# **ELC SERIES**

**ENERGY AND LIGHTING CONTROL** 

4, 8 & 12 ZONE

LIGHTING CONTROL
TIME SWITCH

# **APPLICATIONS**

(VL

HVAC equipment Indoor/Outdoor lighting Meets indoor/outdoor lighting energy code requirements

# THE DO-IT-ALL ENERGY & LIGHTING CONTROLLER

## **ORDERING INFO**

CALIFORNIA Title 24
ASHRAE 90.1

CATALOG NO.	UPC CODE	TIMER SUPPLY (VAC) 50/60Hz	NO. OF CHANNELS	OUTPUT CONTACTS
ELC74*	82523	24/120/208-240/277	4	SPDT
ELC78	82524	24/120/208-240/277	8	SPDT
ELC712	82525	24/120/208-240/277	12	SPDT
EPC-LC	82233	Accessory Photo Sensor		
LCS115M	82082	Accessory Momentary Switch		SPST

\*Also CSA certified.



**SCHEDULING:** 128 time based events allow individual programs for each day of the week at a minimum 1 minute apart. Event types include ON, OFF, Duration, or Duty Cycle.

SENSOR EVENT: 32 sensor driven events allow individual programs for each day of the week.

**ASTRONOMIC:** Adjustable 10° - 70° Northern or Southern latitudes. Settings can be offset from both sunset and sunrise times.

UNIVERSAL INPUT: 8 inputs may be assigned to any channel. ELC74 includes 4.

SWITCHED INPUT: Accepts input from optional momentary or maintained switch.

PHOTOSENSOR INPUT: Accepts input from optional sensor. EPC-LC (indoor/outdoor) has a range from 0 - 200 foot-candels.

USER DEFINED INPUT: Accepts user supplied 4 — 20 milliamp sensor.

MOMENTARY CONTACT: May be configured for momentary ON/OFF operation to control latching contactors. The ELC74 operates as a two channel unit. The ELC78 operates as a four channel unit. The ELC712 operates as a six channel unit.

HOLIDAYS: 26 holidays may be set using 10 individual dates, 10 month type (last Monday in May), or 6 specific holidays with one of 3 independent holiday schedules.

**BLOCK HOLIDAY:** 10 holiday blocks can be set for individual days or for duration of any number of days and may use one of 3 holiday schedules.

**PULSE/TIME DURATION:** 4 different ON settings from 1 second to 23 hours, 59 minutes, 59 seconds.

**DUTY CYCLE:** 4 different ON and OFF patterns from 1 second to 23 hours, 59 minutes, 59 seconds.

**DAYLIGHT SAVING:** Automatic adjustment (can be omitted).

**LEAP YEAR:** Automatic Compensation.

**REMOTE OVERRIDE:** Universal input may be programmed for timed override from a momentary or maintained dry contact switch.

MANUAL OVERRIDE: Keyboard button control until the next regularly scheduled ON or OFF, automatic operation then resumes.

STAGGERED START: Optional stagger up time between channels, after a power outage; selectable from 5 seconds, 15 seconds, 30 seconds, 1 minute, 5 minutes, 10 minutes, and 15 minutes.

**CLOCK FORMAT**: AM/PM or 24 hour format.

POWER OUTAGE BACKUP: The program and time of day are maintained for a minimum of 2 days by means of a capacitor. After two days, a lithium battery takes over and provides a minimum accumulated time of 1 year. The lithium battery should provide over 10 years of protection.

**COMPUTER INTERFACE:** Unit may be programmed with a PC.



#### **SPECIFICATIONS**

TIMING ACCURACY: Line frequency.

**INPUT VOLTAGE:** 

24/120/208-240/277VAC, 50/60Hz.

**TERMINAL RANGE:** 

**#10** - **#16AWG** for line input.

#10 - #16AWG for load output.

#14 - #22AWG universal input.

**OPERATING TEMPERATURE:** 

 $-20^{\circ}$ F to  $+140^{\circ}$ F ( $-29^{\circ}$ C to  $+60^{\circ}$ C).

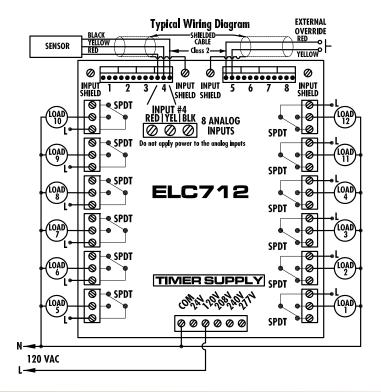
**POWER CONSUMPTION:** 10VA Maximum.

**ENCLOSURE:** Metal Indoor NEMA 1 with lockable hasp (see page 153 for dimensions).

### **CONTACT RATINGS**

TYPE	VOLTAGE	RATING		
	TOLINOL	NO	NC	
General Purpose	120 - 277VAC	20A	10A	
Ballast	120 VAC 208-277 VAC	20A 10A	10A 3A	
Tungsten	120-277VAC	5A		
Pilot Duty	120-240VAC	470VA	275VA	
Motor	120VAC 208-277VAC	1HP 2HP	¹∕₄HP ¹∕₂HP	

# **WIRING DIAGRAMS**



#### **SPECIFICATION WRITER'S GUIDE**

Installer shall furnish and install Tork ELC74 four channel (ELC78 eight channel or ELC712 twelve channel) electronic time control. The control shall have 24 hour, 7 day, 365 day or astronomic capability with 128 events available. It shall also have 4 (8) user-definable durations and duty cycle lengths plus automatic daylight saving time and leap year adjustments. Control shall have remote override capabilities (timed, toggle or enable type). Control shall have keyboard override until overridden again or until next event is reached. It shall be capable of switching loads based on user-definable temperature and light levels with 32 events available. Control shall have momentary (latching relay) capability and shall have astronomic features plus 30 definable holidays and 6 pre-programmed holidays. Control shall provide 2 days of power outage carry-over without a battery. Control shall provide 10 years of power outage protection with a battery. The digital time display shall be  $\frac{3}{4}$ " in height. Clock format shall be selectable, allowing a choice of 12 hour (AM/PM) or 24 hour format. Control shall be capable of interfacing (sending and receiving data) with a personal computer. Control shall be housed in a NEMA 1, lockable steel enclosure, to guard against vandalism or tampering.