         | WG191-10§         | 11957         |
|                        | 125V 60Hz         | WG190-15D         | 11956         |
|                        | 208/277V 50Hz     | WG194-10§         | 11960         |
|                        | 208/277V 60Hz     | N/A               |               |
|                        | 480V 60Hz         | N/A               |               |
| MOTOR ONLY             |                   |                   |               |
| E1000                  | 24V 60Hz          | N/A               |               |
|                        | 125V 50Hz         | N/A               |               |
|                        | 125V 60Hz         | WG230-13D         | 11966         |
|                        | 208/277V 50Hz     | N/A               |               |
|                        | 208/277V 60Hz     | WG233-18§         | 6003          |
|                        | 480V 60Hz         | N/A               |               |
|                        |                   |                   |               |

| Model<br>(Series)<br>to be used | Description   | Part #          | UPC*<br>Item # |
|---------------------------------|---------------|-----------------|----------------|
| MOTOR ONLY                      |               |                 |                |
| C8815                           | 24V 60Hz      | N/A             |                |
|                                 | 125V 50Hz     | N/A             |                |
|                                 | 125V 60Hz     | WG790-11D       | 12019 8        |
|                                 | 208/277V 50Hz | N/A             |                |
|                                 | 208/277V 60Hz | N/A             |                |
|                                 | 480V 60Hz     | N/A             |                |
| MOTOR ONLY                      |               |                 |                |
| C8825                           | 24V 60Hz      | N/A             |                |
|                                 | 125V 50Hz     | N/A             |                |
|                                 | 125V 60Hz     | WG760-10        | 12011*         |
|                                 | 208/277V 50Hz | N/A             |                |
|                                 | 208/277V 60Hz | N/A             |                |
|                                 | 480V 60Hz     | N/A             |                |
| MOTOR ONLY                      |               |                 |                |
| C8835                           | 24V 60Hz      | N/A             |                |
|                                 | 125V 50Hz     | N/A             |                |
|                                 | 125V 60Hz     | WG780-12D       | 12017 4        |
|                                 | 208/277V 50Hz | N/A             |                |
|                                 | 208/277V 60Hz | N/A             |                |
|                                 | 480V 60Hz     | N/A             |                |
| MOTOR ONLY                      |               |                 |                |
| C8845                           | 24V 60Hz      | N/A             |                |
|                                 | 125V 50Hz     | N/A             |                |
|                                 | 125V 60Hz     | WG750-10D       | 12010 5        |
|                                 | 208/277V 50Hz | N/A             |                |
|                                 | 208/277V 60Hz | N/A             |                |
|                                 | 480V 60Hz     | N/A             |                |
| MOTOR ONLY                      | 1001 00112    |                 |                |
| C8855                           | 24V 60Hz      | N/A             |                |
|                                 | 125V 50Hz     | N/A             |                |
|                                 | 125V 60Hz     | WG800-11D       | 10854 7        |
|                                 | 208/277V 50Hz | N/A             | 100017         |
|                                 | 208/277V 60Hz | N/A             |                |
|                                 | 480V 60Hz     | N/A             |                |
| MOTOR ONLY                      | 1004 00112    | 14/71           |                |
| C8865                           | 24V 60Hz      | CW770-10§       | 10852*         |
| 00000                           | 125V 50Hz     | N/A             | 10002          |
|                                 | 125V 50Hz     | WG770-10D       | 12013 6        |
|                                 | 208/277V 50Hz | N/A             | 12013 0        |
|                                 | 208/277V 50Hz | -               | 12014*         |
|                                 | 480V 60Hz     | WG773-10<br>N/A | 12014          |
| MOTOR ONLY                      | 4007 0002     | IVA             |                |
| MOTOR ONLY                      | 34// 60H-     | CM/770 108      | 10050*         |
| C8866                           | 24V 60Hz      | CW770-10§       | 10852*         |
|                                 | 125V 50Hz     | N/A<br>W0770 10 | 10010*         |
|                                 | 125V 60Hz     | WG770-10        | 12012*         |
|                                 | 208/277V 50Hz | WG774-10        | 12015*         |
|                                 | 208/277V 60Hz | WG773-10        | 12014*         |
| N/A Not available.              | 480V 60Hz     | N/A             |                |

All time switch motors are available in voltage and cycle shown in 2nd column. For example: To order new style T100 Series Motor in 60Hz 125V, order WG1570-10D.

NOTE: Carryover only sold as a complete unit with motor. \*\*These voltages and corresponding motor numbers apply to all model numbers.

§ Available while supplies last.

Internal revisions may result in the motor you receive having a different dash number (WG430-3 vs. WG430-10) than the motor ordered. This revision has no effect on the motor function.

### **24-Hour Time Switches**

| INTERMATIC                             | Paragon  | Tork          |  |  |
|--|--|---------------|--|--|
| 24 Hour Time Switch                    | 24 Hour Time Switches (1 hour minimum "ON" time) |               |  |  |
| T101                                   | 4001-00  | 1101/1191     |  |  |
| T102                                   | 4002-71  | 1102          |  |  |
| T103                                   | 4003-00  | 1103/1962     |  |  |
| T104                                   | 4004-71, 4004-20                                 | 1104/1962     |  |  |
| T105                                   | 4005-00S   | 3121          |  |  |
| T101B                                  | 4001-00V   | _             |  |  |
| T101R                                  | 4011-00  | 1101-0/1191-0 |  |  |
| T102R                                  | 4012-20  | _             |  |  |
| T103R                                  | 4013-00  | 1103-0/1962-0 |  |  |
| T104R                                  | 4014-71, 4014-20                                 | 1104-0        |  |  |
| T106R                                  | _  | _             |  |  |
| 24 Hour Time Switch                    | hes with Skip-A-Day                              |               |  |  |
| (1 hour minimum "(                     | ON'' time)                                       |               |  |  |
| T171                                   | P101S  | 7100          |  |  |
| T172                                   | _  | 7102          |  |  |
| T173                                   | 4003-00S, P103S                                  | 7200          |  |  |
| T174                                   | 4004-71S, P104S                                  | 7202          |  |  |
| T175                                   | 4005-00S   | 7120          |  |  |
| T176                                   | 4006-71S   | 7122          |  |  |
| T171R                                  | 4013-00S   | 7100-0        |  |  |
| T172R                                  | 4014-20S   | 7102-0        |  |  |
| T173R                                  | 4013-00S   | 7200-0        |  |  |
| T174R                                  | 4014-20S, 4014-71S                               | 7202-0        |  |  |
| T176R                                  | _  | 7122-0        |  |  |
| T1471BR                                | 47017-0S   | 7300          |  |  |
| T1472BR                                | 47017-20S  | 7302          |  |  |
| T1475BR                                | _  |               |  |  |
| T1871BR                                | _  | 7220          |  |  |
| 24 Hour Time Switch                    | hes with Skip-A-Day and                          |               |  |  |
| Carryover 1 hour m                     |  |               |  |  |
| T1471BCR                               | 47217-00S  | 7300L/7300L-0 |  |  |
| T171CR                                 | _  |               |  |  |
| T173CR                                 | 4213-0S  | 7200L         |  |  |
| T174CR                                 | 4114-27S   | 7202L         |  |  |
| Water Heater Time Switches with manual |  |               |  |  |
| "external override"                    |  |               |  |  |
| WH40                                   | _  | WH2           |  |  |

## **Specialty Time Switches**

| Paragon                    | Tork   |
|----------------------------|--|
| nes (12 minute minimum "ON | N'' time)  |
| _                          | _  |
| _                          | _  |
| (5 minute-4 hour dial)     |  |
| _                          | 8121   |
| _                          | 8301   |
| _                          | _  |
| _                          | 8061   |
| _                          | 8601   |
| _                          | 8602   |
| ers (7 day dial)           |  |
| _                          | T920L  |
| _                          | T930L  |
|                            | nes (12 minute minimum "ON———————————————————————————————————— |

## **Swimming Pool Time Switches**

| INTERMATIC                   | Paragon               | Tork   |  |  |
|------------------------------|-----------------------|--------|--|--|
| 24 Hour Time Switch          | nes in Plastic Case   |        |  |  |
| T101P                        | 4011-00P              | 1101-N |  |  |
| T102P                        | _                     | _      |  |  |
| T103P                        | 4013-00P              | 1103-N |  |  |
| T104P                        | 4014-71P              | 1104-N |  |  |
| 24 Hour Time Switch          | nes w/ Heater Circuit |        |  |  |
| T101R201                     | 41011-00              | _      |  |  |
| T104R201                     | 41014-20              | 1104FM |  |  |
| T101P201                     | 41011-00M             | _      |  |  |
| T104P201                     | 41014-20M             | _      |  |  |
| 2 in 1 24 Hour Time Switches |                       |        |  |  |
| T10101R                      | 4912-99               | 1101D  |  |  |
| T10404R                      | 4918-99               | 1104D  |  |  |
| T12404R                      | 4928-99               | 1104DF |  |  |

### **Astronomic Time Switches**

| INTERMATIC | Paragon                 | Tork          |
|------------|-------------------------|---------------|
| Astro Dial |                         |               |
| V45471R    | 4003SZ,47017-00S & 00SZ | 7200Z/7300Z   |
| V45472R    | 47017-71S & 71SZ        | 7202Z/7302Z   |
| V45471CR   | 47217-00SZ              | 7200ZL/7300ZL |
| V45472CR   | 47217-20SZ & 27SZ       | 7202ZL/7302ZL |

## **Special Timing Cycle**

| INTERMATIC        | Paragon                     | Tork                |
|-------------------|-----------------------------|---------------------|
| 24 Hour Time Sv   | vitches 15 minute minimu    | m "ON" time         |
| T1905             | 1015-00RS                   | 8001                |
| T1905R            | 42011-00                    | _                   |
| T1906             | 1015-00RS                   | 8004                |
| T1975             | 1015-00RS                   | 8007                |
| T1976             | 1015-00RS                   | 8008                |
| T1975E            | 1015-40TS                   | 8001-U              |
| Signal Timers     |                             |                     |
| ET279C            | 25001-0S                    | _                   |
| ET279C            | 25002-0S                    | _                   |
| ET279C            | 23001-00S                   | 5701/5702           |
| ET279C            | 23002-20S                   | _                   |
| ET279C            | 23002-00S                   | _                   |
| 24 Hour Switching | g (with adjustable 10-60 mi | n.) "ON" times      |
| T185              | 8025-00                     | 4277                |
| Momentary Cont    | act Time Switches (with d   | ry contacts for low |
| voltage remote a  | nd mechanically held con    | tactor control)     |
| ET279C            | 47016-00S                   | 1847A               |
| ET279C            | 47216-00S                   | 1847AL              |
| ET279C            | _                           | 1847AW              |
| ET279C            | 7216-00                     | 1847AWL             |

## 7-Day Time Switches

| INTERMATIC | Paragon          | Tork                 |
|------------|------------------|----------------------|
| T7401B     | 7007-00          | W100/W200/ W300/W400 |
| T7402B     | 7007-20, 7007-71 | W202/W302/W402       |
| T7801B     | 7008-00          | W120/W220            |
| T7802B     | 7008-20, 7008-71 | W222                 |
| T7401BC    | 7217-00          | W300L/W400L          |
| T7402BC    | 7217-20          | W302L/W402L          |
| T7801BC    | 7218-00          | W220L                |

## **In-Wall Timers**

| Grasslin                                  | Paragon  | Tork   |  |  |
|---|--|--|--|--|
| 24-Hour Electro-Mechanical In-Wall Timers |  |  |  |  |
| _   | _  | _  |  |  |
| KM2 ST-16                                 | 701A/701AC   | WB101  |  |  |
| _   | 701A-2G  | WB103  |  |  |
| KM2 ST-2G                                 | _  | WB103  |  |  |
| ic In-Wall Timers                         |  |  |  |  |
| ETC-502                                   | - A  | +  |  |  |
| ETC-503                                   |  | _  |  |  |
|   | _  | / —  |  |  |
|   | Mechanical In-Wa — KM2 ST-16 — KM2 ST-2G ic In-Wall Timers ETC-502 | Mechanical In-Wall Timers  — — — — — — — — — — — — — — — — — — — |  |  |

## Digital In-Wall Timers

| INTERMATIC        | Paragon       | Tork    |
|-------------------|---------------|---------|
|                   |               | TOTAL   |
| Interval Timers - | - Electronic  |         |
| EI15MH            | E500/ET2000/E | T1100 — |
| El200             | +             | _       |
| El210             | 7             | _       |
| El220             | _             | _       |
| FI230             | _             | _       |

## **Spring Wound Timers**

| INTERMATIC†   | M.H. Rhodes<br>Mark Time | Tork†† | Paragon†††     |
|---------------|--------------------------|--------|----------------|
| FF5M/FD5M     | 90004/9305M              | A505M  | SW5M/SWD5M     |
| FF15M/FD15M   | 90005/9315M              | A515M  | SW15M/SWD15M   |
| FF30M/FD30M   | 90006/9330M              | A530M  | SW30M/SWD30M   |
| FF60M/FD60M   | 90008/9360M              | A560M  | SW60M/SWD60M   |
| FF2H/FD2H     | 90281/9302H              | A502H  | SW2H/SWD2H     |
| FF4H/FD4H     | 90240/9304H              | A504H  | SW4H/SWD4H     |
| FF6H/FD6H     | 90007/9306H              | A506H  | SW6H/SWD6H     |
| FF12H/FD12H   | 90001/9312H              | A512H  | SW12H/SWD12H   |
| FF5MH         | 90030                    | _      | SW5MH          |
| FF15MH/FD15MH | 90539/9315MH             | A515MH | SW15MH/SWD15MH |
| FF30MH/FD30MH | 90032/9330MH             | A530MH | SW30MH/SWD30MH |
| FF60MH/FD60MH | 90024/9360MH             | A560MH | SW60MH/SWD60MH |
| FF6HH/FD6HH   | 90017/9306HH             | A506HH | SW6HH/SWD6HH   |
| FF12HH/FD12HH | 90015/9312HH             | A512HH | SW12HH/SWD12HH |

| INTERMATIC†                             | M.H. Rhodes                   | Tork†† | Paragon+++ |  |  |
|---|-------------------------------|--------|------------|--|--|
| *SPDT (for reverse action applications) |                               |        |            |  |  |
| FF32HH                                  | 9302HH                        |        |            |  |  |
| FF34HH                                  | 9304HH                        |        |            |  |  |
| FF36H/FD36H                             | _                             | _      |            |  |  |
| FF312H                                  |                               |        |            |  |  |
| FF315M                                  | 90012                         |        | _          |  |  |
| FF330M                                  | 90011                         | _      | _          |  |  |
| FF360M                                  | 90010                         |        |            |  |  |
| DPST (for breaking                      | both sides of 240 volt loads) |        |            |  |  |
| FF415M/FD415M                           |                               | _      | _          |  |  |
| FF430M/FD430M                           |                               |        |            |  |  |
| FF460M/FD460M                           |                               |        |            |  |  |
| FF46H/FD46H                             |                               |        | _          |  |  |
| FF412H                                  |                               |        | _          |  |  |

<sup>†</sup> FF Models with brushed aluminum plate for commercial/industrial applications. FD Models-decorator design with ivory or white time dial for use with existing toggle or decorator style switch plate.

Next Generation 365 Day Multi-Function Electronic Time Switches

| INTERMATIC          | Paragon Paragon  | Tork       | Lithonia |
|---------------------|------------------|------------|----------|
| ET70115C (SPDT)     | EL71/Series      | DT100**    |          |
| *(SPST)             | EC7001/208-240V  | DT100-2**  |          |
| **(DPDT)            | EC7001/277V      | DT100-3**  |          |
|                     | EC7001/208-277V  | DZS100**   |          |
|                     | EC7004/208-240V* |            |          |
|                     | EC7004/277V*     |            |          |
|                     | EC7004/208-277V* |            |          |
|                     | EC71/18S/120V    |            |          |
|                     | EC71D/18S/240V   |            |          |
|                     | EC71ST/120V      |            |          |
|                     | EC71ST/240V      |            |          |
|                     | EC71ST/277V      |            |          |
|                     | EC71STM/120V     |            |          |
|                     | EC71STM/277V     |            |          |
|                     | EC365/C/120V     |            |          |
| ET70115CR (SPDT)    | EL71PC/Series    | DZS100A    |          |
|                     | EC71STN3/120V    | DTS100A    |          |
| **(DPDT)            |                  | DG180      |          |
|                     |                  | DG180-2    |          |
| ET70115CR24         |                  | DG180-3    |          |
| for 24 Volt / 60 Hz |                  | DG100      |          |
| Input only          |                  | DG100-2    |          |
|                     |                  | DG100-3    |          |
|                     |                  | DG120**    |          |
|                     |                  | DG120-2**  |          |
|                     |                  | DZS100**   |          |
|                     |                  | DZS100-2** |          |
|                     |                  | DZS100-3** |          |
|                     |                  | DGS100     |          |
|                     |                  | DGS100-2   |          |
|                     |                  | DGS100-3   |          |
|                     |                  | DGS180     |          |
|                     |                  | DGS180-2   |          |
|                     |                  | DGS180-3   |          |
|                     |                  | DGM100**   |          |
|                     |                  | DGM100-2** |          |
|                     |                  | DGM100-3** |          |
|                     |                  | DWZ100A**  |          |

| IMPORTANT NOTE: | Review manufacturer's literature for |
|-----------------|--------------------------------------|
|                 | possible feature differences         |

| INTERMATIC   | Paragon                                      | Tork  | Lithonia              |
|--|--|---|-----------------------|
| ET70215C   | EL72/Series                                  | DT200   | _                     |
|  | EC72/120V                                    | DT200-2   |                       |
|  | EC72/240V                                    | DT200-3   |                       |
|  | EC72/277V                                    |   |                       |
|  | EC72D/120V                                   |   |                       |
|  | EC72D/240V                                   |   |                       |
|  | EC72ST/120V                                  |   |                       |
|  | EC72ST/240V                                  |   |                       |
|  | EC72ST/277V                                  |   |                       |
| ET70215CR  | EL72PC/Series                                | DZS200A   | _                     |
|  | EC72STN3/120V                                | DTS200A   |                       |
| ET70215CR24  |  | DZM200A   |                       |
| for 24 Volt / 60 Hz  |  | DS200   |                       |
| Input only   |  | DS200-2   |                       |
|  |  | DS200-3   |                       |
|  |  | DZS200  |                       |
|  |  | DZS200-2  |                       |
|  |  | DZS200-3  |                       |
|  |  | DZM200  |                       |
|  |  | DZM200-2  |                       |
|  |  | DZM200-3  |                       |
| ET70415CR  | EL74   | DZS400A   | _                     |
|  | EC74/50S/120V                                | DTS400A   |                       |
| ET70415CR24  | EC74/50S/240V                                | Z400B   |                       |
| for 24 Volt / 60 Hz  |  | Z400B-2   |                       |
|  | EC74/120D/120/240V                           |   |                       |
| Input only   | EC74/120D/120/240V<br>EC74/192MA/120/240V    | K400Z   |                       |
|  |  |   |                       |
|  |  | K400Z   |                       |
|  |  | K400Z<br>K400Z-2  |                       |
|  |  | K400Z<br>K400Z-2<br>K401Z   |                       |
|  |  | K400Z<br>K400Z-2<br>K401Z<br>K401Z-2  |                       |
|  |  | K400Z<br>K400Z-2<br>K401Z<br>K401Z-2<br>DIN103A   | LITE-                 |
| Input only   | EC74/192MA/120/240V                          | K400Z<br>K400Z-2<br>K401Z<br>K401Z-2<br>DIN103A<br>(3PDT)   | LITE-<br>KEEPER       |
| Input only   | EC74/192MA/120/240V                          | K400Z<br>K400Z-2<br>K401Z<br>K401Z-2<br>DIN103A<br>(3PDT)<br>K600Z  |                       |
| Input only  ET70815CR  | EC74/192MA/120/240V                          | K400Z<br>K400Z-2<br>K401Z<br>K401Z-2<br>DIN103A<br>(3PDT)<br>K600Z<br>K800Z   | KEEPER                |
| ET70815CR ET70815CR24  | EC74/192MA/120/240V                          | K400Z<br>K400Z-2<br>K401Z<br>K401Z-2<br>DIN103A<br>(3PDT)<br>K600Z<br>K800Z<br>K600Z-2  | KEEPER                |
| ET70815CR  ET70815CR24 for 24 Volt / 60 Hz                     | EC74/192MA/120/240V                          | K400Z<br>K400Z-2<br>K401Z<br>K401Z-2<br>DIN103A<br>(3PDT)<br>K600Z<br>K800Z<br>K600Z-2<br>K800Z-2   | KEEPER                |
| ET70815CR  ET70815CR24 for 24 Volt / 60 Hz                     | EC74/192MA/120/240V                          | K400Z<br>K400Z-2<br>K401Z-2<br>DIN103A<br>(3PDT)<br>K600Z<br>K800Z<br>K600Z-2<br>K800Z-2<br>K601Z   | KEEPER                |
| ET70815CR  ET70815CR24 for 24 Volt / 60 Hz                     | EC74/192MA/120/240V                          | K400Z<br>K400Z-2<br>K401Z-2<br>DIN103A<br>(3PDT)<br>K600Z<br>K800Z<br>K600Z-2<br>K800Z-2<br>K601Z-2<br>K601Z-2  | KEEPER                |
| ET70815CR  ET70815CR24 for 24 Volt / 60 Hz                     | EC74/192MA/120/240V                          | K400Z<br>K400Z-2<br>K401Z-2<br>DIN103A<br>(3PDT)<br>K600Z<br>K800Z<br>K600Z-2<br>K800Z-2<br>K601Z-2<br>K601Z-2<br>K801Z-2                               | KEEPER                |
| ET70815CR ET70815CR24 for 24 Volt / 60 Hz Input only           | EC74/192MA/120/240V  EL78 EC77/140/120, 240V | K400Z<br>K400Z-2<br>K401Z-2<br>DIN103A<br>(3PDT)<br>K600Z<br>K800Z-2<br>K800Z-2<br>K800Z-2<br>K601Z-2<br>K801Z-2<br>K801Z-2                             | KEEPER<br>LK8         |
| ET70815CR ET70815CR24 for 24 Volt / 60 Hz Input only ET71615CR | EL78<br>EC77/140/120, 240V                   | K400Z  K400Z-2  K401Z-2  DIN103A  (3PDT)  K600Z  K800Z  K600Z-2  K800Z-2  K601Z  K601Z-2  K801Z-2  K801Z-2  K801Z-2  K801Z-2  K801Z-2  K801Z-2  K801Z-2 | KEEPER<br>LK8<br>LK16 |

<sup>††</sup> Decorator models only.

<sup>†††</sup> PSW series no longer available; replaced by SW and SWD series

## Weatherproof Outdoor Receptacle Covers

| Intermatic | Taymac   | Carlon   | Cooper | Arlington   | T&B    | Raco    | P&S      |
|------------|----------|----------|--------|-------------|--------|---------|----------|
| WP1000C    | n/a      | E9UVCRN  | n/a    | n/a         | n/a    | 5752-0* | n/a      |
| WP1000GC   | n/a      | E9UVGRN  | n/a    | n/a         | n/a    | n/a     | n/a      |
| WP1000HC   | n/a      | E9UHCRN  | n/a    | n/a         | n/a    | 5761-0* | n/a      |
| WP1000HGC  | n/a      | E9UVGRN  | n/a    | n/a         | n/a    | n/a     | n/a      |
| WP1000RC   | 71101*   | n/a      | n/a    | DBV* series | n/a    | n/a     | n/a      |
| WP1000HRC  | n/a      | n/a      | n/a    | DBV* series | n/a    | n/a     | n/a      |
| WP1010C    | n/a      | E9UDVCRN | n/a    | n/a         | n/a    | n/a     | n/a      |
| WP1010HC   | n/a      | n/a      | n/a    | n/a         | n/a    | n/a     | n/a      |
| WP1010HMC  | MX3300   | n/a      | n/a    | n/a         | CKMD*  | n/a     | n/a      |
| WP1010MC   | MX3200   | n/a      | n/a    | n/a         | CKSDV* | n/a     | n/a      |
| WP1020C    | MM2440C  | n/a      | n/a    | DBUL1DC     | n/a    | n/a     | n/a      |
| WP1030C    | n/a      | n/a      | n/a    | n/a         | n/a    | n/a     | n/a      |
| WP1030MC   | MX6200*  | n/a      | n/a    | n/a         | 2CKD*  | n/a     | n/a      |
| WP1050     | MM7440C  | n/a      | n/a    | n/a         | n/a    | n/a     | n/a      |
| WP1100C    | MM400C   | n/a      | WIU-1  | DBU1C       | CKNM*  | n/a     | WIUC10CL |
| WP1110C    | n/a      | n/a      | n/a    | n/a         | n/a    | n/a     | n/a      |
| WP1150C    | MM740C   | n/a      | WIU-1D | n/a         | n/a    | n/a     | WIUC10DL |
| WP1100WC   | n/a      | n/a      | WIU-1W | DBUL1       | n/a    | n/a     | WIUC10WL |
| WP1110WC   | n/a      | n/a      | n/a    | n/a         | n/a    | n/a     | n/a      |
| WP1220C    | MM2440C* | E9U2CRN* | WIU-2* | n/a         | 2CKNM* | 5770-0* | n/a      |
| WP1230C    | n/a      | n/a      | n/a    | n/a         | n/a    | n/a     | WIUC20CL |
| WP1250C    | MM7440C* | n/a      | n/a    | n/a         | n/a    | 5789-0  | n/a      |
| WP2000     | n/a      | n/a      | n/a    | n/a         | n/a    | n/a     | n/a      |
| WP3100C    | MM400C   | n/a      | WIU-1  | DBU1C       | CKNM*  | n/a     | WIUC10CL |

<sup>\*</sup>Competitive product does not meet all possible device configurations and installation methods that the Intermatic cover handles.

## 7-Day Electronic Time Switches

| INTERMATIC                  | Paragon                         | Tork               | EZ Controls |
|-----------------------------|---------------------------------|--------------------|-------------|
| ET171C (SPST)               | EC7000/120*                     | ES101, EW101       | EZ-701-1    |
| *(SPDT)                     |                                 | ES120*, EW120*     |             |
|                             | EC7004/120                      | DG100*, DG180*     | EZ-701-1A   |
|                             |                                 | DIN101A*           |             |
| ET173C (DPST)               | EC7005/120                      | ES103, EW103       | EZ-701-2    |
|                             |                                 |                    | EZ-701-2A   |
| ET174C (DPST)               | EC7000/208-240*                 | ES103-2,ES103-3    | EZ-701-72   |
| *(SPDT)                     |                                 | ES120-2*, ES120-3* |             |
|                             | EC7000/277*                     | EW103-2,           |             |
|                             | EC7004/208-240                  | EW103-3            |             |
|                             | EC7004/277                      |                    |             |
|                             | EC7005/120, 208-240             |                    |             |
|                             | EC7005/277                      |                    |             |
| ET279C (SPST)               | EC11 Series*                    | DGM100**           | EZ-701-2M** |
| *(SPDT) **(DPDT)            | EC7001/120*                     | CD100A, DS200**    |             |
|                             |                                 | DIN100*, DIN200*   |             |
| ET8115C                     | EC71/30S/120                    | E, ES & EW120      | EZ-T105     |
|                             |                                 | DG100, DG180       | EZ-701-1A   |
| (SPST)                      |                                 |                    |             |
|                             |                                 | DIN101A            |             |
| ET8215C                     | _                               | DG120 (DPDT)       | _           |
| ET8215C                     | EC71D/30SM/                     | DGM100             | EZ-701-2M   |
| *(SPDT) **(DPDT)            | 120*                            | ·                  | ·           |
| EH10++                      | _                               | EH10               | _           |
| EH40††                      | _                               | EH20               |             |
| ++ With external load indic | ator and external load override |                    |             |

<sup>††</sup> With external load indicator and external load override.

### 24 Hour Electronic Time Switches

| INTERMATIC    | Paragon             | Tork           | EZ Controls |
|---------------|---------------------|----------------|-------------|
| ET100C (SPST) | EC1015P/120*        | E101, E120*    | EZ-T101     |
| *(SPDT)       | EC4000/120*         |                |             |
|               | EC4004/120          |                |             |
|               | EC4004P/120         |                |             |
|               | EC4004PC/120        |                |             |
|               | EC4000P/120*        |                |             |
|               | EC4000PC/120*       |                |             |
|               | EC11 & 11D/120*     |                |             |
| ET101C (SPST) | _                   | E101, E120*    | EZ-T101     |
| *(SPDT)       |                     |                |             |
| ET102C (SPST) | EC1015P/208-277     | E101-2         | EZ-T102     |
| *(SPDT)       | EC4000/208-277*     |                |             |
|               | EC4004/208-277      | E101-3         |             |
|               | EC4004P/208-277     |                |             |
|               | EC4000P/208-277     | E120-2*        |             |
|               | EC4004PC/208-277    |                |             |
|               | EC4005P/120, 208-24 | 0**            |             |
|               | EC4005PC/120, 208-2 | 40**           |             |
| **(DPST)      | EC11D/240*          | E120-3*        |             |
| ET103C (DPST) | _                   | E103           | EZ-T103     |
| ET104C (DPST) | EC4005/120-240      | E103-2, E103-3 | EZ-T104     |
|               |                     |                |             |

### **Astronomic Electronic Time Switches**

| INTERMATIC        | Paragon        | Tork     | EZ Controls |
|-------------------|----------------|----------|-------------|
| ET70115CR† (SPDT) | EC71ST/120     | DZS100   | EZ-701-2AS  |
|                   | EC71ST-N3/120V |          |             |
|                   | EC71ST/277     | DZS100-3 | EZ-701-72AS |

<sup>†</sup> Replaces ET816CR and ET833CR.



NOTE: ET70000 Series provides astronomic programming for any circuit(s).

## High Intensity Discharge (HID) Lighting

| Intermatic Part Number      | RAB Cross                              | Stonco Cross                                | Atlas Cross       | Hubbell           |
|-----------------------------|--|---|-------------------|-------------------|
| Wall Packs                  |  |   |                   |                   |
| WL050MH                     | WP1H50                                 | LPSC50MA-8                                  | WLSG-50MHQPK *    | N/A               |
| VL070MH                     | WP1H70                                 | LPSC70MA-8                                  | WLSG-70MHQPK *    | WGH70H*           |
| VL100MH                     | WP1H100                                | LPM2C100MA-8                                | WLSG-100MHQPK *   | PGM-100H-128-1L   |
| WL150MH                     | WP2H150QT                              | WPM150MA-8                                  | N/A               | N/A               |
| WL175MH                     | WP2H175QT                              | WPM175MA-8                                  | WLM-175MHQPK      | WGH175H           |
| WL250MH                     | WP3H250QT                              | WP250MA-8                                   | WLXD-250MHQPK     | WGH250H           |
| WL400MH                     | WP4H400QT                              | WP400MA-8                                   | WLXD-400MHQPK     | WGH400H           |
| WL035HPS                    | WP1SN35                                | WNPS35NLXL                                  | WLS-35HPK         | N/A               |
| WL050HPS                    | WP1SN50                                | WNPS50NLXL                                  | WLS-50HPK         | N/A               |
| WL070HPS                    | WP1SN70                                | WNPS70NLXL-8                                | WLS-70HPK         | WGH70S            |
| WL100HPS                    | WP1SN100                               | WNPS100NLXL-8                               | WLS-100HPK **     | PGM-100S-128-1*** |
| WL150HPS                    | WP2SH150QT                             | WPM150NLXL-8                                | WLM-150HQPK       | WGH150S           |
| WL250HPS                    | WP3SC250QT                             | WP250NLXL-8                                 | WLXD-250HQPK      | WGH250H           |
| WL400HPS                    | WP4SC400QT                             | WP400LXL-8                                  | WLXD-400HQPK      | WGH400H           |
| Cut-Off Wall Packs          | 7                                      |   | 1                 |                   |
| WLC70HPS                    | WP2CSH70                               | N/A   | WLMC-70HQPK       | N/A               |
| WLC100HPS                   | WP2CSH100                              | N/A   | WLMC-100HQPK      | N/A               |
| WLC100MH                    | WP2CH100QT                             | N/A   | WLMC-100MHQPK     | N/A               |
| WLC150HPS                   | WP2CSH150QT                            | N/A   | WLMC-150HQPK      | N/A               |
| WLC150MH                    | WP2CH150QT                             | N/A   | WLMC-150MHQPK     | N/A               |
| WLC175MH                    | WP2CH175QT                             | N/A   | WLMC-175MHQPK     | N/A               |
| WLC250HPS                   | WP3CSC250QT                            | N/A   | WLXDC-250HQPK     | N/A               |
| WLC250MH                    | WP3CH250QT                             | N/A   | WLXDC-250MHQPK    | N/A               |
| WLC400HPS                   | WP4CSC400QT                            | N/A   | WLXDC-400HQPK     | N/A               |
| WLC400MH                    | WP4CH400QT                             | N/A   | WLXDC-400MHQPK    | N/A               |
| Full Cut-Off Wall Packs     |  |   | WENDO TOOMING!    | 1071              |
| WLFC175MH                   | WP2FCH175QT                            | NPM175MAL-8                                 | WLMFC175MHQPK     | N/A               |
| WLFC150MH                   | WP2FCH150QT                            | NPM150MAL-8                                 | N/A               | N/A               |
| WLFC150HPS                  | WP2FCSH150QT                           | NPM150NLXL-8                                | WLMFC150HQPK      | N/A               |
| Floodlights                 | Wi Zi domidagi                         | IN MITOGREAE O                              | WEINI OTOOTIQI IX | 1071              |
| FL050MH                     | FFH50                                  | TLX50NMAL-1                                 | FL-50MHQPK        | F-050H1*          |
| FL070MH                     | FFH70                                  | SLA70NMAL-1                                 | FL-70MHQPK        | F-070H1*          |
| FL100MH                     | EZHH100QT                              | SLA100MAL-8                                 | FL-100MHQPK       | F-100H1*          |
| FL150MH                     | EZHH150QT                              | SLA150MAL-8                                 | N/A               | N/A               |
| FL175MH                     | EZHH175QT                              | SLA175MAL-8                                 | FLM-175MHQPK      | MIC-175H-338      |
| FL250MH                     | FZH250QT                               | SLM250MAL-8                                 | FLDX-250MHQPK     | MHS-Y250H-468-1   |
|                             |  |   |                   |                   |
| FL400MH                     | FZH400QT                               | SLM400MAL-8                                 | FLDX-400MHQPK     | MHS-Y400H-468-1   |
| FL035HPS                    | FF35                                   | TLX35NLXL-1                                 | FL-35HPK          | N/A<br>F 05004    |
| FL050HPS                    | FF50                                   | TLX50NLXL-1                                 | FL-50HPK          | F-050S1           |
| FL070HPS                    | FF70                                   | TLX70NLXL-1                                 | FL-70HPK          | F-070S1           |
| FL100HPS                    | EZSH100                                | SLA100LXL-8                                 | FL-100HPK **      | F-100S1*          |
| FL150HPS                    | EZSH150QT                              | SLA150LXL-8                                 | FLM-150HQPK       | MIC-150S-258      |
| FL250HPS                    | FZS250QT                               | SLM250LXL-8                                 | FLDX-250HQPK      | MHS-Y250S-468-1   |
| FL400HPS                    | FZS400QT                               | SLM400LXL-8                                 | FLDX-400HQPK      | MHS-Y400S-468-1   |
| Motion Detection            | OTI 44 ODIM                            | MDOOG                                       | N/A               | A1/A              |
| FL300MSW                    | STL110RW                               | MDS304WHT                                   | N/A               | N/A               |
| FL150QMSW                   | STL360Q1W                              | EZX150LMDWHT                                | N/A               | N/A               |
| HLMSW                       | STL110W                                | MDS600WHT                                   | N/A               | N/A               |
| Dusk-to-Dawn                | \# \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ | DTD 447511111111111111111111111111111111111 | 2017511           | NDII 4==0         |
| DD175MV                     | YLM175                                 | DTDA175NMML-1                               | DD175M            | NPU-175C          |
| DD150HPS                    | YLS150                                 | DTDA150NLXL-1                               | DD150HPS          | NPU-150S          |
| Quartz Floodlights          |  |   | ····              |                   |
| FL150Q                      | QF150                                  | EQX150L                                     | N/A               | QD-150B           |
| FL300Q                      | QF300                                  | EQ300L                                      | Q300WF            | N/A               |
| FL500Q                      | QF500                                  | EQ500L                                      | Q500WF            | QL505-BZ          |
| Canopy Lights               |  | I   |                   |                   |
| CP150HPS                    | VAN5S150QT                             | LCQ155LXL-8                                 | VN12-150HQPK      | C12-150S          |
| CP150MH                     | VAN5H150QT                             | LCQ155MAL-8                                 | VN12-150MHQPK     | C12-150H          |
| Wall Fixture with Photocell |  |   |                   |                   |
| WL070HPSPC                  | WPTS70                                 | TLW70NLXL-1                                 | WL-70HPCPK        | NRG307B           |

<sup>\*</sup> CROSS IS 120V ONLY, NOT QUAD TAP BALLAST

<sup>\*\*\*</sup> CROSS PROVIDED WITHOUT LAMP



<sup>\*\*</sup> CROSS HAS GLASS LENS, NOT POLYCARBONATE

## **Electronic Astronomic Time Switches**

| Intermatic         | Paragon                 | Tork    |  |
|--------------------|-------------------------|---------|--|
| SPST Astro Time Sw | ritches in NEMA 1 Case  |         |  |
| ET8015C            | _                       | _       |  |
| Astro Time Sw      | h.                      |         |  |
| ET8015CR           | EC365DST1/120V          | _       |  |
| SPDT Astro Time Sw | vitches in NEMA 1 Case  |         |  |
| ET8115C            | _                       | _       |  |
| SPDT Astro Time Sw | vitches in NEMA 3R Case |         |  |
| ET8115CR           | EL71/120V               | DWZ100A |  |
|                    | EL71/208-240V           | DZS100A |  |
|                    | EL71/277V               |         |  |
| DPST Astro Time Sw | ritches in NEMA 1 Case  |         |  |
| ET8215C            | _                       | _       |  |
| DPST Astro Time Sw | vitches in NEMA 3R Case |         |  |
| ET8215CR           | EC365DST2/120V          | DW200A  |  |
|                    | EC365DST2/277V          | DZS200A |  |
|                    | EL72/120V               |         |  |
|                    | EL72/208-240V           |         |  |
|                    | EL72/277V               |         |  |

## **Electronic Auto-Off Timers**

| Intermatic            | Leviton | Leviton |  |
|-----------------------|---------|---------|--|
| 5-10-15-30 Minute Ran | ge      |         |  |
| El200                 | 6230MI  | _       |  |
| El200LA               | 6230MA  | _       |  |
| El200W                | 6230MW  | _       |  |
| 10-20-30-60 Minute Ra | nge     |         |  |
| El210                 | 6260MI  | 6560MI  |  |
| El210LA               | 6260MA  | 6560MA  |  |
| El210W                | 6260MW  | 6560MW  |  |
| 1-2-4-8 Hour Range    |         |         |  |
| El220                 | _       | _       |  |
| El220LA               | _       | _       |  |
| El220W                | _       | _       |  |
| 2-4-8-12 Hour Range   |         |         |  |
| El230                 | 6212HI  | 6512HI  |  |
| El230LA               | 6212HA  | 6512HA  |  |
| El230W                | 6212HW  | 6512HW  |  |