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# Plugs and Receptacles For Industrial Heavy Duty Hazardous Area Use

## Application and Selection

### Applications:

- To connect portable or movable electrical equipment, such as motors, motor-generator sets, tools, light systems.

### Considerations for Selection:

#### Environmental:

- The environment of the enclosure location in terms of NEC/CEC compliance.
- Material and construction to withstand rough usage and atmospheric conditions.

#### Electrical:†

- Sufficient current carrying capacity to meet load requirements.
- Compatibility with electrical system (new or existing installation).
- Interchangeability of plugs with other hazardous and non-hazardous area receptacles.

See "Quick Selector" below and "Interchangeability Chart" on next page .

### Options:

- Special polarity arrangements available as options, as well as special back boxes and hub arrangements for some series. See listing pages for details.

### Quick Selector Chart

Receptacle Series	NEC Compliances	Electrical Rating†		Mating Plug
		Poles	Amps & Volts	
CES, CESD	Cl. I, Division 1 and 2, Groups C, D	2-wire, 3-pole 3-wire, 4-pole	30A, 120-240VAC 7A, 460VAC‡ 60A, 115-230VAC 30A, 460VAC‡	CPH
CPR	Non-hazardous	2-wire, 3-pole	20A, 125-250VAC 20A, 18VDC	CPP
CPS	Cl. I, Division 1 and 2, Groups C, D	2-wire, 3-pole  3-wire, 4-pole	20A, 125-250VAC 20A, 18VDC 30A, 125-250VAC 7A, 480VAC‡  30A, 125-250VAC 7A, 460VAC‡	CPP
ENR	Cl. I, Division 1 and 2, Groups B, C, D Cl. II, Division 1 and 2, Groups F, G Cl. III	NEMA 5 & 6 Config.	15A, 125VAC 15A, 250VAC 20A, 125VAC 20A, 250VAC	ENP

‡CSA certified units are rated at 600 VAC.

†If higher ratings are needed, refer to receptacles interlocked with safety switches and circuit breakers in Section 4P.

**WARNING:** CPR *Arktite*® cable connectors are for use in non-hazardous areas only.

# Plugs and Receptacles For Industrial Heavy Duty Hazardous Area Use

2P

## Interchangeability Chart

### Interchangeability Chart

Many of the plugs listed in this section can be used interchangeably with receptacles from other sections, both in hazardous and non-hazardous areas, **provided electrical rating and style of plug and receptacle are the same**. The following table is a summary of possible combinations.

Plugs Shown in Section 2P	Can be Used with these Receptacle Series	Listed in Section	Plugs & Receptacle Electrical Rating
<b>APJ</b>	AR, NR, NPR FSQ, EPC, EPCB, EBBR  DBR, WSR, NSR, NBR	1P 4P	30 and 60 amp. 2-wire, 3-pole 3-wire, 4-pole
		3P, 4P	30 and 60 amp. 3-wire, 4-pole
<b>CPH</b>	AR, NR, NPR FSQ, EPC, EPCB, EBBR  DBR, WSR, NBR, NSR	1P 4P	30 and 60 amp. 2-wire, 3-pole 3-wire, 4-pole
		3P, 4P	30 and 60 amp. 3-wire, 4-pole
<b>CPP</b>	AR, NR, NPR  DBR, WSR, NBR, NSR	1P	30 amp. 2-wire, 3-pole 3-wire, 4-pole
		3P, 4P	30 amp. 3-wire, 4-pole

2P

## Delayed Action Factory Sealed

### Applications:

CPS receptacles, angle and straight types, and CPP plugs are used:

- With portable electrically operated devices such as motor-generator sets, compressors, conveyors, portable tools, lighting systems and similar equipment
- In locations which are hazardous due to the presence of flammable vapors or gases
- In damp or corrosive locations
- In petroleum refineries, chemical and petrochemical plants, and other process industry facilities where similar hazards exist

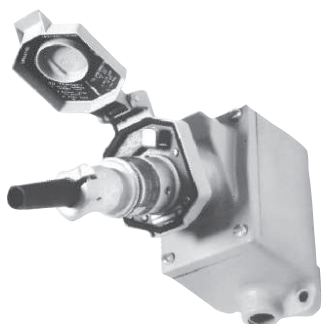


Fig. 1

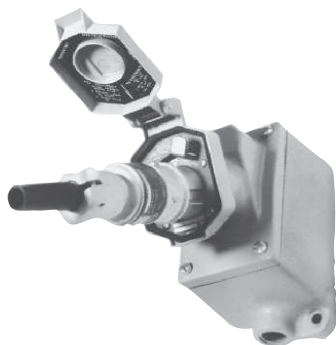


Fig. 2

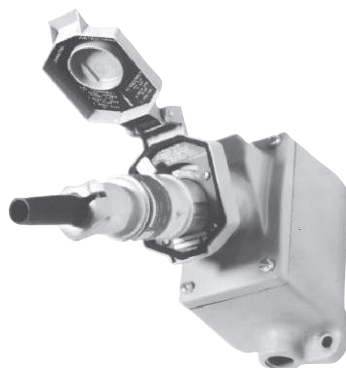


Fig. 3

### Features:

- The delayed action feature permits the plug to be used as an emergency push-pull switch
- CPS receptacles are equipped with a rotating mechanism which prevents complete withdrawal of the CPP plug in one continuous movement. Details of operation are illustrated and explained below

**Figure 1** shows a CPS angle type receptacle assembly with CPP plug fully engaged.

**Figure 2** shows the plug withdrawn until it is stopped by the delayed action mechanism. In this position the circuit has been broken and the arc has been snuffed in the contact chambers. To completely withdraw the plug as shown in **Figure 3**, the delayed action release lever must be rotated counterclockwise. The time required to actuate the mechanism permits dissipation of the arc-generated heat before contacts and arcing chambers are opened to the atmosphere. When inserting the plug, the reverse procedure is followed.

- CPS receptacles are factory sealed to simplify installation and wiring – external seals are not required
- Series 152 receptacles have top hinged cover design, with 45° downward angled receptacle housing, to provide superior environmental protection from accumulations of dust, snow, ice, and water
- Back boxes used for angle type receptacles are standard EDS bodies. Assemblies are listed with single and two gang bodies and dead end or through feed hubs – 1/2" to 1" sizes
- Back boxes used for straight type receptacles are available with a variety of hub arrangements in 1/2" and 3/4" sizes
- All receptacles and 30 ampere plugs are provided with pressure terminals for ease of field wiring. 20 ampere plugs have solder terminals.

### Certifications and Compliances:

- NEC/CEC:  
Class I, Division 1 and 2, Groups C, D
- UL Standard: 1010
- CSA Standard: C22.2 No. 30

### Standard Materials:

- Receptacle housings – die cast copper-free aluminum
- EDS Back boxes – *Feraloy*® iron alloy (U.S.)/Copper-free aluminum (Canada)
- Other back boxes – *Feraloy* iron alloy
- Plug exteriors – copper-free aluminum or Krydon® fiberglass-reinforced polyester material (see listings)
- Insulation – all receptacles and plugs – Krydon fiberglass-reinforced polyester material
- Pressure or solder contacts – brass
- Crimp/solder contacts – leaded red brass

### Standard Finishes:

- Copper-free aluminum – aluminum acrylic paint
- *Feraloy* – electrogalvanized and aluminum lacquer
- Fiberglass-reinforced polyester – natural (red, white)
- Brass – natural
- Leaded red brass – electro-tin-plate

### Electrical Rating Ranges:

- Angle type – 20 and 30 amperes; 125 and 250 VAC
- Straight type – 20 amperes; 125 and 250 VAC

### Grounding:

- NEC Article 501 and CEC Part 1 Section 18 requires that metal frames or exposed non-current-carrying metal parts of portable devices used in hazardous locations be grounded through an extra conductor in the portable cord
- CPS receptacles and CPP plugs are provided with an extra grounding pole
- In plugs, provision is made for attachment of the grounding wire to the grounding pole. In addition, direct connection is provided between plug and receptacle housings and the grounding pole. In the receptacle, grounding is accomplished through the conduit system

### Interchangeability of Plugs with Non-hazardous Location Receptacles:

- 30 ampere CPP plugs can also be used with standard 30 ampere AR Arktime receptacles of the same style and number of poles, thus permitting portable devices suitable for use in hazardous locations to be connected to receptacles in both hazardous and non-hazardous areas

**Note:** Equipment to be used in hazardous areas must be suitable for use in the specific hazardous location.

# Arktite® Circuit Breaking CPS Receptacles and CPP Plugs

Cl. I, Div. 1 & 2, Groups C, D  
Explosionproof  
Wet Locations

2P

**Delayed Action  
Factory Sealed**

## Options:

The following special options are available from factory by adding suffix to Cat. #:

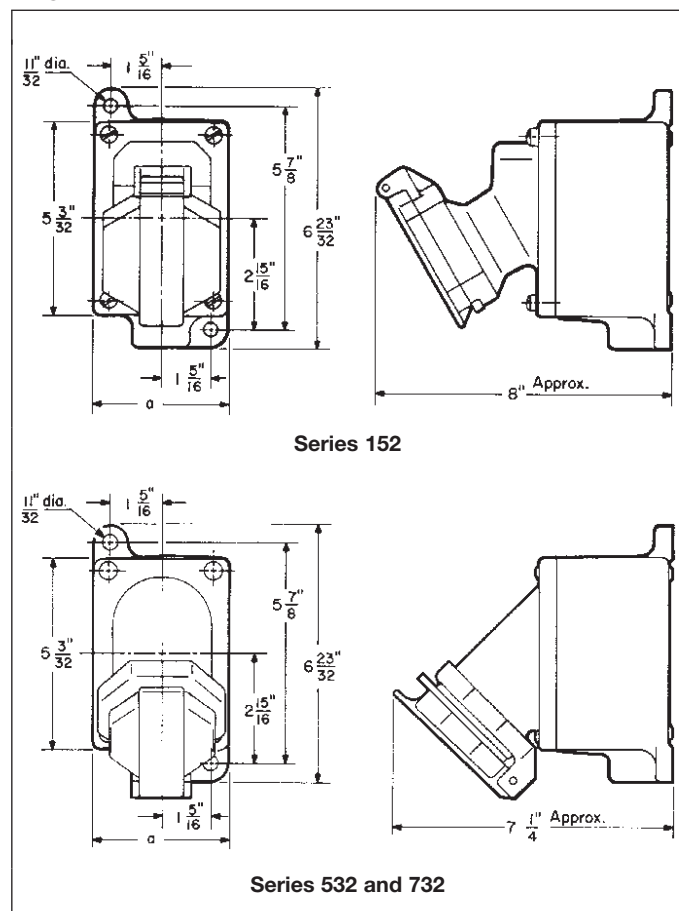
### Description

Material: copper-free aluminum, natural finish, is available on certain back boxes. See listings..... **Suffix SA**  
Receptacle interior rotated 22½° to right (viewed from face) and plug changed to match. 30 ampere units only..... **S4**  
Combination of receptacles and EFS/EFD or EDS series devices, such as pilot lights, switches, pushbutton stations, etc., can be furnished using three, four and five gang bodies..... **Specify**  
Hub arrangements other than those listed can be supplied..... **Specify**

## Dimensions

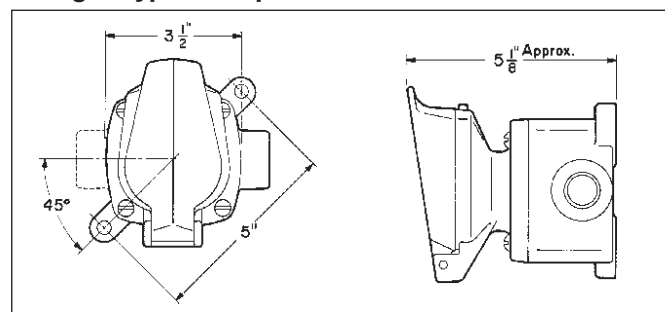
In Inches:

### Angle Type Receptacles

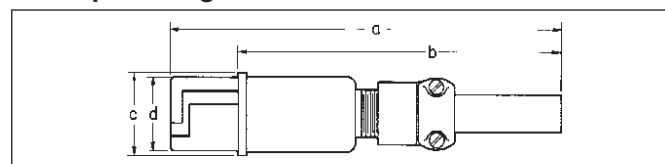


a = 3½ for single gang  
7<sup>9</sup>/<sub>16</sub> for two gang

### Straight Type Receptacles



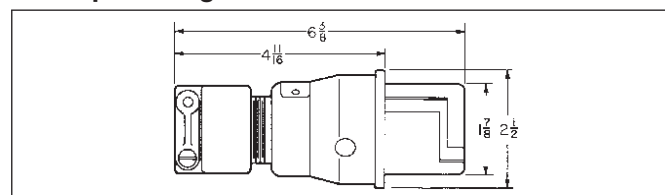
### 20 Ampere Plugs



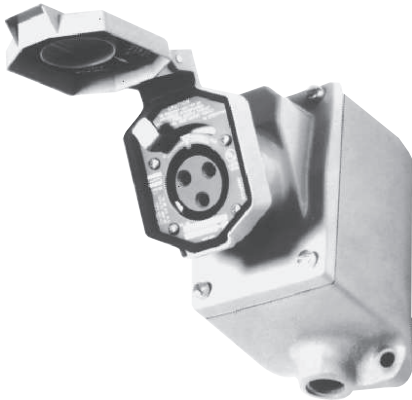
Cat. #	a†	b†	c	d
CPP516‡	8 <sup>3</sup> / <sub>8</sub>	6 <sup>7</sup> / <sub>8</sub>	1 <sup>3</sup> / <sub>4</sub>	1 <sup>9</sup> / <sub>16</sub>
CPP512‡	7	5 <sup>1</sup> / <sub>2</sub>	1 <sup>3</sup> / <sub>4</sub>	1 <sup>9</sup> / <sub>16</sub>

†These dimensions are approximate and vary with cable size.  
‡ 20 amp plugs are furnished with solder terminations at standard, ground contacts have pressure terminations.

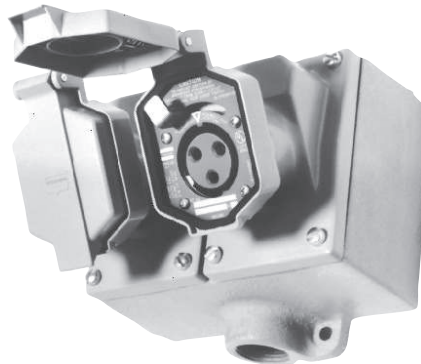
### 30 Ampere Plugs



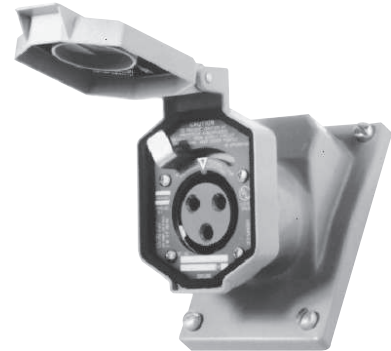
**Delayed Action  
Factory Sealed**



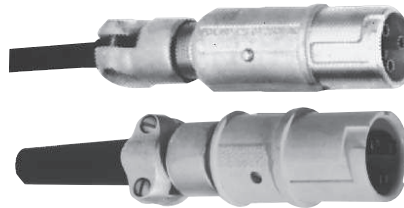
CPS152 – Single gang angle type



CPS152 – Two gang angle type



CPS152R – Receptacle unit only



CPP Plugs with  
mechanical cable grip and neoprene bushing

## Style 2 – Grounded Through Extra Pole and Shell

Rating	Description		Hub Size (In.)	Single Gang Receptacle Assembly Cat. #	Two Gang Receptacle Assembly Cat. #	Cable Dia. (In.)	Plug with Aluminum Handles Cat. #	Plug with High Impact Molded Composition Handle Cat. #	Receptacle Unit only Cat. #
20A, 1 HP, 125–250VAC, 60 hertz, 20A, 18VDC	2-wire, 3-pole	Dead End	1/2 3/4 1	CPS152 101* CPS152 201* CPS152 301*	CPS152 102* CPS152 202* CPS152 302*	.312 to .625†	CPP516‡	CPP512‡	CPS152R
		Through Feed	1/2 3/4 1	CPS152 111* CPS152 211* CPS152 311*	CPS152 112* CPS152 212* CPS152 312*				
30A, 1 1/2 HP, 125–250VAC, 60 hertz, 7A, 1/2 HP, 480VAC**, 60 hertz	2-wire, 3-pole	Dead End	1/2 3/4 1	CPS532 101 CPS532 201 CPS532 301	CPS532 102 CPS532 202 CPS532 302	.375 to .875†	CPP4553		CPS532R
		Through Feed	1/2 3/4 1	CPS532 111 CPS532 211 CPS532 311	CPS532 112 CPS532 212 CPS532 312				
30A, 3 HP, 125–250VAC, 60 hertz, 7A, 1 HP, 480VAC**, 60 hertz	3-wire, 4-pole	Dead End	1/2 3/4 1	CPS732 101 CPS732 201 CPS732 301	CPS732 102 CPS732 202 CPS732 302	.375 to .875†	CPP4752		CPS732R
		Through Feed	1/2 3/4 1	CPS732 111 CPS732 211 CPS732 311	CPS732 112 CPS732 212 CPS732 312				

\*Back boxes are available in copper-free aluminum. To order, add suffix SA to the Cat. No.

\*\* CSA certified units are rated at 600 VAC at 7A.

† Receptacles will take any of the plugs grouped in the bracket opposite the receptacle listings.

‡ 20 amp plugs are furnished with solder terminations at standard, ground contacts have pressure terminations.

# Arktite® Circuit Breaking CPS Receptacles and CPP Plugs

Cl. I, Div. 1 & 2, Groups C, D  
Explosionproof  
Wet Locations

**2P**

**Delayed Action  
Factory Sealed**

## CPS Straight Type

2-wire, 3-pole

20A, 1HP, 125–250VAC, 60–400 hertz, 20A, 18VDC

### CPS Dead End



Hub Size (In.)	Assembly Cat. #	Body Cat. #
1/2	CPS14 120	CPS120
3/4	CPS14 20	CPS20

### CPS Through Feed



Hub Size (In.)	Assembly Cat. #	Body Cat. #
1/2	CPS14 121	CPS121
3/4	CPS14 21	CPS21

### CPS Receptacle Unit With Spring Door



Type	Cat. #
CPS Receptacle Unit with Spring Door	CPS14R

### CPP Plugs

With Mechanical Cable Grip and Neoprene Bushing

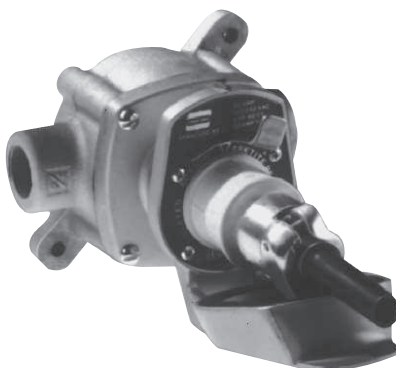


With aluminum handle



With high impact molded composition handle

Cable Dia. (In.)	Aluminum Cat. #	Composition Cat. #
.312 to .625	CPP516	CPP512



CPS straight type shown with plug



2P

# Arktime® CPR Cable Connector Receptacles

## Delayed Action

## Circuit Breaking

**Applications:**

CPR *Arktime* delayed action cable connector receptacles are used in **non-hazardous areas only\***:

- To make up adapter sets for connecting portable devices having CPP plugs to receptacles in non-hazardous areas. This is accomplished by equipping one end of the length of cable with the CPR receptacle and the other with a plug to mate with the receptacle in the non-hazardous area.
- To make up extension cords using the CPR receptacle at one end and a CPP plug at the other.

**Features:**

- Spring door housing with the same delayed action rotating mechanism provided in CPS receptacles
- Pressure terminals are furnished for ease of wiring
- Gland nut with mechanical cable grip and bushing for effective strain relief

**Standard Materials:**

- Housing – copper-free aluminum
- Insulation – fiberglass-reinforced polyester
- Contacts – brass

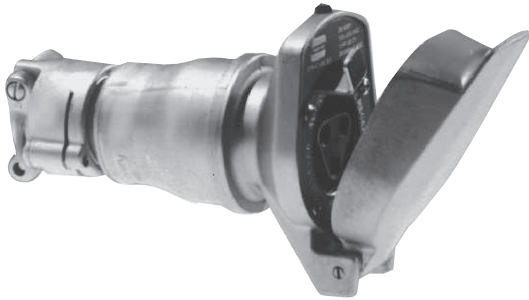
**Standard Finishes:**

- Copper-free aluminum – natural
- Fiberglass-reinforced polyester – natural (red)
- Brass – natural

\*CSA certified unit suitable for Class I, Groups C and D (not available in USA).

**Style 2 – Grounded Through Extra Pole and Shell**

**For Use With CPP516 and CPP512 Series Plugs**



Description	Rating	Cable Dia.	Cat. #
2-wire, 3-pole	20A, 1HP, 125–250VAC, 60 hertz 20A, 18 VDC	.375 to .625	CPR154



## Premier and Value Series

## Ark•Gard® Premier Series:

- The premier line of ENR Receptacles (M4) come equipped with an exclusive cover design that provides a watertight NEMA 4 rating while not in use. This design provides superior protection in environments that are NEMA 4 and where extra protection is required against blowing sand and dust. There is no other product offering on the market today that can offer these hazardous NEMA style units with this level of watertight protection. The premier ENR Receptacle series also includes value-added features that provide ease of installation, added safety, reduced maintenance costs, and increased product life.

## Ark•Gard® Value Series:

- The value line of ENR Receptacles is the ideal solution for rugged and industrial NEMA configured application up to 20 amperes. Like the premier line, this product comes equipped with built-in safety features that reject standard NEMA configuration plugs that could cause an arc in hazardous areas.

## FEATURES AND BENEFITS - Premier Solution (M4)

**Gasketed Flamepath:**

- For maximum sealing when mounted on EDS or EFS backboxes to meet NEMA 4 hosedown application requirements

**Gasketed Screw Cap Cover Design:**

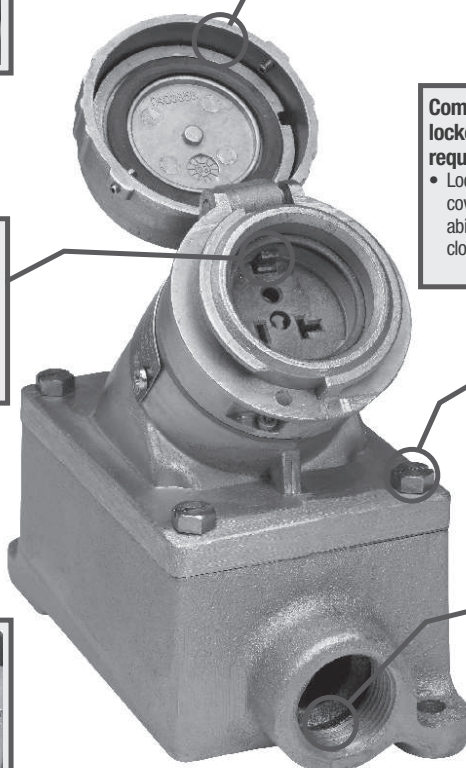
- Rated NEMA 4 while not-in-use
- Offers superior protection from harsh environments for increased product life
- Eliminates the need to purchase a separate environmental cover for added protection

**Complies with OSHA lockout/tagout requirements:**

- Lockout tagout hole in cover gives users the ability to lock the cover closed while not-in-use

**Spring-Loaded Sliding Key Offers Increased Safety:**

- Rejects standard NEMA/EEMAC configuration plugs that could cause an arc in a hazardous area.
- Also prevents the receptacle faceplate from being rotated until the ENP plug is fully inserted.

**Hex Head Mounting Screws:**

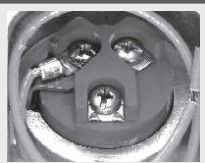
- Gasketed screw design to achieve NEMA 4 rating when mounted to EDS or EFS back boxes

**Integral Bushings:**

- Taper tapped hubs protect wire installation during wire-pulling

**Saddle Clamp Terminals:**

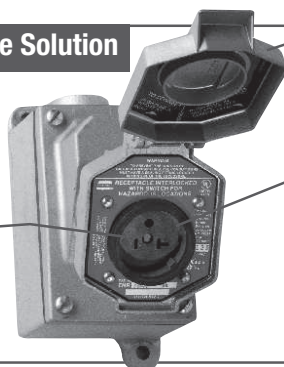
- Reduce installation and maintenance costs – easy to wire, time-saving terminals



Note: Premier series with NEMA 4 design only available when ordered with "M4" suffix

## FEATURES AND BENEFITS - Traditional Value Solution

- To make connection, simply insert the ENP plug and rotate to close the circuit
- Built-in features cause the ENP plug to become locked in the receptacle and cannot be accidentally disengaged while in use



- Top hinged cover design with 45° downward angle provides protection in damp, wet and dirty locations

- Molded-in contact design provides for superior interior contact reliability
- Incorporates three spring-loaded slide keys that prevent the receptacle faceplate from being rotated until the ENP plug is fully inserted into the receptacle.

# 2P ENR Premier Series Dead Front Interlocked Circuit Breaking Receptacles ENP Plugs

Cl. I, Div. 1 & 2, Groups B\*, C, D Explosionproof  
Cl. II, Div. 1 & 2, Groups F, G Dust-Ignitionproof  
Cl. III Raintight  
NEMA 3, 7BCD, 9FG, 12 Wet Locations

## Applications:

Ark•Gard® products are used:

- In applications that require additional environmental protection, or in NEMA 4 hosedown environments where washdown/hosedowns occur
- With portable or fixed electrical equipment such as motor generator units, welders, pumps, compressors, heating and cooling units, cellular relay stations, conveyors, lighting systems, and similar equipment
- In areas made hazardous by the presence of flammable vapors and gases or combustible dusts
- When power requirements do not exceed 20 amperes

## Certifications and Compliances:

- NEC:  
Class I, Division 1, Groups B\*, C, D  
Class II, Groups F, G  
Class III  
NEMA 3, 3R, 4X, 7
- CEC‡:  
Class I, Division 1, Groups B\*, C, D  
Class II, Groups G  
Class III  
NEMA 3, 3R, 4X, 7

## Standard Materials:

- Receptacle housing, spring door and plug body – die cast copper-free aluminum
- Interiors: receptacle – Krydon® fiberglass-reinforced polyester material; plugs – nylon 100
- Contacts: receptacle blade – brass; receptacle switch – silver; plug – brass
- Receptacle cover hinge pin and spring – stainless steel
- Receptacle gasket – neoprene
- Plug bushing – neoprene

## Standard Finishes:

- Copper-free aluminum – aluminum acrylic paint
- Brass – natural

## Options:

### Description

Corro-free™ epoxy powder finish for added corrosion resistance

### Suffix

S752

## Electrical Rating Ranges:

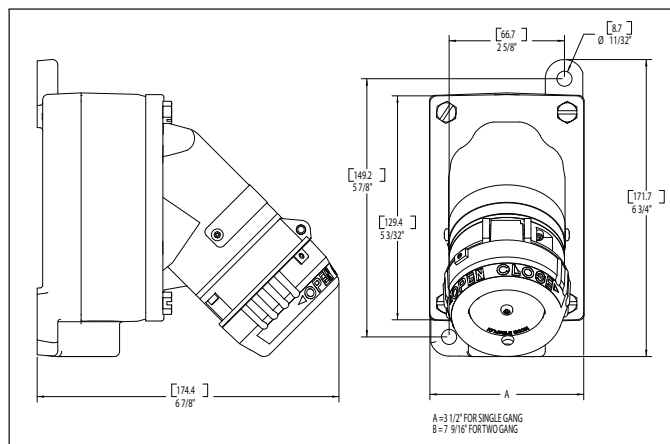
- Receptacles:  
15 amperes; 125 VAC and 250 VAC, 50–400 hertz  
20 amperes; 125 VAC and 250 VAC, 50–400 hertz
- Plugs:  
15 amperes; 125 VAC and 250 VAC, 50–400 hertz  
20 amperes; 125 VAC and 250 VAC, 50–400 hertz

## Grounding:

- NEC Article 501 and CEC Section 18 requires that metal frames or exposed non-current-carrying metal parts of portable devices used in hazardous locations be grounded through an extra conductor in the portable cord. ENR Receptacles and ENP Plugs are provided with an extra grounding pole.

## Dimensions

### In Inches:



### Type

Single Gang  
Double Gang

### Dimension A

3 1/2"  
7 9/16"

\*Single gang assemblies purchased with an EDS back box are suitable for Class I, Group C, D only. For self-certified Class I, Group B rating, add the suffix "GB" to the catalog number (i.e. ENR21201 GB M4). Dual gang assemblies purchased with an EDS back box are suitable for Class I, Group C, D only. For self-certified Class I, Group B rating, add the suffix "GB" to the catalog number (i.e. ENR22201 GB M4).  
‡15A units are CSA Listed only.

# ENR Premier Series Dead Front Interlocked Circuit Breaking Receptacles

















## ENP Plugs

Cl. I, Div. 1 & 2, Groups B\*, C, D  
Cl. II, Div. 1 & 2, Groups F, G  
Cl. III  
NEMA 3, 7BCD, 9FG, 12

Explosionproof  
Dust-Ignitionproof  
Raintight  
Wet Locations

**2P**

### Ordering Information:

									
15A	15 A Receptacle Rating	Description	Hub Size	Single Gang* Receptacle Assembly Cat. #	Two Gang** Receptacle Assembly Cat. #	Receptacle\$ Unit Only Cat. #	NEMA Config.	15 A Plug†† Cat. #	NEMA Config.
	15 Amp 125 Volt	Dead End	1/2"	ENR11151 M4	ENR12151 M4	ENR5151 M4		ENP5151	
		Through Feed	3/4"	ENR21151 M4	ENR22151 M4				
			1"	ENR31151 M4	ENR32151 M4				
			1/2"	ENRC11151 M4	ENRC12151 M4				
			3/4"	ENRC21151 M4	ENRC22151 M4				
			1"	ENRC31151 M4	ENRC32151 M4		5-15R		5-15P
	15 Amp 250 Volt	Dead End	1/2"	ENR11152 M4	ENR12152 M4	ENR6152 M4		ENP6152	
		Through Feed	3/4"	ENR21152 M4	ENR22152 M4				
			1"	ENR31152 M4	ENR32152 M4				
			1/2"	ENRC11152 M4	ENRC12152 M4				
			3/4"	ENRC21152 M4	ENRC22152 M4				
			1"	ENRC31152 M4	ENRC32152 M4		6-15R		6-15P
20A	20 A Receptacle Rating	Description	Hub Size	Single Gang* Receptacle Assembly Cat. #	Two Gang** Receptacle Assembly Cat. #	Receptacle\$ Unit Only Cat. #	NEMA Config.	20 A Plug†† Cat. #	NEMA Config.
	20 Amp 125 Volt	Dead End	1/2"	ENR11201 M4	ENR12201 M4	ENR5201 M4		ENP5201	
		Through Feed	3/4"	ENR21201 M4	ENR22201 M4				
			1"	ENR31201 M4	ENR32201 M4				
			1/2"	ENRC11201 M4	ENRC12201 M4				
			3/4"	ENRC21201 M4	ENRC22201 M4				
			1"	ENRC31201 M4	ENRC32201 M4		5-20R		5-20P
	20 Amp 250 Volt	Dead End	1/2"	ENR11202 M4	ENR12202 M4	ENR6202 M4		ENP6202	
		Through Feed	3/4"	ENR21202 M4	ENR22202 M4				
			1"	ENR31202 M4	ENR32202 M4				
			1/2"	ENRC11202 M4	ENRC12202 M4				
			3/4"	ENRC21202 M4	ENRC22202 M4				
			1"	ENRC31202 M4	ENRC32202 M4		6-20R		6-20P

\*Single gang assemblies purchased with an EDS back box are suitable for Class I, Group C, D only. For self-certified Class I, Group B rating, add the suffix "GB" to the catalog number (i.e. ENR21201 M4 GB).

\*\* Dual gang assemblies purchased with an EDS back box are suitable for Class I, Group C, D only. For self-certified Class I, Group B rating, add the suffix "GB" to the catalog number (i.e. ENR22201 M4 GB).

\$Receptacle units alone (i.e. ENR5201) are not suitable for Class I, Group B.

††ENP Plugs use #12 or #14 AWG type S, SO, ST or STO cord with range of .540 to .635 inches diameter.

**Note:** ‡15A with copper-free aluminum EDS, EDSC back boxes. 20A with Feraloy® iron alloy EDS, EDSC back boxes.

# ENR Value Series Dead Front Interlocked Circuit Breaking Receptacles

## ENP Plugs

Cl. I, Div. 1 & 2, Groups B†, C, D  
Cl. II, Div. 1 & 2, Groups F, G  
Cl. III  
NEMA 3, 7BCD, 9FG, 12

Explosionproof  
Dust-Ignitionproof  
Raintight  
Wet Locations

### Applications:

ENR receptacles and ENP plugs are used:

- With portable electrical equipment such as compressors, tools, lighting systems, and similar devices
- In areas made hazardous by the presence of flammable vapors and gases or combustible dusts
- Wherever portable electrical equipment is likely to be transferred from hazardous to non-hazardous areas
- In damp and corrosive areas
- When power requirements do not exceed 20 amperes
- Where general purpose application is required

### Features:

- **Ark•Gard 2** receptacle incorporates three spring-loaded slide keys that prevent the receptacle face plate from being rotated until the ENP plug is fully inserted into the receptacle. To make the connection, the ENP plug is fully inserted, and the receptacle face moved inward by pushing the plug forward. The plug is then rotated, closing the circuit. As rotation begins, the plug becomes locked in the receptacle and cannot be accidentally disengaged. In making or breaking the circuit, any resulting electrical arc is confined in the factory-sealed chamber.
- Factory-sealed chamber encloses the potential arcing components between two explosionproof threaded joints. These threads are specially coated to guarantee freedom of movement, which ensures on-off action. No additional seals are required.
- One piece molded gasket seals cover plate and ENP plug when plug is inserted, providing full environmental protection at the receptacle face.
- Top-hinged cover design with 45° downward angle provides superior protection in damp, wet, and dirty locations.
- Molded-in contact design provides superior interior contact reliability.
- ENP plugs can be used in non-hazardous areas with standard U-ground NEMA/EEMAC configuration 5 and 6 receptacles, eliminating the need for two separately equipped portable units of the same type. The ENR receptacle will not accept standard NEMA/ EEMAC configuration plugs.
- ENP plug handle body is designed with an internal cord strain relief mechanism and a cable sealing grommet which will accept various cable diameters.
- Field assembly is accomplished with standard tools.
- Use standard EDS back boxes.

### Certifications and Compliances:

- NEC:  
Class I, Division 1 and 2, Groups B†, C, D  
  
Class II, Division 1 and 2, Groups F, G  
Class III
- ANSI/UL Standard 1010
- NEMA/EEMAC 3, 7BCD, 9FG
- CEC:  
Class I, Division 1 and 2, Groups B, C, D  
  
Class II, Division 1 and 2, Group G  
Class III

### Standard Materials:

- Receptacle housing, spring door and plug body – die cast copper-free aluminum
- Interiors: receptacle – *Krydon*® fiberglass-reinforced polyester material; plugs – nylon 100
- Contacts: receptacle blade – brass; receptacle switch – silver; plug – brass
- Receptacle cover hinge pin and spring – stainless steel
- Receptacle gasket – neoprene
- Plug bushing – neoprene

### Standard Finishes:

- Copper-free aluminum – aluminum acrylic paint
- Brass – natural

### Electrical Rating Ranges:

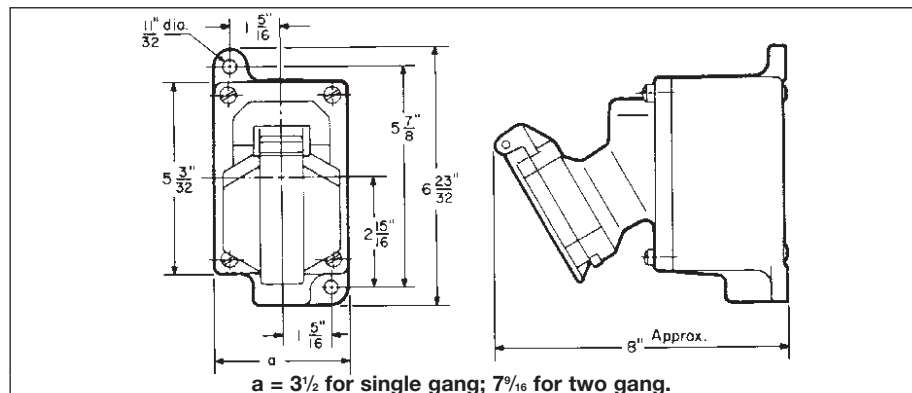
- Receptacles:  
20 amperes; 125 VAC and 250 VAC, 50-400 hertz
- Plugs:  
15 amperes; 125 VAC and 250 VAC, 50-400 hertz  
20 amperes; 125 VAC and 250 VAC, 50-400 hertz

### Grounding:

- NEC Article 501 and CEC Section 18 requires that metal frames or exposed non-current-carrying metal parts of portable devices used in hazardous locations be grounded through an extra conductor in the portable cord. ENR Receptacles and ENP Plugs are provided with an extra grounding pole.

**CAUTION:** To reduce the risk of ignition of hazardous atmospheres, do not use plugs or receptacles in Class II, Group F locations that contain electrically conductive dusts.

### Dimensions In Inches:



†Receptacle units alone (i.e. ENR5201) are not suitable for Class I, Group B.

# ENR Value Series Dead Front Interlocked Circuit Breaking Receptacles




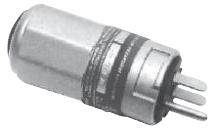












## ENP Plugs

Cl. I, Div. 1 & 2, Groups B†, C, D  
Cl. II, Div. 1 & 2, Groups F, G  
Cl. III  
NEMA 3, 7BCD, 9FG, 12

Explosionproof  
Dust-Ignitionproof  
Raintight  
Wet Locations

**2P**

### Ordering Information:

									
15 A	15 A Receptacle Rating	Description	Hub Size	Single Gang* Receptacle Assembly Cat. #	Two Gang** Receptacle Assembly Cat. #	Receptacle† Unit Only Cat. #	NEMA Config.	15 A Plug‡ Cat. #	NEMA Config.
	15 Amp 125 Volt	Dead End	1/2"	ENR11151	ENR12151	ENR5151		ENP5151	
		Through Feed	3/4"	ENR21151	ENR22151				
			1"	ENR31151	ENR32151				
			1/2"	ENRC11151	ENRC12151				
			3/4"	ENRC21151	ENRC22151				
			1"	ENRC31151	ENRC32151		5-15R		5-15P
	15 Amp 250 Volt	Dead End	1/2"	ENR11152	ENR12152	ENR6152		ENP6152	
		Through Feed	3/4"	ENR21152	ENR22152				
			1"	ENR31152	ENR32152				
			1/2"	ENRC11152	ENRC12152				
			3/4"	ENRC21152	ENRC22152				
			1"	ENRC31152	ENRC32152		6-15R		6-15P
	20 A Receptacle Rating	Dead End	1/2"	ENR11201	ENR12201	ENR5201		ENP5201	
		Through Feed	3/4"	ENR21201	ENR22201				
			1"	ENR31201	ENR32201				
			1/2"	ENRC11201	ENRC12201				
			3/4"	ENRC21201	ENRC22201				
			1"	ENRC31201	ENRC32201		5-20R		5-20P
	20 Amp 125 Volt	Dead End	1/2"	ENR11202	ENR12202	ENR6202		ENP6202	
		Through Feed	3/4"	ENR21202	ENR22202				
			1"	ENR31202	ENR32202				
			1/2"	ENRC11202	ENRC12202				
			3/4"	ENRC21202	ENRC22202				
			1"	ENRC31202	ENRC32202		6-20R		6-20P

†Receptacle units alone (i.e. ENR5201) are not suitable for Class I, Group B.

\*Single gang assemblies purchased with an EDS back box are suitable for Class I, Group B.

\*\*Dual gang assemblies purchased with an EDS back box are suitable for Class I, Group C, D only. For Class I, Group B rating, add the letter B to the Cat. No. Example: ENRB22201. Seals must be installed within 1 1/2" of each conduit opening.

‡ENP Plugs use #12 or #14 AWG type S, SO, ST or STO cord with range of .540 to .635 inches diameter.

**Note:** 15A with copper-free aluminum EDS, EDSC back boxes. 20A with *Feraloy*® iron alloy EDS, EDSC back boxes.



## Applications:

Premier ENR-GFS Assemblies are used:

- With portable electrical equipment such as tools, lighting systems, compressors and similar devices for personnel protection
- In areas made hazardous by the presence of flammable vapors, gases or combustible dusts
- In branch circuits of 15 to 20 amperes at 125 volts AC

## Features:

- Premier ENR-GFS Assemblies are installed on two-gang EDS back boxes. They are NEMA 3 rated and self-certified to meet UL requirements for Class I, Div. 1, Group B environments.
- Allows for a single part number to be specified, ordered and delivered on-site, significantly reducing the cost of order processing, material handling and misplacement of materials.
- Premier ENR-GFS components meet all UL and CSA requirements for ground fault protection in hazardous locations.
- Includes all of the value-added features of the Premier ENR Receptacle series: NEMA 4 cover design, OSHA lockout/tagout compliance, and a spring-loaded sliding key for added safety.
- The GFCI protects personnel against possible injury due to unwanted ground faults; meets requirements for personnel protection as defined in the National Electrical Code®.

## Certifications and Compliances:

- NEC/CEC  
Class I, Division 1 and 2, Groups C, D  
Class II, Division 1, Groups E, F, G  
Class II, Division 2, Groups F, G  
Class III
- ANSI/UL Standard: 943, 1203
- NEMA/EFMAC 7CD, 9EFG, 12
- CSA Standard: C22.2 No. 30, 144

## Standard Materials:

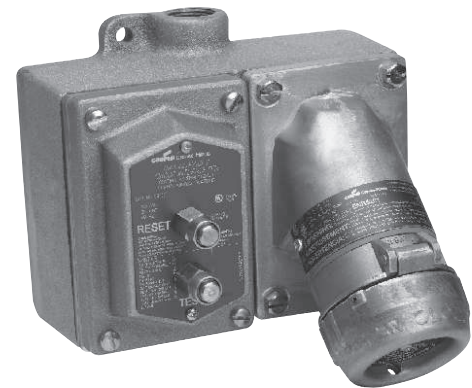
- Receptacle housing, spring door and plug body – die cast copper-free aluminum
- Interiors: receptacle – Krydon® fiberglass-reinforced polyester material
- Contacts: receptacle blade – brass; receptacle switch – silver
- Receptacle cover hinge pin and spring – stainless steel
- Receptacle gasket – neoprene

## Standard Finishes:

- Copper-free aluminum – aluminum lacquer
- Stainless steel – natural
- Polycarbonate – natural (ivory)
- Brass – natural

## Electrical Rating Ranges:

- 20 amperes
- 125 VAC







# Ark•Gard® Premier Series ENR-GFS Assemblies

Cl. I, Div. 1 & 2, Groups C, D  
Cl. II, Div. 1, Groups E, F, G  
Cl. II, Div. 2, Groups F, G  
Cl. III  
NEMA/IEC 7CD, 9EFG, 12

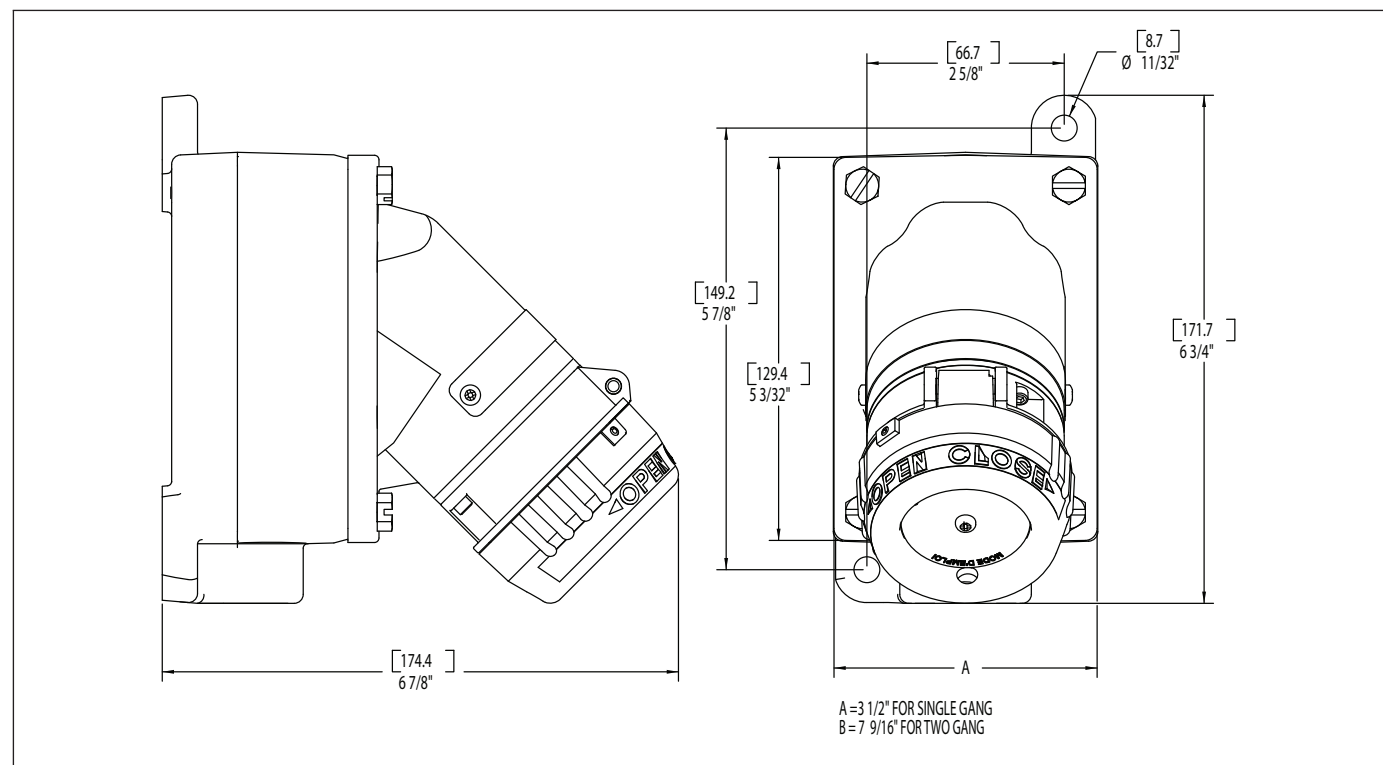
Explosionproof  
Dust-Ignitionproof

**2P**

## Ordering Information:

20 A Certifications	20 A Receptacle Rating	Description	Hub Size	Two Gang Receptacle Assembly Cat. #	NEMA Config.	20A Plug Cat. #	NEMA Config.
	20 Amp 125 Volt	Dead End	$\frac{1}{2}$ " $\frac{3}{4}$ " 1"	ENR12201 M4 GFS ENR22201 M4 GFS ENR32201 M4 GFS		ENP5201	
		Through Feed	$\frac{1}{2}$ " $\frac{3}{4}$ " 1"	ENRC12201 M4 GFS ENRC22201 M4 GFS ENRC32201 M4 GFS			
					5-20R		5-20P

## Dimensions In Inches:



Type	Dimension A
Single Gang	$3 \frac{1}{2}$ "
Double Gang	$7 \frac{9}{16}$ "



Hazardous Locations:  
Cl. I, Groups B, C, D  
Cl. II, Group G  
Cl. III  
NEMA 3R, 4

Non-hazardous  
Locations:  
NEMA 3R, 4  
UL Listed

ENC Connector:

- This NEMA 4 connector makes it safe and easy to bring power wherever it is needed. It provides versatility for making cord sets for connecting portable devices in non-hazardous locations and hazardous locations

Applications:

ENC Connectors are used:

- In abusive locations where product durability is critical
- With portable or fixed electrical equipment such as motor generator units, work lights, pumps, compressors, heating and cooling units, conveyors, lighting systems, and similar equipment
- Wherever portable electrical equipment is likely to be transferred from hazardous to non-hazardous areas
- In damp and corrosive areas
- When power requirements do not exceed 20 amperes

Features:

- Offering includes: 15A and 20A, 125V
- Users no longer have to make up their own ENR/EDS female extension cord ends, which are heavy to move, difficult to store, and offer no form of strain relief
- Hinged, locking cover provides a watertight NEMA 4 rating with superior protection in damp, wet, and dirty locations
- Molded-in contact design provides superior interior contact reliability
- Lockout/tagout feature in cover provides safety and complies with OSHA requirements
- Impact resistant center plate design ensures long product life
- Ark•Gard products come with unsurpassed easy-to-wire, time-saving terminals and an internal cord strain relief that provides superior pull strength
- Equipped with time-tested industry-leading features of Arktite® Plugs and Connectors, including:  
Uni-Shell™ handle body, The Tri-Lock™ cable grip and Sure-Seal™ cable gland

Certifications and Compliances:

Non-hazardous Locations

- NEMA 3R, 4
- UL Listed UL 498

Hazardous Locations

- Class I, Groups B, C, D
- Class II, Groups G, Coal Dust
- Class III
- NEMA 3R, 4
- CSA Certified CSA C22.2 No. 159M



Standard Materials:

- Connector bodies – high impact strength copper-free aluminum
- Insulation – fiberglass-reinforced polyester material
- Contacts: receptacle blade – brass; receptacle switch – silver; plug – brass

Standard Finishes:

- Aluminum – natural
- Fiberglass-reinforced polyester - red











Options:

Description	Suffix
• Corro-free™ epoxy powder finish for added corrosion resistance .....	S752

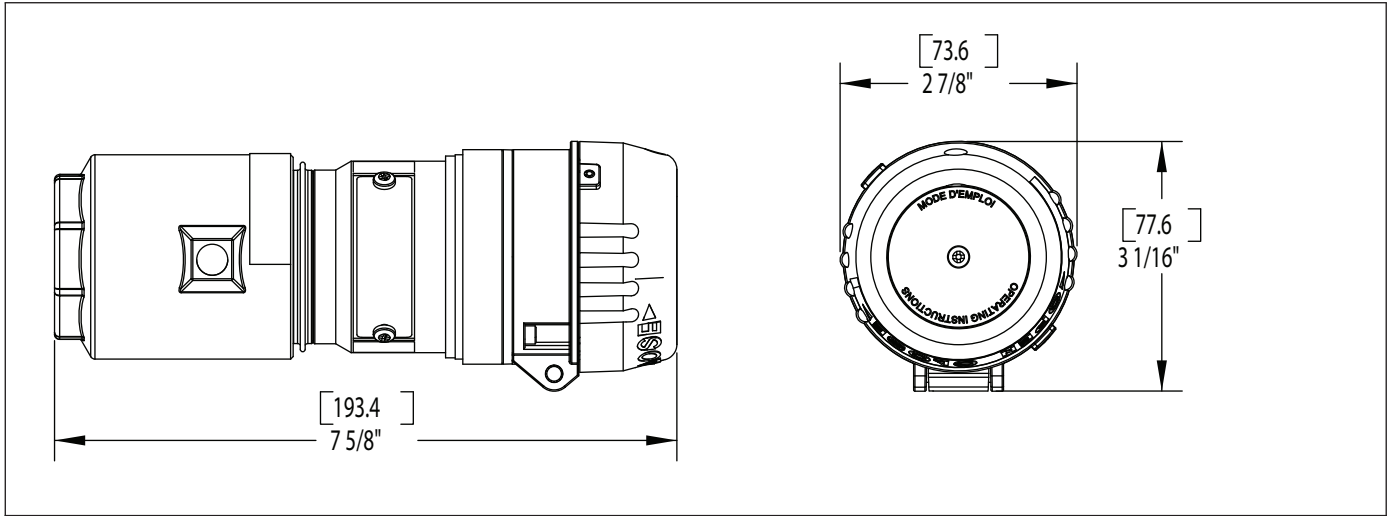
Electrical Rating Ranges:

- 20 amperes
- 125 VAC

Ordering Information:

15A/20A Rating	Cord Range	Connector Cat. #	NEMA Config.	Plug Cat. #	NEMA Config.
15 Amp 125 Volt	0.39-1.20	ENC5151	 	ENP5151	
		ENC5151 CAN	 		5-15P
20 Amp 125 Volt	0.39-1.20	ENC5201	 	ENP5201	
		ENC5201 CAN	 		5-20P

Dimensions  
In Inches:



## Applications:

GFS ground fault circuit interrupters are used:

- With portable electrical equipment such as tools, lighting systems, compressors and similar devices for personnel protection
- In areas made hazardous by the presence of flammable vapors, gases or combustible dusts
- In branch circuits of 15 to 20 amperes at 125 volts AC
- In conjunction with ENR or CPS152 receptacles

## Features:

- Factory sealed chamber encloses the ground fault circuit interrupter (GFCI) and its potentially arcing components in an enclosure with explosionproof ground joints. No additional sealing is required when proper body is used.
- GFCI protects personnel against possible injury due to unwanted ground faults; meets requirements for personnel protection as defined in the *National Electrical Code*®.
- GFCI is feed-through type to serve several receptacles.
- Decentralized GFCI protection on branch circuits permits immediate identification of circuit where a ground fault is occurring; does not interrupt power on total branch circuit if tripped or when periodically tested; significantly reduces incidence of nuisance tripping; provides for use of 125 VAC portable lighting even when working on metal floors or catwalks.
- Field installation is accomplished with standard tools.
- Can be installed on any Cooper Crouse-Hinds single or multiple gang EDS or EDSC device box.

## Certifications and Compliances:

- NEC/CEC  
Class I, Division 1 and 2, Groups C, D  
Class II, Division 1, Groups E, F, G  
Class II, Division 2, Groups F, G  
Class III
- ANSI/UL Standard: 943, 1203
- NEMA/EEMAC 7CD, 9EFG, 12
- CSA Standard: C22.2 No. 30, 144

## Standard Materials:

- Cover – sand cast copper-free aluminum
- Sealing well – die cast copper-free aluminum
- Pushbuttons and guards – stainless steel
- Shaft seals – neoprene
- Interior: body – polycarbonate; contacts – brass



## Standard Finishes:

- Copper-free aluminum – aluminum lacquer
- Stainless steel – natural
- Polycarbonate – natural (ivory)
- Brass – natural

## Electrical Rating Ranges:

- 20 amperes
- 125 VAC
- 5 milliamperes trip setting
- Class A per ANSI/UL943

## Ordering Information:

Amps	Description	Cat. #
20	Factory-sealed ground fault circuit interrupter – 5 milliamperes trip	GFS1

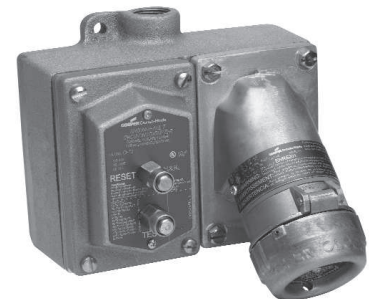
## Application Recommendations:

- GFS-1 can be installed in an EDS back box (see page 503) for point-of-use protection or for protection of downstream receptacles.



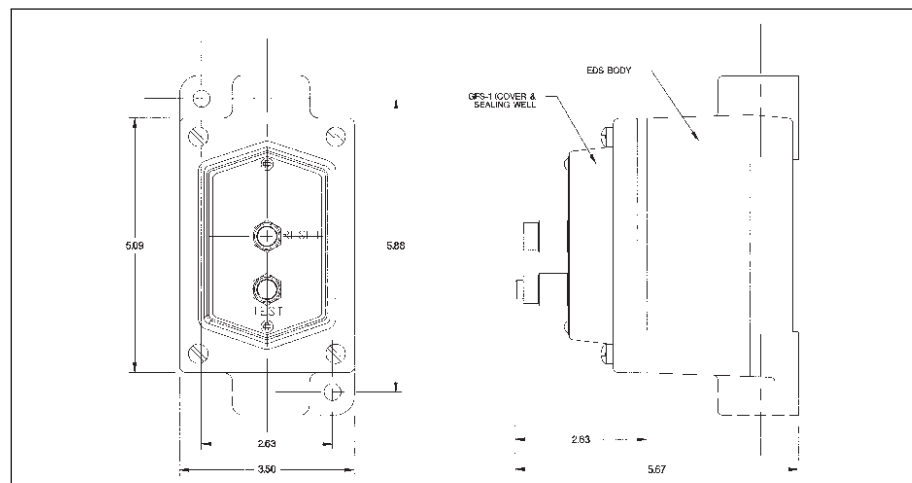
GFS-1 with EDS271 back box

GFS-1 can be used with ENR or CPS receptacles and EDS back box for circuit interrupter protection of portable equipment.



GFS-1 with EDS172 back box and ENR5201 M4 receptacle

## Dimensions In Inches:



## Delayed Action Circuit Breaking CPH Plugs

### Applications:

CES and CESD receptacles with CPH plugs are used:

- With portable electrically operated devices such as motor-generator sets, compressors, conveyors, portable tools, lighting systems and similar equipment
- In locations which are hazardous due to the presence of flammable vapors or gases
- In damp or corrosive locations
- At petroleum refineries, chemical and petrochemical plants, and other process industry facilities where similar hazards exist

### Features:

- CES and CESD receptacles are equipped with a delayed action rotating sleeve which prevents complete withdrawal of the CPH plug in one continuous movement
- The delayed action feature permits the plug to be used as an emergency push-pull switch
- Details of operation are illustrated and described to the right:
- Receptacles are factory sealed to simplify installation and wiring. External seals are not required.
- The 30 ampere receptacles are provided with pressure terminals for field connection. The 60 ampere receptacles have flexible leads. Plugs are equipped with solder terminals.
- Two arrangements are provided for the  $\frac{3}{4}$ " and  $1\frac{1}{4}$ " conduit hubs, as shown in the listings and dimensions on page see page 1278.

### Certifications and Compliances:

- NEC/CEC:  
 CES – Class I, Division 1 and 2, Groups C, D;  
 CESD – Class I, Division 1 and 2, Group D\*
- ANSI/UL Standard: 1010
- CSA Standard: C22.2 No. 182.1



Fig. 1



Fig. 2



Fig. 3



Fig. 4

**Figure 1** above shows a CES receptacle assembly with CPH plug fully engaged.

**Figure 2** shows the plug withdrawn until it is stopped by the delayed action sleeve. In this position the circuit has been broken and the arc has been snuffed in the contact chambers.

**Figure 3** shows the delayed action receptacle sleeve rotated approximately 45° to allow withdrawal of plug from receptacle.

**Figure 4** shows the plug completely withdrawn. To accomplish this, the delayed action sleeve must be rotated counterclockwise. The time required to actuate the mechanism permits dissipation of the arc-generated heat before contacts and arcing chambers are opened to the atmosphere. When inserting the plug, the reverse procedure is followed.

### Options:

The following special options are available from the factory by adding the suffix to the Cat. #:

#### Description

- Special polarity – for use where two or more receptacles of the same ampere rating, style and number of poles are to be installed in the same area for use on different voltages. Receptacle interior rotated 22½° clockwise when viewed from face and plug changed to match .....

#### Suffix

S4

### Standard Materials:

- Back boxes – *Feraloy*® iron alloy
- Receptacle housings – 30 ampere – copper-free aluminum; 60 ampere – *Feraloy*® iron alloy
- Plug bodies – copper-free aluminum
- Insulation – *Krydon*® fiberglass-reinforced polyester
- Contacts – brass or hard-drawn copper

### Standard Finishes:

- *Feraloy* – electrogalvanized and aluminum acrylic paint
- Copper-free aluminum – natural
- *Krydon* material – red
- Brass and copper – natural

### Grounding:

- NEC article 501 and CEC Part 1 Section 18 require that metal frames or exposed non-current-carrying metal parts of portable devices used in hazardous locations be grounded through an extra conductor in the portable cord.
- CES and CESD receptacles and CPH plugs are provided with an extra grounding pole for attachment of the grounding wire. In the plugs, provision is made for attachment of the grounding wire to the grounding pole. In addition, direct connection is provided between plug and receptacle housings and the ground pole. In the receptacles, grounding is accomplished through the conduit system.

### Interchangeability of Plugs with Non-hazardous Location Receptacles:

- CPH plugs can also be used with standard AR and NR receptacles of the same ampere rating, style and number of poles, thus permitting portable devices which are suitable for use in hazardous locations to be connected to receptacles in both hazardous and non-hazardous areas
- Portable devices for non-hazardous areas equipped with APJ and NPJ *Arktite* plugs cannot be used with CES and CESD receptacles

### Electrical Rating Ranges:

- 30 and 60 amperes

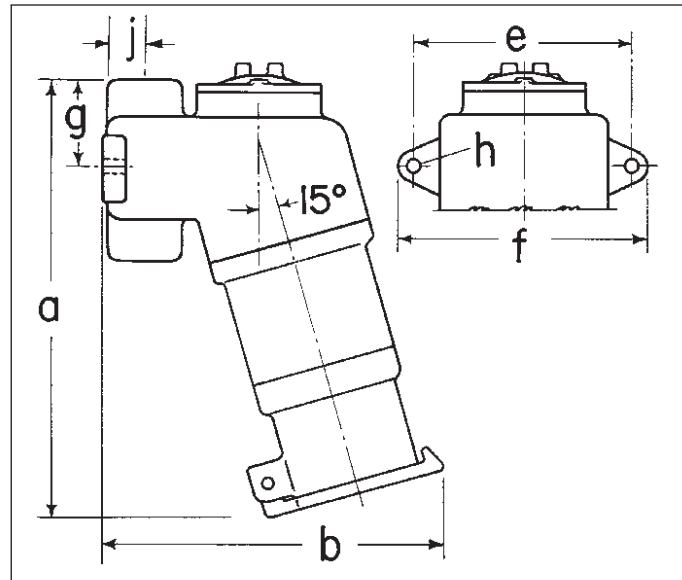
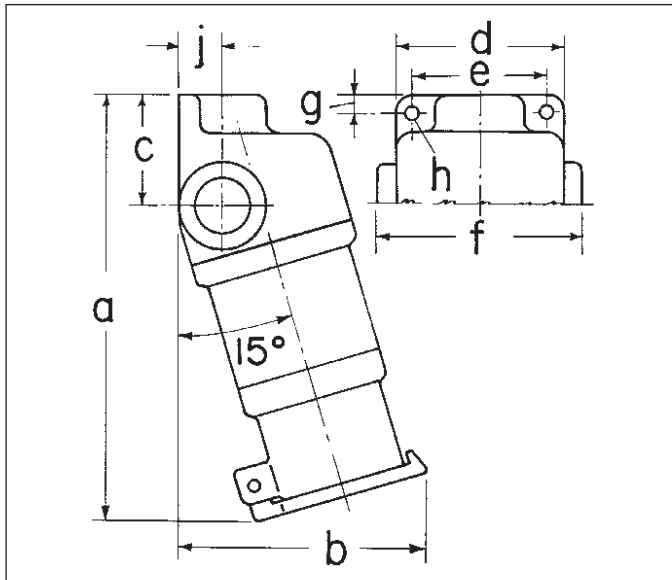
\*For U.S. CESD are also suitable for Class I, Group C when used with immediately adjacent seals.

**Delayed Action Circuit Breaking  
CPH Plugs Dimensions**

CESD – Cl. I, Div. 1 & 2, Group D\*  
 CES – Cl. I, Div. 1 & 2, Groups C, D  
 Explosionproof  
 Wet Locations  
 Factory Sealed

**Dimensions**

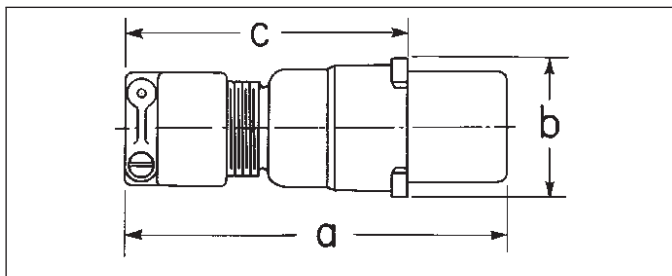
In Inches:

**CES**

Cat. #	a	b	c	d	e	f	g	h	j
CES2213	7 <sup>7</sup> / <sub>16</sub>	4 <sup>5</sup> / <sub>8</sub>	2 <sup>3</sup> / <sub>16</sub>	3 <sup>3</sup> / <sub>8</sub>	2 <sup>3</sup> / <sub>4</sub>	4 <sup>1</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>16</sub>	1 <sup>1</sup> / <sub>32</sub>	7 <sup>7</sup> / <sub>8</sub>
CES2214									
CES4233	12	7	2 <sup>7</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>4</sub>	4 <sup>3</sup> / <sub>8</sub>	6 <sup>1</sup> / <sub>8</sub>	7 <sup>1</sup> / <sub>16</sub>	1 <sup>3</sup> / <sub>32</sub>	1 <sup>1</sup> / <sub>8</sub>
CES4234									

**CESD**

Cat. #	a	b	e	f	g	h	j
CESD2213	7 <sup>5</sup> / <sub>8</sub>	6 <sup>3</sup> / <sub>8</sub>	4 <sup>1</sup> / <sub>4</sub>	5	1 <sup>7</sup> / <sub>8</sub>	1 <sup>1</sup> / <sub>32</sub>	1 <sup>3</sup> / <sub>16</sub>
CESD2214							
CESD4233	13 <sup>1</sup> / <sub>2</sub>	9 <sup>5</sup> / <sub>8</sub>	6 <sup>1</sup> / <sub>4</sub>	7 <sup>1</sup> / <sub>4</sub>	3	1 <sup>3</sup> / <sub>32</sub>	1 <sup>3</sup> / <sub>16</sub>
CESD4234							

**CPH**

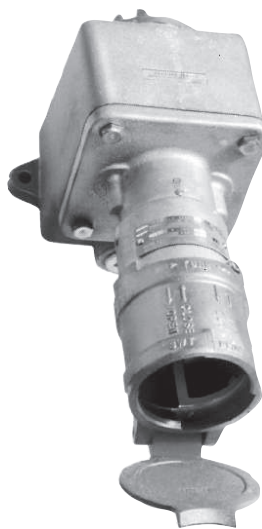
Cat. #	a	b	c
CPH7713	6	2 <sup>3</sup> / <sub>8</sub>	4 <sup>5</sup> / <sub>16</sub>
CPH7913	6 <sup>7</sup> / <sub>16</sub>	2 <sup>3</sup> / <sub>8</sub>	4 <sup>3</sup> / <sub>4</sub>
CPH7714	6	2 <sup>3</sup> / <sub>8</sub>	4 <sup>5</sup> / <sub>16</sub>
CPH7914	6 <sup>7</sup> / <sub>16</sub>	2 <sup>3</sup> / <sub>8</sub>	4 <sup>3</sup> / <sub>4</sub>
CPH7733	7 <sup>3</sup> / <sub>4</sub>	2 <sup>3</sup> / <sub>4</sub>	5
CPH7933	8 <sup>1</sup> / <sub>8</sub>	2 <sup>3</sup> / <sub>4</sub>	5 <sup>3</sup> / <sub>8</sub>
CPH7734	7 <sup>3</sup> / <sub>4</sub>	3 <sup>1</sup> / <sub>16</sub>	5
CPH7934	8 <sup>1</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>16</sub>	5 <sup>3</sup> / <sub>8</sub>

\*In U.S. CESD are also suitable for Class I, Group C when used with immediately adjacent seals.





CES Receptacles with three hubs – one on each side and one at top – and two pipe plugs with CPH plug fully engaged.



CESD Receptacles with vertical through feed hubs and one pipe plug. Removable threaded cover at top to facilitate pulling wires.

### CES/CESD Receptacles

Hub Size (In.)	Circuit	Phase	Max. HP	Max. Amps	Volts at 60 Cycles AC	CES Cat. #	CESD Cat. #
3/4	2-wire, 3-pole	1	1/2 1 1/2	7 30	480† 120 to 240	CES2213	CESD2213
3/4	3-wire, 4-pole	3	1 3	7 30	480† 120 to 240	CES2214	CESD2214
1 1/4	2-wire, 3-pole	1	3	30 60	480† 120 to 240	CES4233	CESD4233
1 1/4	3-wire, 4-pole	3	5	30 60	480† 120 to 240	CES4234	CESD4234



CPH Plugs with mechanical cable grip and neoprene bushing.

### CPH Plugs

Circuit	Phase	Max. HP	Max. Amps	Volts at 60 Cycles AC	Cable Diameter		
					.375 to .875	.500 to .875	.875 to 1.375
2-wire, 3-pole	1	1/2 1 1/2	7 30	480† 120 to 240	CPH7713		
3-wire, 4-pole	3	1 3	7 30	480† 120 to 240	CPH7714		
2-wire, 3-pole	1	3	30 60	480† 120 to 240	CPH7733		
3-wire, 4-pole	3	5	30 60	480† 120 to 240	CPH7734		

†CSA certified units are rated at 600 volts.

\*In U.S. CESD are also suitable for Class I, Group C when used with immediately adjacent seals.





# Plugs and Receptacles

## Industrial Heavy Duty Interlocked

### Non-hazardous

3P

Description	Page No.
Application/Selection	see pages 1282–1283
Interlocked Receptacle with –	
<b>Disconnect Switch</b>	
WSR 30, 60, 100A Aluminum	see page 1284
WSRD 30, 60, 100A Sheet Metal	see page 1284
WSRDW 30, 60, 100A Viewing Window	see page 1284
WSRD SM S901 Stainless Steel	see pages 1286–1288
<b>Rotary Switch</b>	
CSR 30 & 60A Non-metallic NEMA 4X	see pages 1290–1292
WSQC 30 & 60A Aluminum	see page 1293
<b>Watertight Krydon® NEMA 4X</b>	
NSR 30, 60 & 100A Switch	see page 1296
NBR 30, 60 & 100A Breaker	see page 1294

## Industrial Heavy Duty Interlocked Application and Selection

### Applications:

- Where extra protection is a requirement; interlocked units provide dead front receptacles; connection cannot be made or broken when unit is under load
- In areas where dirt, moisture, and corrosion are a problem; to supply power for portable electrical equipment and provide safe disconnect means and short circuit protection

### Considerations for Selection:

#### Environmental:

- The environment of the enclosure location in terms of NEMA/EEMAC type required
- Material and construction to withstand rough usage and corrosive atmospheric conditions

#### Electrical:

- Sufficient current carrying capacity to meet load requirements
- Compatibility with electrical system (new or existing installations)
- Interchangeability of plugs with hazardous and non-hazardous area receptacles

#### Function:

- Switch vs. circuit breaker See "Quick Selector Chart" below and "Interchangeability Chart" on next page.

### Options:

- Special polarity and conduit arrangements are available to meet specific needs. See individual listing pages for details.

### Quick Selector Chart

Series	Receptacle Interlocked With	NEMA/EEMAC Rating	Mating Plug	Electrical Characteristics	
CSR	Disconnect switch	3, 4X, 12	APJ/NPJ	Circuit breaker: 30, 60 amp. 600VAC Fusible or non-fusible	Receptacle: 30, 60 amp. 600VAC 3-wire, 4-pole
NBR	Circuit breaker	3, 12	APJ/NPJ	Circuit breaker: 100 amp. frame size 250VDC/600VAC 3-pole	Receptacle: 30, 60, 100 amp. 250VDC/600VAC 3-wire, 3-pole 3-wire, 4-pole
NSR	Disconnect switch	3, 12	APJ/NPJ	Switch: 30, 60, 100 amp. 250VDC/240VAC 600VAC 3-pole Fusible or non-fusible	Receptacle: 30, 60, 100 amp. 250VDC/600VAC 3-wire, 3-pole 3-wire, 4-pole
WSR	Disconnect switch	3R, 4, 12	APJ/NPJ	Switch: 30, 60, 100 amp. 250VDC/240VAC 600VAC 3-pole Fusible or non-fusible	Receptacle: 30, 60, 100 amp. 250VDC/600VAC 3-wire, 3-pole 3-wire, 4-pole
WSRD	Disconnect switch	3R, 12	APJ/NPJ	Switch: 60 amp. 250VDC/240VAC 600VAC 3-pole Fusible or non-fusible	Receptacle: 60 amp. 250VDC/600VAC 3-wire, 3-pole 3-wire, 4-pole

## Industrial Heavy Duty Interlocked Interchangeability Chart

### Interchangeability Chart

Many of the plugs listed in this section can be used interchangeably with receptacles from other sections, both in hazardous and non-hazardous areas, **provided electrical rating and style of plug and receptacle are the same**. The following table is a summary of possible combinations.

Plugs Shown in Section 3P	Can be Used with these Receptacle Series	Listed in Section	Plug & Receptacle Electrical Rating
AP	AR	1P	200 and 400 amp. 3-wire, 4-pole
APJ/NPJ	AR DBR, EBBR FSQ, EPC, EPCB	1P 4P 4P	30, 60, 100 amp. 3-wire, 3-pole 3-wire, 4-pole
SP	BHR	4P	30, 60, 100 amp. 2-wire, 3-pole 3-wire, 4-pole 4-wire, 5-pole

# WSR, WSRD, WSRDW Interlocked Arkrite® Receptacles with Enclosed Disconnect Switches

30, 60, 100A  
NEMA 3, 3R, 4, 12  
Raintight  
Watertight  
Corrosion-Resistant

WSR



Aluminum  
NEMA 3R, 4, 12

WSRD



Sheet Metal  
NEMA 3R, 12

WSRDW



Sheet Metal  
Viewing Window  
NEMA 3R, 12

## Applications:

- The WSR and WSRD disconnect switches are used as a service outlet for portable or fixed electrical equipment – generators, compressors, welders, etc.
- They are designed for use in non-hazardous areas where dust, moisture and corrosion may be a problem.
- Designed for flush or surface mounting.
- A fusible type switch, when used, also provides short circuit protection.

## Features:

### WSR and WSRD:

- Switches are NEMA type HD heavy duty 3-pole, with visible blades; a quick make-and-break mechanism with reinforced, positive pressure type blade and jaw construction. Fusible types have fuse clips with steel reinforcing springs of positive pressure type. Pressure connectors are used for wire connectors.
- For maximum safety, the spring door receptacle at the bottom of the unit is mechanically interlocked with the switch operating mechanism. The switch *cannot be closed* until the plug is fully inserted and the plug *cannot be withdrawn or inserted* unless the switch is open. With the switch open, *accidental plug withdrawal is prevented* by the interlock mechanism. Withdrawal can only be accomplished by activation of the interlock release lever located on the receptacle.
- Enclosures are compact and rectangular in shape with a gasketed, hinged door.
- Enclosure, handle and other exterior parts are corrosion resistant.

- The switch enclosure covers are interlocked with the body and operating mechanism and cannot be opened when the plug is engaged and the switch is closed ("ON"). When the switch *is open*, the switch *cannot* be put in a closed ("ON") position with the door open.

### WSR:

- Mounting lugs may be rotated 90° or moved to the vertical centerline portion for pole mounting.
- Side hinged covers are retained in a closed position by compression spring draw-pull catches, which permit the opening or closing of the cover without tools.

- The switch operating handle may be padlocked in the "ON" or "OFF" position, thereby preventing unauthorized operation of the switch and/or opening of the enclosure. Up to three padlocks may be used. In addition, a unique hinge arrangement has been devised to allow the door of the unit to be padlocked. This feature allows operation while preventing unqualified or unauthorized entry.

## Certifications and Compliances:

### WSR:

- NEMA 3R, 4, 12 (enclosure)
- UL Standard 98

### WSRD:

- NEMA 3R, 12
- UL Standard 98

## Standard Materials:

### WSR and WSRD:

- Receptacle housings and plug exteriors – copper-free aluminum
- Insulation (plug and receptacle) – fiberglass-reinforced polyester
- Pressure contacts – brass
- Crimp/solder contacts – leaded red brass

### WSR:

- Enclosure – copper-free aluminum
- Operating handle – copper-free aluminum
- Other exterior parts – stainless steel

### WSRD:

- Enclosure – sheet steel
- Operating handle – sheet steel
- Other exterior parts – stainless steel

## Standard Finishes:

- Copper-free aluminum – WSR enclosure, plug exteriors – natural
- Leaded red brass – electro-tin-plate
- Brass – natural
- Sheet steel – baked grey enamel
- Fiberglass-reinforced polyester – natural (red)

## Electrical Rating Ranges:

- 3 and 4 pole; fusible or non-fusible; 240 VAC, 250 VDC; 600 VAC
- 30, 60, 100 amperes
- 7½ to 75 HP

## Options:

Description	Suffix
• Interiors rotated 22½° to the right (viewed from face).....	<b>S4</b>
• Auxiliary switch, 600 VAC-DC heavy duty pushbutton station rating, can be supplied, and its contacts will close after safety switch contacts open and close before safety switch opens.....	<b>S483</b>

# WSR, WSRD, WSRDW Interlocked Arktite® Receptacles with Enclosed Disconnect Switches

## APJ/NPJ Plugs

30, 60, 100A  
NEMA 3, 3R, 4, 12  
Raintight  
Watertight  
Corrosion-Resistant

**3P**

			WSR				WSRD†■ For viewing window see note 2		
		Conduit Opening Sizes§	240VAC 600VAC 250VDC Cat. #	Max. HP Rating 240VAC	Max. HP Rating 480VAC	Max. HP Rating 600VAC	600VAC 250VDC Cat. #	Max.† HP Rating 480VAC	Max.† HP Rating 600VAC
System	Amps								
3-Wire, 3-Pole Style 1, Fusible	30	1	WSR3351*	7½	15	20	WSRD3351*	15	20
	60	1¼	WSR6351*	15	30	50	WSRD6351*	30	50
	100	1½	WSR10351*	30	60	75	WSRD10351*	60	75
3-Wire, 4-Pole Style 2, Fusible	30	1	WSR3352*	7½	15	20	WSRD3352*	15	20
	60	1¼	WSR6352*	15	30	50	WSRD6352*	30	50
	100	1½	WSR10352*	30	60	75	WSRD10352*	60	75
3-Wire, 3-Pole Style 1, Non- fusible	30	1	WSR33541	7½	15	20	WSRD33541	15	20
	60	1¼	WSR63541	15	30	50	WSRD63541	30	50
	100	1½	WSR103541	30	60	75	WSRD103541	60	75
3-Wire, 4-Pole Style 2, Non- fusible	30	1	WSR33542	7½	15	20	WSRD33542	15	20
	60	1¼	WSR63542	15	30	50	WSRD63542	30	50
	100	1½	WSR103542	30	60	75	WSRD103542	60	75

\*Arranged for NEC Class H fuses. May be field converted to NEC Class J fuses.

§Furnished with reducer which may be removed to obtain one size larger opening. Locknut and bushing used must meet NEC requirements (WSR only).

†Ratings of unfused and fusible switches with time delay fuses.

■ Viewing window – add "W" to prefix, i.e.: WSRDW6352.

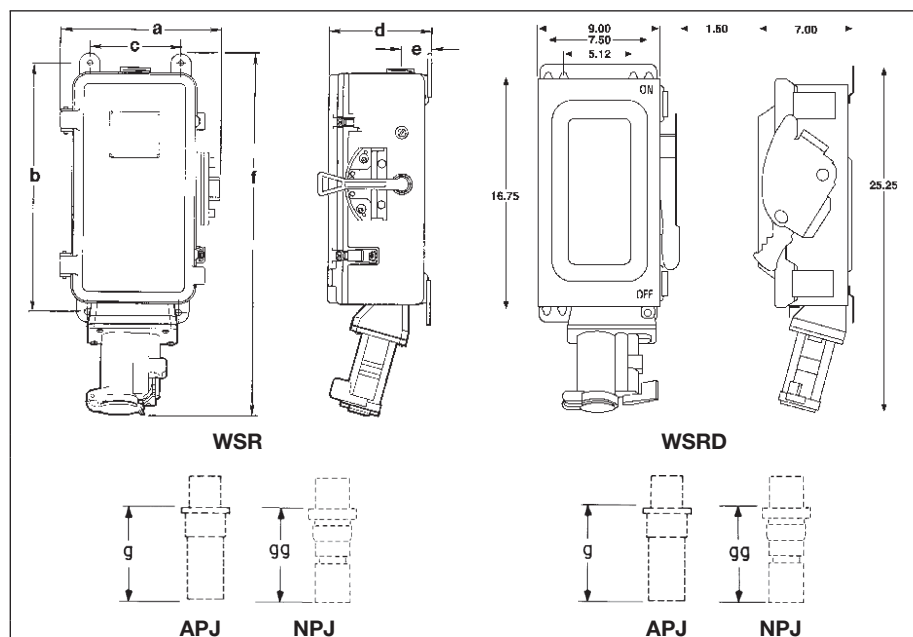
‡Conduit entrances not furnished.

## APJ/NPJ Plugs

Amps	Max. Volts	Outside Dia. of Cable, Flexible Conduit or Armored Cable	Style 1†† 3-wire, 3-pole Cat. #	Style 2†† 3-wire, 4-pole Cat. #
30	250 DC	0.60 to 1.20	APJ3375	APJ3485
	600 AC	0.55 to .070 0.70 to 0.85		NPJ3483 NPJ3484
60	250 DC	0.75 to 1.45	APJ6375	APJ6485
	600 AC	0.75 to 1.07 1.07 to 1.35		NPJ6484 NPJ6485
100	250 DC	1.00 to 1.70	APJ10377	APJ10487
	600 AC	0.93 to 1.21 1.21 to 1.50		NPJ10486 NPJ10487

††Style 1 - Grounded through shell. Style 2 - Grounded through extra pole and shell. For a detailed description of these grounding methods, see page 1230.

## Dimensions In Inches:



### WSR

Dims.	30 Amps	60 Amps	100 Amps
a	11¾	11¾	14⅞
b	20⅞	20⅞	26⅞
c	6⅞	6⅞	9⅞
d	7¼	7¼	8¼
e	2⅞	2⅞	2⅞
f	27⅞	28⅞	35⅞
g	4¾	5¼	7¼
gg	7	6⅞	7¼
Mtg. Holes	⅜	⅜	⅞

Dim. "g" and "gg" are exposed portion of plug when engaged with receptacle.

### WSRD

Dims.	60 Amps
g	5⅞
gg	6⅞
Mtg. Holes	⅞

Dim. "g" and "gg" are exposed portion of plug when engaged with receptacle.



3P

# Arktite® WSRD SM S901 Stainless Steel Interlocked Receptacles

Fused and Non-fused

30, 60 and 100 Amp  
Enclosure Type 3, 4, 4X, 12  
IP66  
UL and cUL Listed

Watertight  
Corrosion-Resistant

## WSRD SM S901 Series Stainless Steel Arktite® Interlocked Receptacles

Cooper Crouse-Hinds Arktite Stainless Steel Interlocks prevent engagement and disengagement of the plug under load, providing safe portable connections and extended product life.

Available in 30–100 Amp in both fused and non-fused versions, the Stainless Steel Interlock is rated Enclosure Type 4X watertight and features an optional viewing window.

## Arktite Stainless Steel Interlocked Receptacles:

- Supply power to portable or fixed electrical equipment such as welders, compressors, conveyors, portable tools, lighting systems and similar equipment.
- Are used in damp or corrosive locations.
- Are ideal for use in wet locations and hosedown areas.



Optional window allows viewing of both visible blade and indicating type fuses

Durable enclosure design features a gasket flange with continuously welded seams that stays in place when cover is opened

Corro-Free™ epoxy powder coat for even greater outdoor weatherability

Locking ring on the APJ/NPJ Arktite plug threads onto the receptacle, providing positive, worry free power engagement and a watertight environmental seal

Threaded front cap ensures watertight rating while plug is not engaged

Field proven direct drive interlock provides positive locking action every time

## Additional Features and Benefits:

- Heavy duty Arktite receptacle is compatible with existing Cooper Crouse-Hinds Arktite plugs of same rating and configuration
- Self-wiping, naval brass contacts in receptacle assure reliable performance and long dependable life
- Stainless steel interior hardware
- Ground bar supplied as standard and connected to 4th wire in receptacle
- UL and cUL Listed

## Ordering Information: 3-Pole, 4-Wire - 600 VAC

Amps	Cat. #	Description	Weight (lbs.)	Cooper Crouse-Hinds Mating Arktite Plug Cat. #
30	WSRDW3352 SM S901	Fused w/Window	24	APJ3485 & NPJ3485
30	WSRD33542 SM S901	Non-fused	22	APJ3485 & NPJ3485
30	WSRDW33542 SM S901	Non-fused w/Window	22	APJ3485 & NPJ3485
60	WSRDW6352 SM S901	Fused w/Window	30	APJ6485 & NPJ6485
60	WSRD63542 SM S901	Non-fused	29	APJ6485 & NPJ6485
60	WSRDW63542 SM S901	Non-fused w/Window	29	APJ6485 & NPJ6485
100	WSRDW10352 SM S901	Fused w/Window	36	APJ10487 & NPJ10487
100	WSRD103542 SM S901	Non-fused	35	APJ10487 & NPJ10487
100	WSRDW103542 SM S901	Non-fused w/Window	35	APJ10487 & NPJ10487

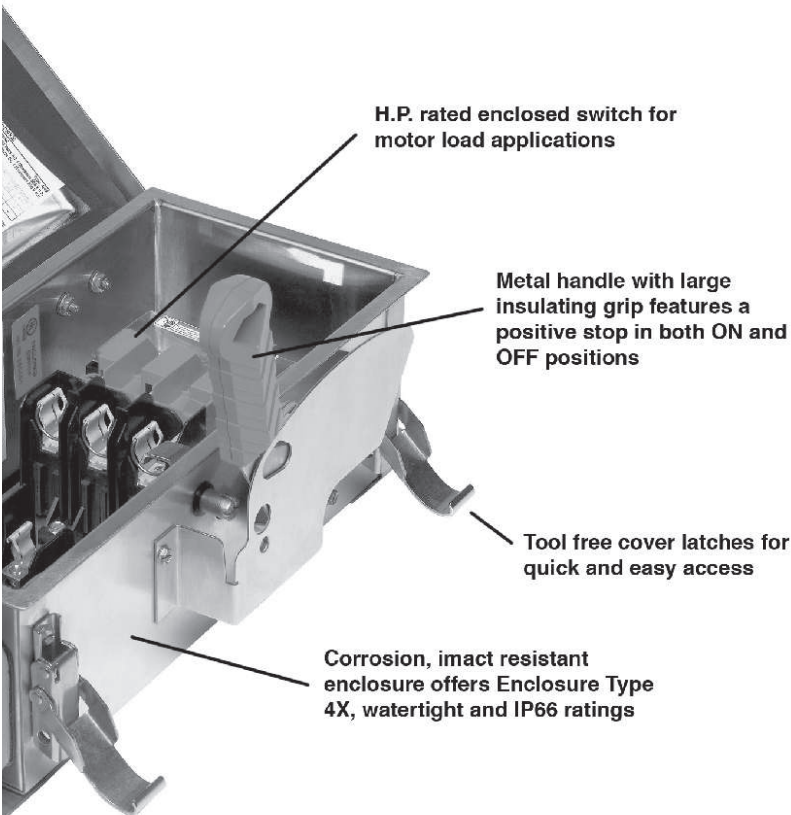
# Arktite® WSRD SM S901 Stainless Steel Interlocked Receptacles

Fused and Non-fused

30, 60 and 100 Amp  
Enclosure Type 3, 4, 4X, 12  
IP66  
UL and cUL Listed

Watertight  
Corrosion-Resistant

**3P**



H.P. rated enclosed switch for motor load applications

Metal handle with large insulating grip features a positive stop in both ON and OFF positions

Tool free cover latches for quick and easy access

Corrosion, impact resistant enclosure offers Enclosure Type 4X, watertight and IP66 ratings



Optional window allows viewing of both visible blade and indicating type fuses.



Plug locks into receptacle, providing positive, worry-free power engagement as well as watertight protection.



Complies with OSHA lockout/tagout requirements.

## Certifications and Compliances:

- UL Listed – (UL Standards 98, 1682)
- cUL Listed (Certified by UL to CSA Standards C22.2 Nos. 4, 182.1)
- Enclosure Type 3, 4, 4X, 12
- IP66 Enclosure

## Standard Materials:

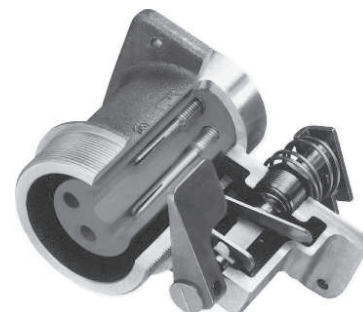
- Enclosure – Type 304 stainless steel
- Hardware – stainless steel
- Receptacle Housing – aluminum
- Power Contacts – naval brass
- Interlock Mechanism – stainless steel

## Standard Finishes:

- Stainless Steel – natural
- Aluminum – Corro-free™ epoxy powder
- Brass – natural

## Options:

Description	Suffix
• Factory Installed Auxiliary Contacts.....	<b>S483</b>
• Rotated Interior (22½° to right).....	<b>S4</b>



Heavy-duty, epoxy coated cast aluminum receptacle with stainless steel interlocking mechanism for superior durability and corrosion resistance.



3P

# Arktite® WSRD SM S901 Stainless Steel Interlocked Receptacles

Fused and Non-fused

30, 60 and 100 Amp  
Enclosure Type 3, 4, 4X, 12  
IP66  
UL and cUL Listed

Watertight  
Corrosion-Resistant

## Horsepower Ratings

Cat. #	Amps	Fusing	240 VAC (1 PH)	240 VAC (3 PH)	480 VAC (1 PH)	480 VAC (3 PH)	600 VAC (1 PH)	600 VAC (3 PH)	250 VDC
WSRD33542 SM S901	30	Non-fused	5	10	7.5	20	10	30	5
WSRDW33542 SM S901	30	Non-fused	5	10	7.5	20	10	30	5
WSRDW3352 SM S901	30	Fused	1.5 (3)	3 (7.5)	3 (7.5)	5 (15)	3 (10)	7.5 (20)	5
WSRD63542 SM S901	60	Non-fused	10	20	20	50	25	60	10
WSRDW63542 SM S901	60	Non-fused	10	20	20	50	25	60	10
WSRDW6352 SM S901	60	Fused	3 (10)	7.5 (15)	5 (20)	15 (30)	10 (25)	15 (50)	10
WSRD103542 SM S901	100	Non-fused	15	40	30	75	40	100	20
WSRDW103542 SM S901	100	Non-fused	15	40	30	75	40	100	20
WSRDW10352 SM S901	100	Fused	7.5 (15)	15 (30)	10 (30)	25 (60)	15 (40)	30 (75)	20

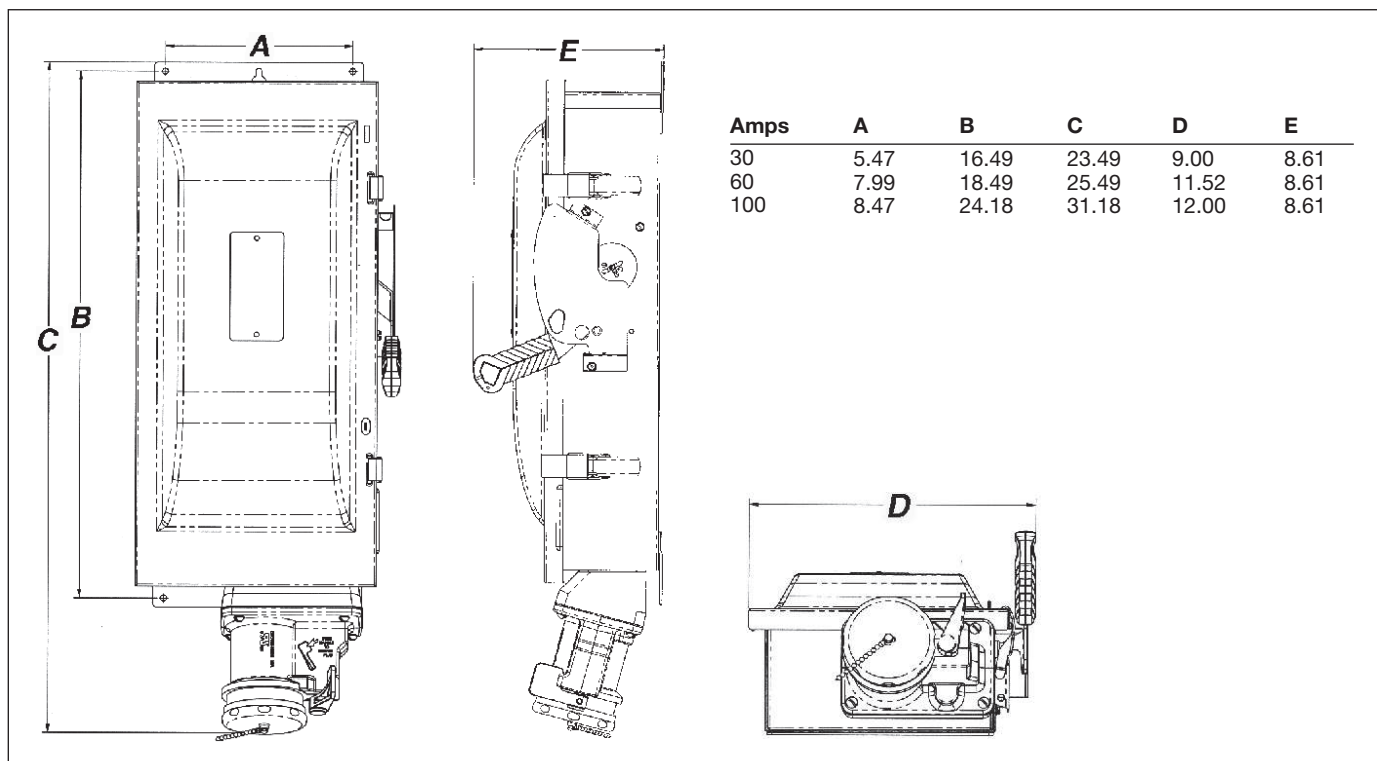
### Note:

Values for Non-Fused units are maximum horsepower.

Values for Fused units are standard horsepower with standard fuse and (maximum horsepower with time delay).

## Dimensions

In Inches:



3P



# Arktite® CSR Series Non-metallic Interlocked Receptacles Fused and Non-fused

30, 60 and 100 Amp  
Enclosure Type 3, 4, 4X, 12  
IP66  
UL and cUL Listed

Watertight  
Corrosion-Resistant

## CSR Series Compact Interlocked Arktite® Receptacles

*Cooper Crouse-Hinds  
interlocked receptacles prevent  
engagement and disengagement of  
the plug under load, providing safe  
portable connections and extended  
product life.*

## Arktite Compact Interlocked Receptacles are Used:

- To supply power to portable or fixed electrical equipment such as welders, compressors, conveyors, portable tools, lighting systems and similar equipment.
- In damp or corrosive locations.
- In wet locations.
- In hosedown areas.

Threaded front cap ensures  
watertight rating while plug  
is not engaged

Locking ring on the APJ/NPJ Arktite  
plug threads onto the receptacle,  
providing positive, worry free power  
engagement and a watertight  
environmental seal

Field proven direct drive  
interlock provides positive  
locking action every time

Corro-free™ epoxy powder  
coated receptacle for even  
greater outdoor weatherability

Self-wiping, naval brass contacts in  
receptacle assure reliable performance  
and long dependable life

Innovative cover break line  
provides easy wiring access

Large rotary handle is easy to  
operate even with gloved hands

Corrosion, impact resistant  
enclosure offers Enclosure Type  
4X, watertight, IP66 rating



## Additional Features and Benefits:

- Enclosure Type 4X, Watertight, IP66.
- Compact enclosure is designed to fit into the web of an I-beam.
- Heavy duty Arktite® receptacle is compatible with existing Cooper Crouse-Hinds Arktite® plugs of same rating and configuration.
- Bussmann® CubeFuse™ with Indicator – the world's first "finger-safe" industrial power fuse.
- Front mounted handle permits the interlocked receptacles to be easily mounted side by side or in tight spots.
- Molded-in-place mounting feet require only four screws to mount the entire unit.
- UL and cUL Listed.

## Ordering Information: 600 VAC

Amps	Configuration	Hub Size	Fusing	Cat. #	Mating Cat. #
30	3W, 4P	1"	Fused	CSR3352	APJ3485/NPJ3484
30	3W, 4P	1"	Non-fused	CSR33542	APJ3485/NPJ3484
60	3W, 4P	1 1/4"	Fused	CSR6352	APJ6485/NPJ6484
60	3W, 4P	1 1/4"	Non-fused	CSR63542	APJ6485/NPJ6484

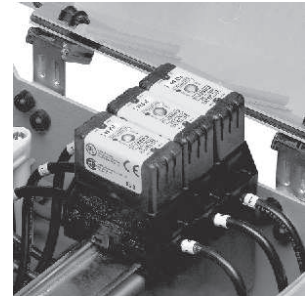
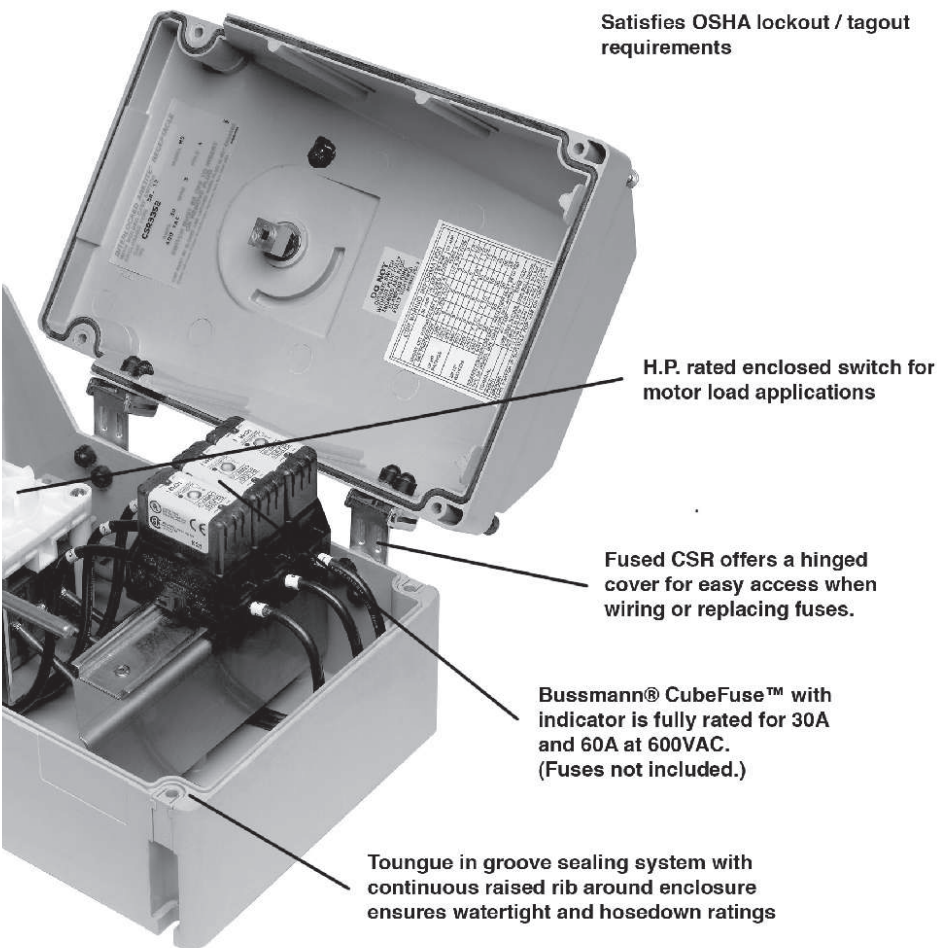
# Arktite® CSR Series Non-metallic Interlocked Receptacles

Fused and Non-fused

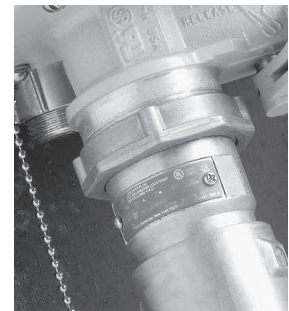
30, 60 and 100 Amp  
Enclosure Type 3, 4, 4X, 12  
IP66  
UL and cUL Listed

Watertight  
Corrosion-Resistant

**3P**



Fully rated for 30A and 60A at 600 VAC. For use with Bussmann CubeFuse. Fuses not included.



Plug locks into receptacle, providing positive, worry-free power engagement as well as watertight protection.



Complies with OSHA lockout/ tagout requirements.

## Certifications and Compliances:

- UL Listed – (UL Standards 508, 1682)
- cUL Listed (Certified by UL to CSA Standards C22.2 Nos. 14, 182.1)
- Enclosure Type 3, 4, 4X, 12
- IP66 Enclosure

## Standard Materials:

- Enclosure – fiber reinforced polyester
- Hardware – stainless steel
- Receptacle Housing – aluminum
- Power Contacts – naval brass
- Interlock Mechanism – stainless steel

## Standard Finishes:

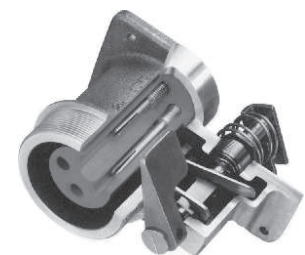
- Aluminum – Corro-free™ epoxy powder
- Brass – natural
- Stainless Steel – natural

## Options:

Description	Suffix
• Factory Installed Auxiliary Contacts.....	<b>S483</b>
• Rotated Interior (22½° to right).....	<b>S4</b>

## Horsepower Ratings

Amps	250 VAC	480 VAC	600 VAC
30	10 HP	20 HP	25 HP
60	20 HP	40 HP	40 HP



Heavy-duty, epoxy coated cast aluminum receptacle with stainless steel interlocking mechanism for superior durability and corrosion resistance.

3P

Arktite® CSR Series

Non-metallic Interlocked

Receptacles

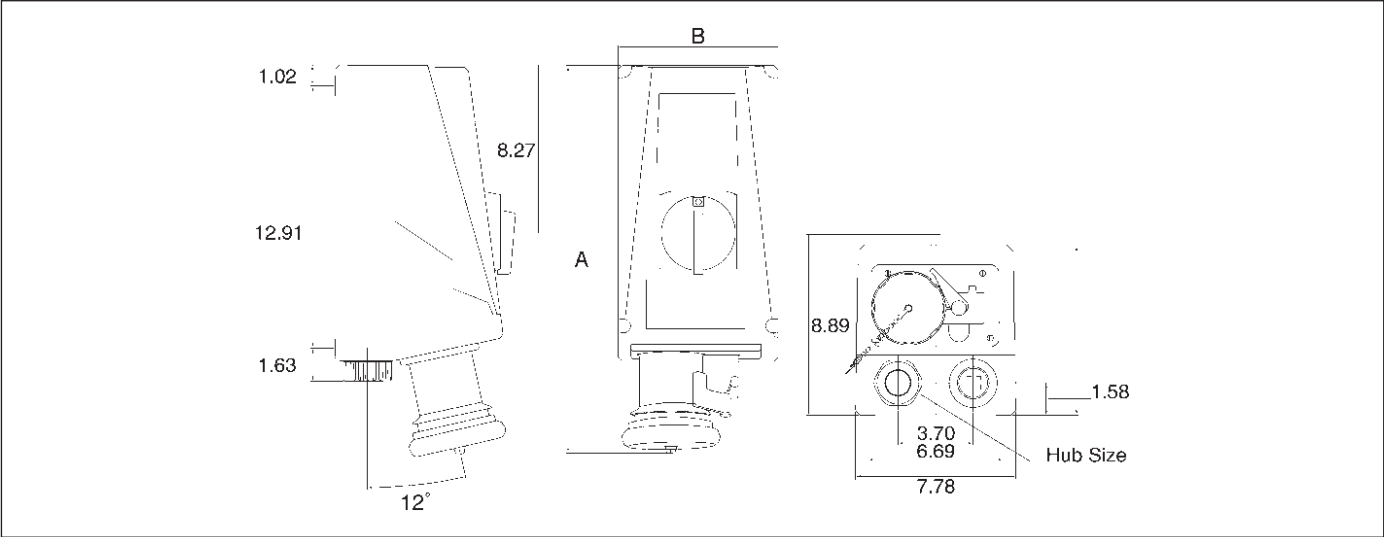
Fused and Non-fused

30, 60 and 100 Amp  
Enclosure Type 3, 4, 4X, 12  
IP66  
UL and cUL Listed

Watertight  
Corrosion-Resistant

Dimensions

In Inches:



Amps	Style	Dimension A	Dimension B	Hub Size
30	Fused	18.26	8.00	1"
30	Non-fused	18.26	7.87	1"
60	Fused	19.26	8.00	1¼"
60	Non-fused	19.26	7.87	1¼"

3P

# WSQC Interlocked Arktite® Receptacles with Enclosed Switches

## APJ Plugs

30 and 60A  
600 VAC  
NEMA 3R, 12

Raintight  
Dust-tight

**3P**

### Applications:

WSQC dead front interlocked receptacles with APJ, NPJ, BP or FP plugs are used:

- To supply power to portable electrical equipment such as hand lamps, lighting systems, power tools, conveyors, welders, compressors, etc.
- In damp, wet or corrosive locations
- Indoors or outdoors in non-hazardous areas
- In locations where mounting area is confined and compact equipment is required

### Features:

- NEMA 3R, 12
- Rainproof, dust-tight
- Available in 30 and 60 amps
- Horsepower rated switch
- Smallest footprint for interlocked receptacles
- Padlockable in OFF position; meets OSHA lockout/tagout requirements
- Compatible with Arktite® APJ aluminum and NPJ Krydon® material non-metallic plugs

### Certifications and Compliances:

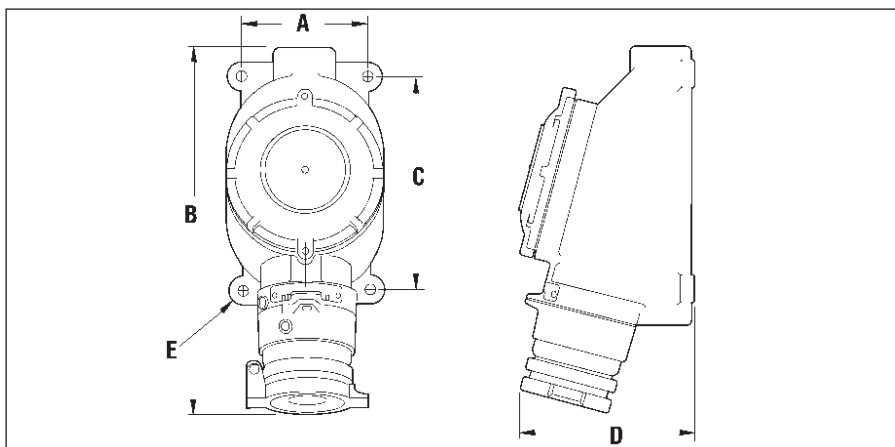
- NEMA 3R, 12
- CSA Standard: C22.2 No. 14, 182.1
- UL and cUL Listed

### Standard Materials:

- Enclosure – copper-free aluminum
- Cover and spring door – copper-free aluminum
- Insulator – Krydon® material
- Contacts – brass
- Cover gasket – neoprene



### Dimensions In Inches:



Amps	A	B	C	D	E
30A	3 <sup>1</sup> / <sub>8</sub>	9 <sup>3</sup> / <sub>4</sub>	—	5 <sup>3</sup> / <sub>4</sub>	3 <sup>3</sup> / <sub>8</sub>
60A	5	14 <sup>7</sup> / <sub>16</sub>	8 <sup>1</sup> / <sub>2</sub>	7	1 <sup>3</sup> / <sub>32</sub>

### Horsepower Ratings:

Amps	Single Phase				Three Phase			
	120V	240V	480V	600V	120V	240V	480V	600V
30A	2	5	7 <sup>1</sup> / <sub>2</sub>	7 <sup>1</sup> / <sub>2</sub>	3	7 <sup>1</sup> / <sub>2</sub>	15	15
60A		10	25	30		10	25	30

### Ordering Information:

Amps	Hub	Config.	Cat. #
30A	3/4"	2W3P	WSQC2330
	1"	2W3P	WSQC3330
	3/4"	3W4P	WSQC2340
	1"	3W4P	WSQC3340
60A	1 1/2"	2W3P	WSQC5630
	1 1/2"	3W4P	WSQC5640

### Options:

#### Description

- Interior rotated 22<sup>1</sup>/<sub>2</sub>° to the right (viewed from face)..... **S4**  
ex: WSQC5640 S4

#### Suffix



## APJ/NPJ Arktite Plugs

### Applications:

NBR *Arktite* interlocked receptacles with enclosed circuit breakers are used:

- To supply power and provide short circuit protection, thermal overload protection, and a disconnect means for portable electrical equipment such as motor generator sets, compressors, conveyors, and other similar equipment
- In locations where corrosion is present such as in offshore and marine locations, pulp and paper mills, chemical plants, food processing, and sewage treatment plants
- Indoors and outdoors in damp, wet or hosedown locations

### Features:

- Enclosures are made of *Krydon*® high impact strength fiberglass-reinforced polyester material having excellent resistance to corrosion and heat
- Receptacles are mechanically interlocked with circuit breakers which provide a disconnect means, short circuit protection, and thermal time delay overload protection
- For maximum safety, the spring door receptacle at the bottom is mechanically interlocked with the circuit breaker operating mechanism. The circuit breaker cannot be closed until the plug is fully inserted and the plug cannot be withdrawn unless the breaker is open
- Enclosure has hinged access door for easy wiring and maintenance. Three screws, hidden behind access door in door frame, prevent disassembly when door is locked
- Enclosure access door is mechanically interlocked with operating handle and cannot be opened unless operating handle operator is in "OFF" position
- A *Krydon* material hub (not mounted) is supplied with each enclosure as follows:

Rating	Hub Size (In.)	Cat. #
30A	3/4	NHUB2
60A	1 1/4	NHUB4
100A	2	NHUB6

For alternate hub sizes, see page 646

- Receptacle has self-closing spring door assembly to provide environmental protection
- Operating handle can be padlocked in "OFF" position. Breaker is trip-free of handle and will open under short circuit or overload when handle is in the "ON" position
- Provided with top and bottom mounting feet which may be rotated 90° to vertical or horizontal mounting positions

### Certifications and Compliances:

- NEMA 3, 3R, 4\*, 4X\*, 12
- ANSI/UL Standard: 489
- UL Standard: 1682
- CSA

### Standard Materials:

- Enclosure, covers and operating handles – *Krydon* fiberglass-reinforced polyester material
- Operating shafts – stainless steel
- Receptacle housings – copper-free aluminum
- Receptacle insulators – *Krydon* material
- Crimp/solder contacts – leaded red brass

### Standard Finishes:

- Copper-free aluminum – baked on powder epoxy
- Stainless steel – natural
- Enclosure – natural
- Receptacle insulators – natural (red)
- Brass – natural
- Leaded red brass – electro-tin-plated

### Electrical Rating Range:

- Receptacles – 30, 60 and 100 amperes
- Circuit Breakers – 100 ampere frame size

**Note:** For additional dimensional data, see page 496, enclosure catalog number NCB1024.

### Options:

#### Description

Special polarity – for use where two or more receptacles of the same ampere rating, style and number of poles are to be installed on the same premises for use of different voltages. Receptacle interior rotated 22½° to right (viewed from face) and plug changed to match ..... Hubs for other conduit sizes can be supplied. See page 646.

#### Suffix

S4



### Interchangeability of Plugs With Other Non-hazardous and Hazardous Location Receptacles:

- Plugs listed for use with NBR assemblies are standard *Arktite* APJ/NPJ plugs. Other standard APJ/NPJ and CPH plugs of the same rating, style and number of poles may be used with NBR receptacles, as well as EBBR, EPC and EPCB receptacles listed in Section 4P
- Portable equipment, suitable for the locations and equipped with the proper plug, can be used with non-hazardous rated AR receptacles, DBR and WSR interlocked receptacles located in non-hazardous locations, with EBBR, EPC and EPCB receptacles for Class I, Groups B, C, D hazardous locations, with DR and DBR interlocked receptacles for Class II, Groups F, G hazardous locations, and with NBR/NSR interlocked receptacles for wet and corrosive locations

\*30 and 60A Style 2 only.



# NBR Arktite® Interlocked Receptacles with Enclosed Circuit Breakers

3-Pole, 600 VAC  
NEMA 3, 3R, 4, 4X, 12  
Watertight  
Corrosion-Resistant

3P

## APJ/NPJ Arktite Plugs▲

### 100 Ampere Frame Size with Non-interchangeable Trip†§

Receptacle With Spring Door Housing	Enclosure Hub Size (In.)	Ckt. Brkr. Amps	Without Circuit Breaker Cat. #	With Cutler-Hammer Circuit Breaker Cat. #
<b>Style 1†</b>				
30 amp., 3-wire, 3-pole	¾	20	<b>NBR53731</b>	<b>NBR53731 WT20 3</b>
		30		<b>NBR53731 WT30 3</b>
		40		<b>NBR53731 WT40 3*</b>
		50		<b>NBR53731 WT50 3*</b>
60 amp., 3-wire, 3-pole	1¼	50	<b>NBR56731</b>	<b>NBR56731 WT50 3</b>
		60		<b>NBR56731 WT60 3</b>
		70		<b>NBR56731 WT70 3*</b>
		90		<b>NBR56731 WT90 3*</b>
100 amp., 3-wire, 3-pole	2	100	<b>NBR51731</b>	<b>NBR56731 WT100 3*</b>
		60		<b>NBR51731 WT60 3</b>
		70		<b>NBR51731 WT70 3</b>
		90		<b>NBR51731 WT90 3</b>
100 amp., 3-wire, 4-pole	2	100	<b>NBR51742</b>	<b>NBR51731 WT100 3</b>
		60		<b>NBR51742 WT60 3</b>
		70		<b>NBR51742 WT70 3</b>
		90		<b>NBR51742 WT90 3</b>
100 amp., 3-wire, 4-pole	2	100	<b>NBR51742</b>	<b>NBR51742 WT100 3</b>
		60		<b>NBR51742 WT60 3</b>
		70		<b>NBR51742 WT70 3</b>
		90		<b>NBR51742 WT90 3</b>

\*Circuit breaker trip rating may exceed receptacle rating for welding equipment applications only, as higher trip rating may not protect wiring.

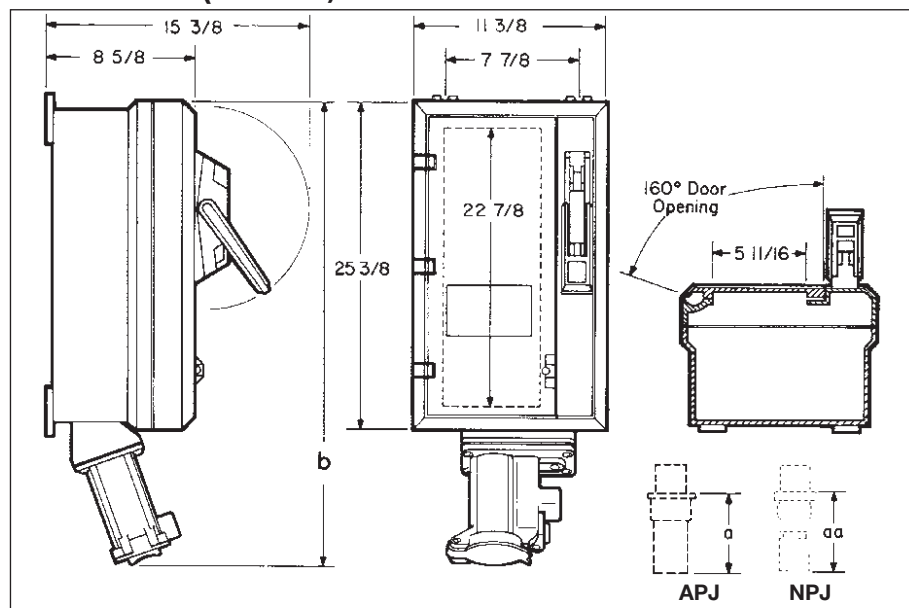
†Style 1 – Grounded through shell. Style 2 – Grounded through extra pole and shell. For a detailed description of these grounding methods, see page 1231.

§Also available with interchangeable trip breakers. Specify on order.

‡ For detailed information on circuit breaker selection, see Section 3C.

▲ Pressure connectors are standard. Crimp/solder type terminators are optionally available for 3 and 4-pole 30, 60 and 100 ampere. For details, see page 1233. To specify, add the suffix "T" to the catalog number. For example: APJ3375-T (Plug).

### Dimensions (In Inches):



### APJ/NPJ Plugs

600 VAC  
With Cable Grip and Neoprene Bushing



APJ



NPJ

Amps	Cable O.D. Range	Style 1† 3-wire, 3-pole Cat. #	Style 2† 3-wire, 4-pole Cat. #
30	0.60 to 1.20	<b>APJ3375</b>	<b>APJ3485</b>
	0.55 to 0.70		<b>NPJ3483</b>
	0.70 to 0.85		<b>NPJ3484</b>
60	0.75 to 1.45	<b>APJ6375</b>	<b>APJ6485</b>
	0.75 to 1.07		<b>NPJ6484</b>
	1.07 to 1.35		<b>NPJ6485</b>
100	1.00 to 1.70	<b>APJ10377</b>	<b>APJ10487</b>
	0.93 to 1.21		<b>NPJ10486</b>
	1.21 to 1.50		<b>NPJ10487</b>

Amps	b	a	aa
30	31 <sup>3</sup> / <sub>8</sub>	4 <sup>13</sup> / <sub>16</sub>	7
60	33	5 <sup>13</sup> / <sub>16</sub>	6 <sup>13</sup> / <sub>16</sub>
100	33 <sup>3</sup> / <sub>4</sub>	6 <sup>5</sup> / <sub>8</sub>	7 <sup>3</sup> / <sub>4</sub>

Dim. "a" and "aa" are exposed portion of plug when engaged with receptacle.

### Applications:

NSR *Arktime* interlocked receptacles with enclosed disconnect switches are used:

- To provide a power disconnect for fixed or portable electrical equipment such as welders, generators and compressors where the switch will be subject to frequent operation
- To provide short circuit protection when a fusible switch is needed
- In non-hazardous indoor or outdoor areas where corrosion, dust, hosedown and moisture may be a problem such as in offshore and marine locations, pulp and paper mills, chemical plants, sewage treatment plants and food processing facilities

### Features:

- Enclosures are made of *Krydon*® high impact strength fiberglass-reinforced polyester material having excellent resistance to corrosion and heat
- Switches are NEMA type HD heavy duty 3-pole, enclosed blade; a quick make-and-break mechanism with reinforced, positive pressure type blade and jaw construction. Fusible switches have fuse clips with steel reinforcing springs
- For maximum safety, the spring door receptacle at the bottom is mechanically interlocked with the switch operating mechanism. The switch cannot be closed until the plug is fully inserted and the plug cannot be withdrawn unless the switch is open
- Switch enclosure access door is mechanically interlocked with switch and cannot be opened unless switch operator is in "OFF" position
- Enclosure has hinged access door for easy wiring and maintenance. Three screws, located behind access door in door frame, prevent disassembly when door is locked
- A *Krydon* material hub (not mounted) is supplied with each enclosure as follows:

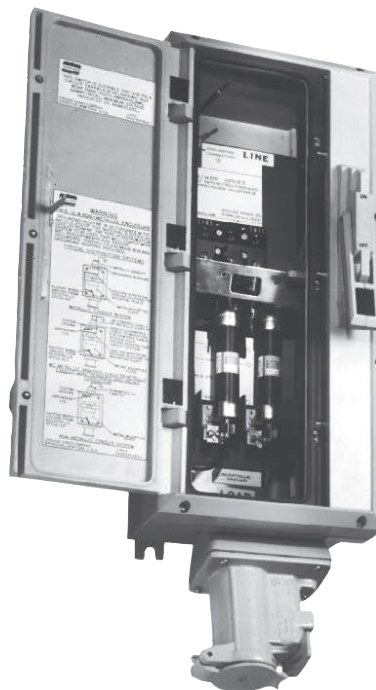
Rating	Hub Size (In.)	Cat. #
30A	3/4	NHUB2
60A	1 1/4	NHUB4
100A	2	NHUB6

For alternate hub sizes, see page 646

- Receptacle has self-closing spring door assembly to provide environmental protection
- Mounting feet may be rotated 90° to horizontal or vertical mounting positions
- Switch operating handle may be padlocked in the "OFF" position, preventing unauthorized operation of the switch

### Certifications and Compliances:

- NEMA 3, 3R, 4\*, 4X\*, 12
- UL Standard: 1682, 98



### Interchangeability of Plugs With Other Non-hazardous and Hazardous Location Receptacles:

- Plugs listed for use with NSR assemblies are standard *Arktime* APJ/NPJ plugs. Other standard APJ/NPJ and CPH plugs of the same rating, style and number of poles may be used with NSR receptacles, as well as with EBBR, EPC and EPCB receptacles listed in Section 4P
- Portable equipment, suitable for the locations and equipped with the proper plug, can be used with non-hazardous rated AR receptacles, DBR and WSR interlocked receptacles located in non-hazardous locations, with EBBR, EPC and EPCB receptacles for Class I, Groups B, C, D hazardous locations, with DR and DBR interlocked receptacles for Class II, Groups F, G hazardous locations, and with NBR/NSR interlocked receptacles for wet and corrosive locations

### Standard Materials:

- Receptacle housings – copper-free aluminum
- Insulators (plug and receptacle) – *Krydon* material
- Crimp/solder contacts – leaded red brass
- Enclosure and operating handle – *Krydon* fiberglass-reinforced polyester material
- Other exterior parts – stainless steel

### Standard Finishes:

- Copper-free aluminum – baked-on powder epoxy
- Stainless steel – natural
- Leaded red brass – electro-tin-plated
- Enclosure – natural (gray)
- Insulator (plug and receptacle) – natural (red)

### Options:

Description	Suffix
Special polarity – for use where two or more receptacles for the same ampere rating, style and number of poles are to be installed in the same area for use on different voltages. Receptacle interior rotated 22 1/2° to right (viewed from face) and matching plug .....	S4

Hubs for other conduit sizes can be supplied. See page 646.

\*30 and 60A Style 2 only.

# NSR Arktite® Interlocked Receptacles With Enclosed Disconnect Switches

## APJ/NPJ Arktite Plugs††

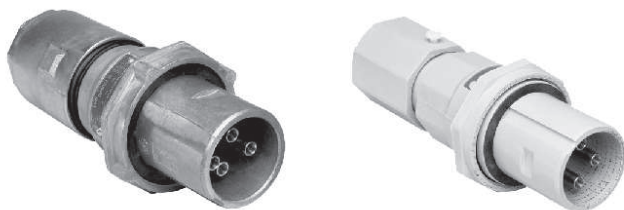
240 and 600 VAC  
250 VDC  
NEMA 3, 3R, 4, 4X, 12  
Watertight  
Corrosion-Resistant

**3P**

		240VAC/250VDC				600VAC/250VDC			
	Conduit Opening Sizes§	Style 1† 3-wire, 3-pole Cat. #	Style 2† 3-wire, 4-pole Cat. #	AC HP Rating	DC HP Rating	Style 1† 3-wire, 3-pole Cat. #	Style 2† 3-wire, 4-pole Cat. #	AC HP Rating	DC HP Rating
Amps									
Fusible									
30	¾	NSR331‡	NSR332‡	3	5	NSR3351*	NSR3352*	7½	5
60	1¼	NSR631‡	NSR632‡	5	10	NSR6351*	NSR6352*	20	10
100	2	NSR1031‡	NSR1032‡	10	20	NSR10351*	NSR10352*	30	20
Non-Fusible									
30	¾	NSR3341	NSR3342	7½	5	NSR33541	NSR33542	20	5
60	1¼	NSR6341	NSR6342	20	10	NSR63541	NSR63542	50	10
100	2	NSR10341	NSR10342	30	20	NSR103541	NSR103542	75	20

## APJ/NPJ Plugs

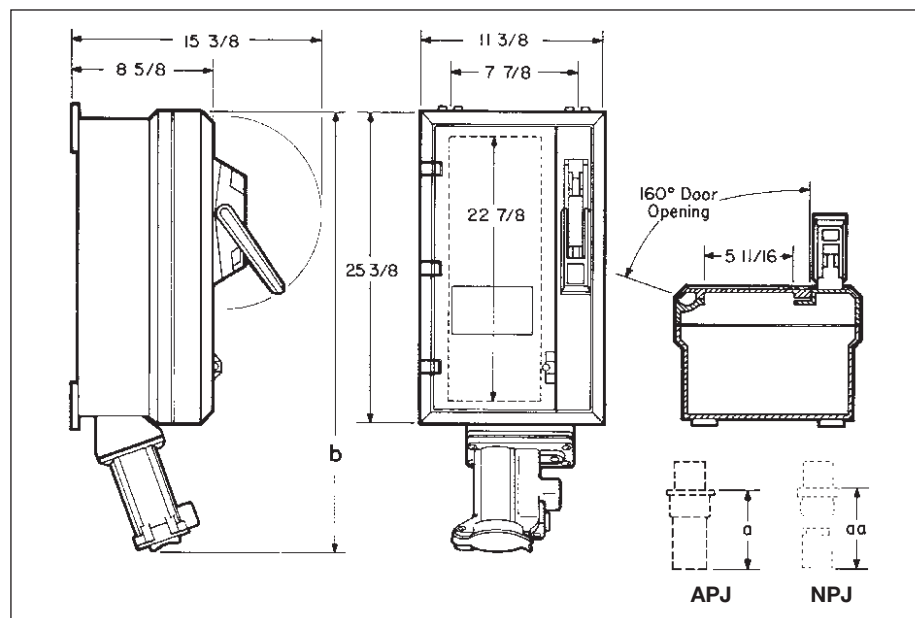
600VAC/250VDC, with Cable Grip and Neoprene Bushing



Amps	Cable O.D. Range	Style 1† 3-wire, 3-pole Cat. #	Style 2† 3-wire, 4-pole Cat. #
30	0.60 to 1.20	APJ3375	APJ3485
	0.55 to 0.70		NPJ3483
	0.70 to 0.85		NPJ3484
60	0.75 to 1.45	APJ6375	APJ6485
	0.75 to 1.07		NPJ6484
	1.07 to 1.35		NPJ6485
100	1.00 to 1.70	APJ10377	APJ10487
	0.93 to 1.21		NPJ10486
	1.21 to 1.50		NPJ10487

\*Arranged for NEC Class H fuses. May be field converted to NEC Class J fuses.  
‡Fuse clips accommodate NEC Class H fuses. For NEC Class J fuses, use 600V switches.  
†Style 1 - Grounded through shell. Style 2 - Grounded through extra pole and shell. For a detailed description of these grounding methods, see page 1231.  
§For alternate hub sizes, refer to catalog page see page 818.  
†Style 1 - Grounded through shell. Style 2 - Grounded through extra pole and shell. For a detailed description of these grounding methods, see page 1231  
††Pressure connectors are supplied as standard. To specify crimp/solder type terminators add the suffix "T" to the catalog number. For example: APJ3375-T (Plug).

## Dimensions In Inches:



Amps	b	a	aa
30	31⅜	4⅜	7
60	33	5⅜	6⅜
100	33¾	6⅜	7¾

Dim. "a" and "aa" are exposed portion of plug when engaged with receptacle.



# Plugs and Receptacles Industrial Heavy Duty Interlocked Hazardous

4P

Description	Page No.
Application/Selection	see pages 1300–1301
Interlocked Receptacle with –	
<b>H.P. Rated Switch</b>	
Technical Data	see page 1302
FSQC 30A & 60A / APJ Plugs	see pages 1302–1303
FSQC 100A / APJ Plugs	see page 1304
<b>Factory Sealed Switch</b>	
BHR 30A, 60A & 100A / BHP Plugs	see pages 1308–1309
SRD 30A & 60A / SP Plugs	see page 1310
<b>Circuit Breaker</b>	
EBBR 30A, 60A, 100A	see pages 1305–1307
EPC, 30A, 60A, 100A, 200A	see page 1312
EPCB 30A, 60A, 100A	see pages 1315–1316
DBR 30A, 60A, 100A	see page 1317

4P

# Plugs and Receptacles

## Industrial Heavy Duty Interlocked

### Application and Selection

### Hazardous

#### Applications:

- Where extra protection is a requirement. Interlocked units provide dead front receptacles; connection cannot be made or broken when unit is under load.
- In areas made hazardous by flammable vapors, gases or dusts; to supply power for portable electrical equipment and provide safe disconnect means and short circuit protection.

#### Considerations for Selection:

##### Environmental:

- The environment of the enclosure location in terms of NEC/CEC compliance and NEMA/EEMAC type required.
- Material and construction to withstand rough usage and atmospheric conditions.

##### Electrical:

- Sufficient current-carrying capacity to meet load requirements.
- Compatibility with electrical system (new or existing installation).
- Interchangeability of plugs with other hazardous and non-hazardous area receptacles.

##### Function:

- Switch vs. circuit breaker.

#### Options:

- Special polarity arrangements, material options, accessories, and optional arrangements of enclosure interiors are available to meet specific application needs. See listing pages for details.

#### Quick Selector Chart

Series	NEC/CEC & NEMA/EEMAC Compliances	Receptacles Interlocked With	Page	Mating Plugs	Electrical Rating
<b>BHR</b>	Class I, Division 1 and 2, Groups B, C, D Class II, Division 1 and 2, Groups F, G Class III NEMA: 3, 4, 7BCD, 9FG, 12	Factory sealed switch	See pages 1308–1309	BHP	30, 60, 100 amp. 480VAC 2-wire, 3-pole 3-wire, 4-pole 4-wire, 5-pole
<b>DBR</b>	NEC: Class II, Division 1 and 2, Groups F, G NEC: Class III NEMA/EFC: 3, 9FG, 12 CEC: Class II, Division 1 and 2, Group G CEC: Class III Encl. 3, 5	Circuit breaker	See page 1317	APJ/NPJ	Circuit breaker: 100 amp. frame size 250VDC/600VAC Receptacle: 30, 60, 100 amp. 2-wire, 3-pole 3-wire, 3-pole 3-wire, 4-pole
<b>EBBR</b>	Class I, Division 1 and 2, Groups B, C, D Class II, Division 1 and 2, Groups F, G Class III NEMA 3, 3R, 7BCD, 9FG, 12	Circuit breaker	See pages 1305–1307	APJ/NPJ	Receptacle: 30, 60, 100, 150 amp. 3-wire, 4-pole
<b>EPC</b>	NEC: Class I, Division 1 and 2, Groups C, D NEC: Class II, Division 1 and 2, Groups F, G NEC: Class III NEMA: 3, 7CD, 9FG, 12 CEC: Class I, Division 1 and 2, Groups C, D CEC: Class II, Division 1 and 2, Group G CEC: Class III Encl. 3, 4	Circuit breaker	See pages 1312–1314	APJ/NPJ	Circuit breaker: 100 amp. frame size 480VAC/250VDC Receptacle: 30, 60, 100 amp. 2-wire, 3-pole 3-wire, 4-pole
<b>EPC</b>	Class I, Division 1 and 2, Group D Class II, Division 1 and 2, Groups F, G Class III NEMA: 3, 7D, 9FG, 12	Circuit breaker	See pages 1312–1314	DP	Circuit breaker: 225 amp. frame size 600VAC/250VDC Receptacle: 200 amp. 3-wire, 4-pole
<b>EPCB</b>	NEC: Class I, Division 1 and 2, Groups B, C, D NEC: Class II, Division 1 and 2, Groups F, G NEC: Class III NEMA: 3, 7BCD, 9FG, 12 CEC: Class I, Division 1 and 2, Groups B, C, D CEC: Class II, Division 1 and 2, Group G CEC: Class III Encl. 3, 4	Circuit breaker	See pages 1315–1316	APJ/NPJ	Circuit breaker: 100 amp. frame size 600VAC/250VDC Receptacle: 30, 60, 100 amp. 2-wire, 3-pole 3-wire, 4-pole



## Industrial Heavy Duty Interlocked Quick Selector and Interchangeability Chart Hazardous

### Quick Selector Chart

Series	NEC/CEC & NEMA/EEMAC Compliances	Receptacles Interlocked With	Page	Mating Plugs	Electrical Rating
<b>FSQ</b>	NEC: Class I, Division 1 and 2, Groups B, C, D NEC: Class II, Division 1 and 2, Groups F, G NEC: Class III NEMA: 3, 7BCD, 9FG, 12 CEC: Class I, Division 1 and 2, Groups B, C, D CEC: Class II, Division 1 and 2, Groups G CEC: Class III Encl. 3, 5	Switch	See pages 1302–1304	APJ/NPJ	30A 250V/20A 600VAC 2-wire, 3-pole 3-wire, 4-pole 60 & 100 amp. 2-wire, 3-pole 3-wire, 4-pole
<b>SRD</b>	Class I, Division 1 and 2, Group D Class II, Division 1 and 2, Groups F, G Class III NEMA: 3, 7D, 9FG, 12	Factory sealed switch	See pages 1310–1311	5P	30 & 60 amp. 480VAC 2-wire, 3-pole 3-wire, 4-pole 4-wire, 5-pole

### Interchangeability Chart

Many of the plugs listed in this section can be used interchangeably with receptacles from other sections, both in hazardous and non-hazardous areas, **provided electrical rating and style of plug and receptacle are the same**. The following table is a summary of possible combinations.

Plugs Shown in Section 4P	Can be Used with These Receptacle Series	Listed in Section	Plug & Receptacle Electrical Rating
<b>APJ/NPJ</b>	AR, NR EPC, EPCB, DBR, EBBR, CSR, FSQC	1P 4P	30, 60, 100 amp. 3-wire, 4-pole
	NBR, NSR, WSR, CSR, WSRD, WSRDW, WSQC, WSRD SM S901	3P	30, 60, 100 amp. 3-wire, 3-pole 3-wire, 4-pole
<b>BHP</b>	BHR SRD	4P	30, 60, 100 amp. 2-wire, 3-pole 3-wire, 4-pole 4-wire, 5-pole
<b>SP</b>	BHR SRD	4P	30, 60 amp. 2-wire, 3-pole 3-wire, 4-pole 4-wire, 5-pole

**CAUTION:** To reduce the risk of ignition of hazardous atmospheres, do not use plugs or receptacles in Class II, Group F locations that contain electrically conductive dusts.

# FSQC Arktime® Dead Front Interlocked Receptacles and Switches

## APJ/NPJ Arktime Plugs

Cl. I, Div. 1 and 2, Groups B, C, D  
Cl. II, Div. 1 and 2, Groups F, G  
Cl. III  
NEMA/EEMAC 3, 7BCD, 9FG, 12

Explosionproof  
Dust-Ignitionproof  
Raintight  
Wet Locations

### Applications:

FSQC dead front switched interlock receptacles are used:

- To supply power to portable electrical equipment such as hand lamps, lighting systems, power tools, conveyors, welders and similar equipment.
- In areas which are hazardous due to the presence of flammable vapors or gases and combustible dusts.
- In damp, wet or corrosive locations.
- Indoors or outdoors at petroleum refineries, chemical and petrochemical plants and facilities for processing and handling grain, flour and starch.

### Features:

- Compatible with Arktime® APJ aluminum and NPJ Krydon® plugs
- Switch cannot be turned "ON" until plug is fully inserted and rotated
- Plug cannot be withdrawn under load
- Cover cannot be removed when switch is "ON"
- Satisfies OSHA lockout tagout requirement
- Smallest mounting footprint for interlocks

### Certifications and Complies:

- NEMA 3, 7BCD, 9FG, 12
- NEC/CEC:  
Class I, Division 1 & 2, Groups B, C, D  
Class I, Zone 1, Group IIB + Hydrogen  
Class II, Division 1 & 2, Groups F, G  
Class III
- ANSI/UL Standards: 1010 UL Listed
- CSA Standards: C22.2 No. 30 cUL Listed & C22.2 No. 159

### Materials:

- Enclosure – copper-free aluminum
- Cover and spring door – copper-free aluminum
- Insulator – Krydon®
- Contacts – brass



### Options:

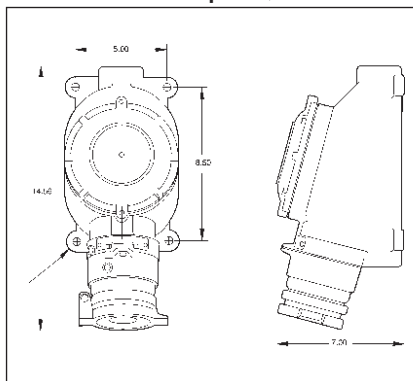
Description	Suffix
Special polarity, receptacle interior rotated 22½°.....	S4

### Interchangeability of Plugs with Other Hazardous and Non-hazardous Location Receptacles:

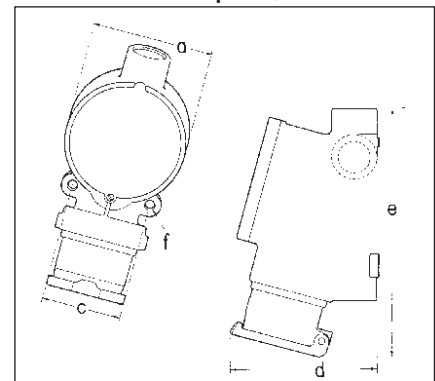
- Plugs listed for FSQC receptacles on 1043 are standard APJ/NPJ plugs. Other standard APJ/NPJ of the same rating, style and number of poles may be used with FSQC receptacles as well as with DBR, EBBR, EPC and EPCB receptacles listed in Section 2P and 4P.
- As a result, portable equipment suitable for the location and equipped with the proper plug can be used with AR series receptacles for non-hazardous areas, EBBR, EPC, EPCB, and FSQC receptacles for Class I hazardous locations; DBR receptacles for Class II hazardous locations.

### Dimensions In Inches:

30 Amp FSQC



60 Amp FSQC



### Dimensions

Cat. #	Maximum Dimensions				
	a	c	d	e	f
FSQC2320, 3320					
FSQC2430, 3430	4¾	3⅛	5¾	9¾	¾
FSQC2390, 3390					

# FSQC Arktite® Dead Front Interlocked Receptacles and Switches

## APJ/NPJ Arktite Plugs

Cl. I, Div. 1 and 2, Groups B, C, D  
Cl. II, Div. 1 and 2, Groups F, G  
Cl. III  
NEMA/EEMAC 3, 7BCD, 9FG, 12

Explosionproof  
Dust-Ignitionproof  
Raintight  
Wet Locations

**4P**

## FSQC Receptacles

With Spring Door Through Feed Hubs

### Horsepower Rating:

Amps	120V	Single Phase			600V
		240V	480V		
30A	2	5	7½		7½
60A	—	10	25		30

Amps	120V	Three Phase			600V
		240V	480V		
30A	3	7½	15		15
60A	—	10	25		30



### Ordering Information:

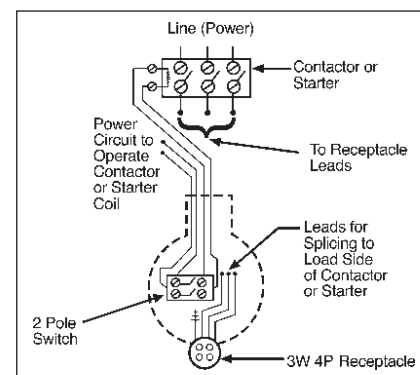
Amps	Hub	Config.	Description	Cat. #	Matching Plug
30A	¾"	2W3P	2-Pole Switch	FSQC2320	APJ3385
		3W4P	3-Pole Switch	FSQC2430	APJ3485
	1"	2W3P	2-Pole Switch	FSQC3320	APJ3385
		3W4P	3-Pole Switch	FSQC3430	APJ3485
60A	1½"	2W3P	2-Pole Switch	FSQC5630	APJ6385
		3W4P	3-Pole Switch	FSQC5640	APJ6485

## FSQC for Use with Magnetic Motor Starters or Contactors

FSQC units listed below operate in the same way as standard units but are intended *only for use with magnetic motor starters or contactors* (see Wiring Diagram 1).

Receptacles have leads for splicing to conductors from the load side of contactor. The switch actuated by the plug is wired into the starter or contactor coil circuit and controls only this circuit. The starter or contactor is energized only when the plug is fully inserted and rotated to close the switch. Since the plug is inserted or withdrawn only when the switch is open, the circuit cannot be made or broken under the load.

Plugs used are standard APJ units and special polarity units listed are recommended where interchange with devices for other wiring systems is possible.



**Wiring Diagram 1**  
FSQC2390 and 3390 only

## FSQC Receptacles

With Spring Door Through Feed Hubs

No. of Poles	Hub Size	Receptacle Cat. #	Cable Dia.	Mating Plug Cat. #
Standard Configuration				
3W, 4P	¾	FSQC2390	} 0.39-1.20 0.55-0.70 0.70-0.85	APJ3485
3W, 4P	1	FSQC3390		NPJ3483
3W, 4P	1			NPJ3484
Special Polarity Configuration				
3W, 4P	¾	FSQC2390 S4	} 0.39-1.20 0.55-0.70 0.70-0.85	APJ3485 S4
3W, 4P	1	FSQC3390 S4		NPJ3483 S4
				NPJ3484 S4

## Applications:

- To supply power to portable or fixed electrical equipment such as welders, pumps, motors, machine tools, conveyors, oil rigs, mixers, grain elevators, petroleum refineries, chemical and petrochemical plants
- In hazardous areas containing flammable vapors or gases and combustible dusts
- In damp, wet or hosedown environments
- In highly corrosive locations

## Features:

- NEMA Type 4 watertight
- Suitable for Group B
- Compact housing
- Simple operation
- Compatible with Arkrite® APJ aluminium and NPJ Krydon® plugs
- H.P.-rated enclosed switch
- 4 mounting feet can be rotated for flexibility in positioning to surface
- Wiring channel provided under switch for easy wire routing to terminals
- Dual bottom-feed hubs and one top hub for convenient feed-through installation
- Bread-loose fork lugs case in place for easy removal of cover

## Certifications and Compliances:

- NEMA 3, 3R, 4, 4X\*, 7BCD, 12  
 Class I, Divisions 1 and 2, Groups B, C, D  
 Class I, Zone 1, Group IIB + H<sub>2</sub>  
 Class II, Divisions 1 and 2, Groups F, G  
 Class III
- ANSI/UL Standards: 1010 and 98 UL Listed
- cUL Listed, CSA Standard C22.2 No. 30, C22.2 No. 159

\*NEMA 4X when ordered with suffix S752.

## Materials:

- Body – copper-free aluminum
- Cover – copper-free aluminum
- Locking collar – Feraloy® iron alloy
- Insulator – Krydon® material
- Contacts – brass

## Options:

Description	Suffix
• Special polarity – receptacle interior rotated 22½° to right.....	<b>S4</b>
(example: FSQC61040 S4)	
• NEMA 4X – epoxy powder coated.....	<b>S752</b>
(example: FSQC61040 S752)	
• Auxiliary contact.....	<b>S483</b>
• Breather/Drain.....	<b>S756V</b>

## Safety First:

- Power cannot be turned "on" until plug is fully inserted and Uni-Loc collar is rotated
- When Uni-Loc collar is in "on" position, plug is locked in place to prevent disengagement under load
- Cover cannot be removed while switch is "on"
- Cover-Loc™ design prevents switch from being turned "on" while cover is removed
- Uni-Loc collar aligns with lug on housing to permit OSHA lockout/tagout in the "off" position

## Electrical Rating:

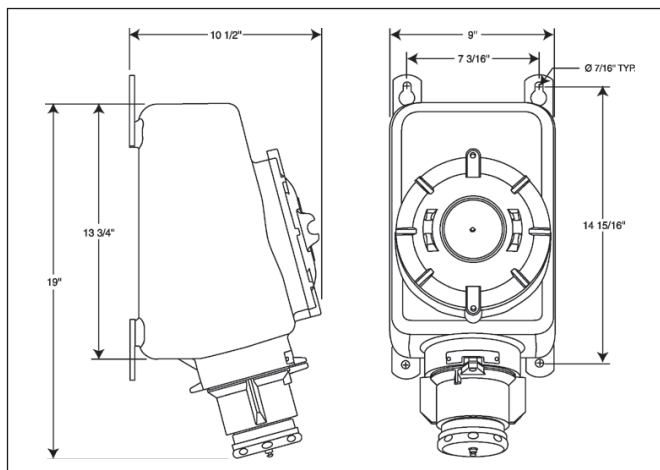
- 100A, 600VAC

## Ordering Information:

Rating	Config.	Hub Size	HP Rating	Cat. #
100A, 600 VAC	3W4P	2"	50 HP @ 600V, 480V	<b>FSQC61040</b>

## Dimensions

### In Inches:



# EBBR Series Interlocked Arktite® Receptacles with Circuit Breakers

## 30, 60, 100 Amp Interlocked Receptacles

Cl. I, Div. 1 and 2, Groups B, C, D  
Cl. II, Div. 1 and 2, Groups F†, G  
Cl. III  
NEMA 3, 3R, 7BCD, 9FG, 12  
Explosionproof

Dust-Ignitionproof  
Raintight  
Wet Locations

**4P**

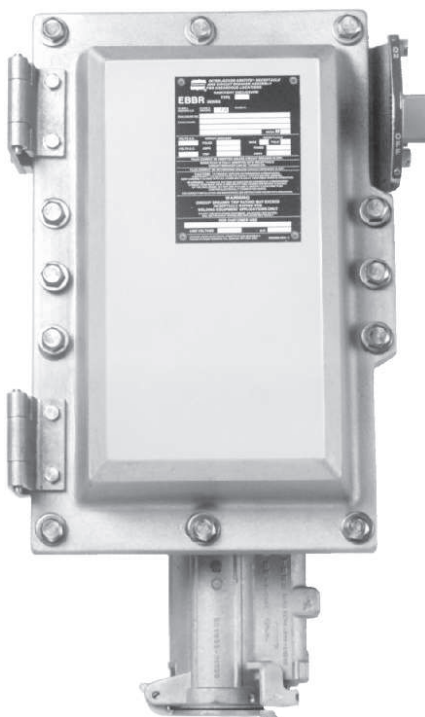
### Applications:

EBBR interlocked receptacles with circuit breakers are used:

- As a service outlet for portable equipment – indoors or outdoors – in damp, wet, corrosive locations, without the need for a protective shelter.
- In areas which are hazardous due to flammable vapors, gases or combustible dust, e.g., refineries, chemical plants, and other processing and handling facilities of a hazardous nature.
- In areas where frequent washdowns are necessary or where heavy rain or water spray is prevalent.

### Features:

- Rugged, corrosion resistant, cast copper-free aluminum construction.
- Accepts compatible Arktite plug of same rating and configuration.
- Mechanical interlock mechanism for dead front construction.
- Receptacles are mechanically interlocked with circuit breakers to provide disconnect means, short circuit protection and thermal time delay overload protection.
- A spring door receptacle, located at the bottom of the unit, is mechanically interlocked with the circuit breaker operating mechanism for safe and dependable operation.
- Plug and receptacle contacts cannot be made or broken under load. The circuit breaker cannot be closed until the plug is fully inserted and the plug cannot be withdrawn unless the breaker is de-energized.
- Operating handles can be padlocked in either "ON" or "OFF" positions. Breakers are trip-free of the handles and will open under short circuit or overload even if the handle is locked in the "ON" position.
- Component operating handles located through the right side wall of the body permits visual confirmation of correct component assembly and operation.
- Total compliance to the wiring and room requirements of the National Electrical Code®.
- Semi-clamshell enclosure design, with an external machined flat joint flamepath between body and cover makes interior components easily accessible.
- Minimum enclosure-to-enclosure spacing with little interference between the opened cover and an adjacent enclosure.
- Copper-free aluminum hinges allow the cover to swing well out of the way.
- Stainless steel, quick release, captive, hex head cover bolts. Stainless steel springs provide clear indication cover bolts are fully retracted from body.
- Versatile, internal operating mechanisms allow for field adjustment to accommodate popular manufacturers' breakers.



- Simple, straightforward installation of breaker on pre-drilled mounting plate within enclosure.
- Neoprene cover gasket permanently attached to the cover seals out moisture.
- Bodies have top drilled and tapped entrance for power conduit (1½") plus one at the top and one at the bottom for a breather and drain (½"). Breather and drain entrances are plugged.
- Tap-on mounting feet.

### Certifications and Compliances:

- NEC:
  - Class I, Division 1 and 2, Groups B, C, D
  - Class II, Division 1 and 2, Groups F†, G
  - Class III
- NEMA: 3, 3R, 7BCD, 9FG, 12
- UL Standard: 1203

### Standard Materials:

- Body, cover, and receptacle – copper-free aluminum
- Contact insulator (receptacles and plugs) – fiberglass-reinforced polyester
- Receptacle contacts – leaded red brass
- Pressure contacts (plugs) – brass
- Operating handle – copper-free aluminum
- Operating shafts and bushings – stainless steel
- Interior parts – heavy gauge sheet steel, zinc plated
- Cover bolts, washer and retractile springs – stainless steel

### Standard Finishes:

- Copper-free aluminum – natural
- Fiberglass-reinforced polyester – natural (red)
- Brass – natural
- Leaded red brass – electro-tin-plated
- Stainless steel – natural

### Electrical Rating Ranges:

- Circuit breakers – 20–150 amps
- Receptacles – 30, 60, 100, 150 amp
- 3-wire, 4-pole configuration

### Options:

The following options are available from the factory by adding suffix to the Cat. #:

Description	Suffix
• Receptacle interior rotated 22½° to right (viewed from face) and plug changed to match.....	S4
• Breather (ECD13) at top, Drain (ECD11) at bottom.....	S198V
• Group B Breather and Drain.....	S756V
• External Powder Epoxy Finish.....	S752

### Grounding:

- EBBR interlocked receptacles and matching plugs are provided with an extra grounding pole for attaching a grounding wire. In addition, direct connection is provided between receptacle and metallic plug and the grounding pole. If a compatible non-metallic plug made of Krydon® fiberglass-reinforced polyester material is used, grounding is accomplished through the extra grounding pole only. If a separate grounding wire is not installed in the enclosure, grounding is accomplished through the conduit system.

†Caution: To reduce the risk of ignition of hazardous atmospheres, do not use plugs or receptacles in Class II, Group F locations that contain electrically conductive dusts.



# 4P EBBR Series Interlocked Arktime® Receptacles with Circuit Breakers

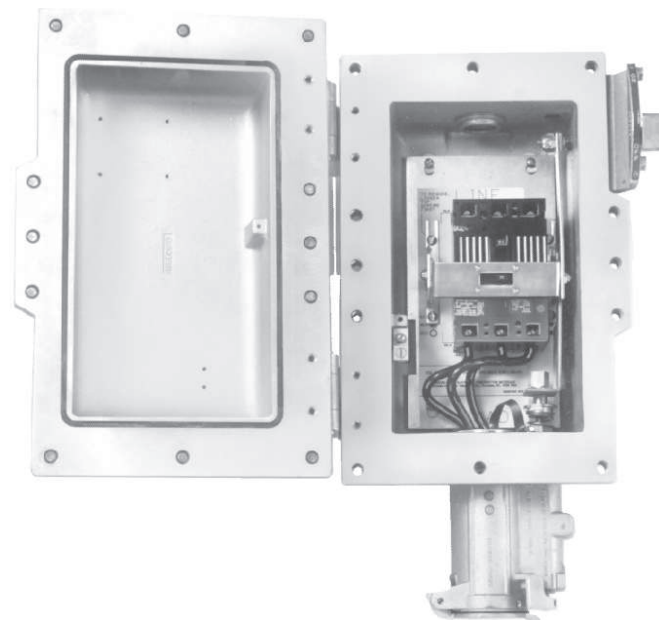
30, 60, 100 Amp Interlocked Receptacles

Cl. I, Div. 1 and 2, Groups B, C, D  
Cl. II, Div. 1 and 2, Groups F†, G  
Cl. III  
NEMA 3, 3R, 7BCD, 9FG, 12  
Explosionproof

Dust-Ignitionproof  
Raintight  
Wet Locations

## Interchangeability of Plugs with Other Hazardous and Non-hazardous Location Receptacles:

- Plugs listed for use with EBBR receptacles are standard Arktime APJ/NPJ plugs. Standard APJ/NPJ and also CPH plugs of the same rating, style and number of poles may be used with EBBR receptacles, as well as with DBR, EPC and EPCB receptacles listed in Section 4P of the catalog.
- As a result, portable equipment suitable for the location and equipped with the proper plug can be used with AR/NR series receptacles for non-hazardous locations; EBBR, EPC and EPCB receptacles for Class I and II hazardous locations; and DBR and DBR receptacles for Class II hazardous locations.



Complete EBBR receptacle with circuit breaker installed.

## Ordering Information:

Receptacle With Spring Door Housing	Hub Size (In.)	Circuit Breaker		Without Circuit Breaker Cat. #	w/Cutler-Hammer Breaker	w/G.E. Breaker	w/Square D Breaker
		Rating	Amps				
30 Amp 3-wire 4-pole Style 2	1½	3-pole	20	EBBRA304	EBBRA304 WT20 3	EBBRA304 TT20 3	EBBRA304 DT20 3
		480VAC+	30	EBBRA304	EBBRA304 WT30 3	EBBRA304 TT30 3	EBBRA304 DT30 3
		or	40	EBBRA304	EBBRA304 WT40 3*	EBBRA304 TT40 3*	EBBRA304 DT40 3*
		250 VDC	50	EBBRA304	EBBRA304 WT50 3*	EBBRA304 TT50 3*	EBBRA304 DT50 3*
60 Amp 3-wire 4-pole Style 2	1½	3-pole	50	EBBRA604	EBBRA604 WT50 3	EBBRA604 TT50 3	EBBRA604 DT50 3
		480VAC+	60	EBBRA604	EBBRA604 WT60 3	EBBRA604 TT60 3	EBBRA604 DT60 3
		or	70	EBBRA604	EBBRA604 WT70 3*	EBBRA604 TT70 3*	EBBRA604 DT70 3*
		250 VDC	90	EBBRB604	EBBRB604 WT90 3*	EBBRB604 TT90 3*	EBBRB604 DT90 3*
			100	EBBRB604	EBBRB604 WT100 3*	EBBRB604 TT100 3*	EBBRB604 DT100 3*
100 Amp 3-wire 4-pole Style 2	1½	3-pole	50	EBBRA104	EBBRA104 WT50 3	EBBRA104 TT50 3	EBBRA104 DT50 3
		480VAC+	60	EBBRA104	EBBRA104 WT60 3	EBBRA104 TT60 3	EBBRA104 DT60 3
		or	70	EBBRA104	EBBRA104 WT70 3	EBBRA104 TT70 3	EBBRA104 DT70 3
		250 VDC	90	EBBRB104	EBBRB104 WT90 3	EBBRB104 TT90 3	EBBRB104 DT90 3
			100	EBBRB104	EBBRB104 WT100 3	EBBRB104 TT100 3	EBBRB104 DT100 3
150 Amp† 3-wire 4-pole Style 2	1½	3-pole	100	EBBRB154	EBBRB154 WT100 3		
		480VAC+	125	EBBRB154	EBBRB154 WT125FDB 3		
		or	150	EBBRB154	EBBRB154 WT150FDB 3		
		250 VDC					

+Enclosures with 600 Volt circuit breakers are available. Add suffix "FDB" Ex: EBBRA304 – WT20FDB-3.

\*Circuit breaker trip rating may exceed receptacle rating for welding equipment applications only, as higher trip rating may not protect wiring.

†150A also available in A size enclosure for areas with space constraints (ie EBBRA154).

‡Caution: To reduce the risk of ignition of hazardous atmospheres, do not use plugs or receptacles in Class II, Group F locations that contain electrically conductive dusts.



# EBBR Series Interlocked Arktime® Receptacles with Circuit Breakers

## 30, 60, 100 Amp Interlocked Receptacles

Cl. I, Div. 1 and 2, Groups B, C, D  
Cl. II, Div. 1 and 2, Groups F†, G  
Cl. III  
NEMA 3, 3R, 7BCD, 9FG, 12  
Explosionproof

Dust-Ignitionproof  
Raintight  
Wet Locations

**4P**

Amps	Cable O.D. Range	3-wire, 4-pole Cat. #	
		Aluminum	Krydon material
30	0.60 to 1.20	APJ3485	
	0.55 to 0.70		NPJ3483
	0.70 to 0.85		NPJ3484
60	0.75 to 1.45	APJ6485	
	0.75 to 1.07		NPJ6484
	1.07 to 1.35		NPJ6485
100	1.00 to 1.70	APJ10487	
	0.93 to 1.21		NPJ10486
	1.21 to 1.50		NPJ10487

## APJ and NPJ Arktime Plugs



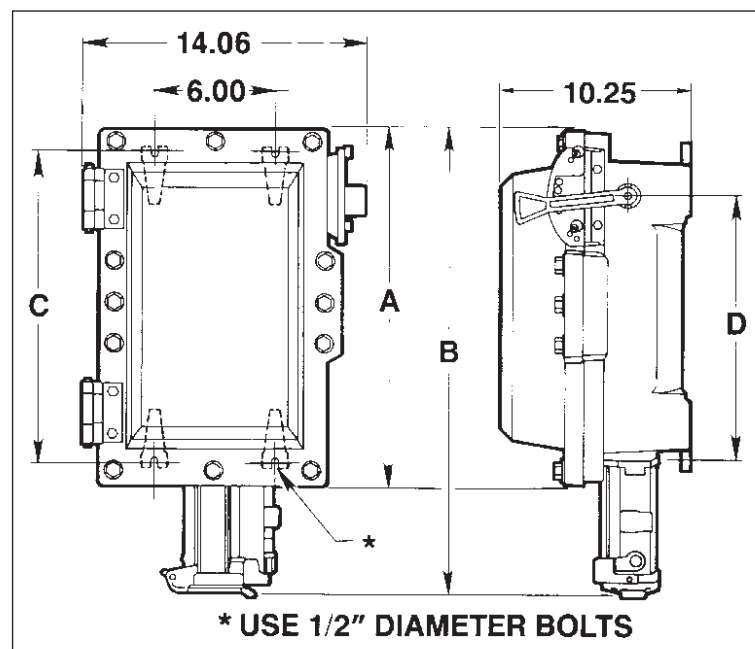
Aluminum APJ series



Krydon® material NPJ series (non-metallic)

Both APJ and NPJ series plugs may be used with EBBR series interlocked receptacles.

## Dimensions In Inches:



## EBBRA

Amps	A	B	C	D
30	19.40	22.85	17.25	14.50
60	19.40	23.95	17.25	14.50
100	19.40	24.70	17.25	14.50
150	19.40	24.70	17.25	14.50

## EBBRB

A	B	C	D
26.90	31.45	24.75	22.00
26.90	32.20	24.75	22.00
26.90	32.20	24.75	22.00

†Caution: To reduce the risk of ignition of hazardous atmospheres, do not use plugs or receptacles in Class II, Group F locations that contain electrically conductive dusts.

# BHR Dead Front Interlocked Receptacles with Factory Sealed Switch

## BHP Plugs

Cl. I, Div. 1 and 2, Groups B, C, D  
Cl. II, Div. 1 and 2, Groups F, G  
Cl. III  
NEMA 3, 4, 7BCD, 9FG, 12  
Explosionproof

Dust-Ignitionproof  
Raintight  
Wet Locations

### Applications:

BHR dead front interlocked receptacles and switches with BHP plugs are used:

- To supply power to portable electrical equipment such as motor-generator sets, compressors, heating and cooling units, lighting systems, conveyors, and similar equipment
- Primarily in areas which are hazardous due to the presence of hydrogen or gases, or vapors of equivalent hazard such as manufactured gas
- In damp, wet, or corrosive locations
- Indoors or outdoors in hydrogen areas of process industries, missile bases where hydrogen fuel is used, and gas manufacturing plants

### Features:

- BHR receptacles feature a built-in rotary switch which is operated automatically when the plug is inserted and withdrawn. The switch, capable of making and breaking the circuit at full rated load, is operated by a helical blade in the center of the plug
- The plug and receptacle contacts cannot be made or broken under load. When the plug is inserted, the plug and receptacle contacts engage before the switch closes. When the plug is withdrawn, the switch opens before the plug and receptacle contacts disengage. This sequence of operation provides maximum safety in a dead front receptacle. Arcing is isolated in a flame and dust-tight chamber
- Operation is simple, safe and positive. To disconnect the portable device, the plug fastening ring is unscrewed and the plug simply pulled straight out. No separate interlock device or operating handle need be actuated
- Positive engagement without mismatching is assured by a distinct physical polarization of the plug and receptacle in every rating
- Plugs are furnished with pressure terminations. Receptacles are furnished with flexible leads for splicing to the supply conductors. A large threaded cover provides access to the wiring compartment
- As shown in the listings, assemblies are available for top, bottom or through feed conduit arrangements in  $\frac{3}{4}$ " to 2" sizes

### Certifications and Compliances:

- Class I, Division 1 and 2, Groups B, C, D
- Class II, Division 1 and 2, Groups F, G
- Class III
- NEMA: 3, 4, 7BCD, 9FG, 12
- ANSI/UL Standard: 1010

### Standard Materials:

- Receptacle housings – copper-free aluminum
- Seals – malleable iron
- Plug exteriors – copper-free aluminum
- Insulation – high impact glass filled phenolic
- Contacts – brass

### Standard Finishes:

- Copper-free aluminum – natural
- Malleable iron – electrogalvanized and aluminum lacquer
- Phenolic – natural (black)
- Brass – silver plated

### Options:

- Special polarity – where two or more receptacles of the same ampere rating and number of poles are to be installed in the same areas for use on different voltages, alternate polarizations can be furnished. Details on request.

### Electrical Rating Ranges:

- 30, 60 and 100 amperes, 480VAC

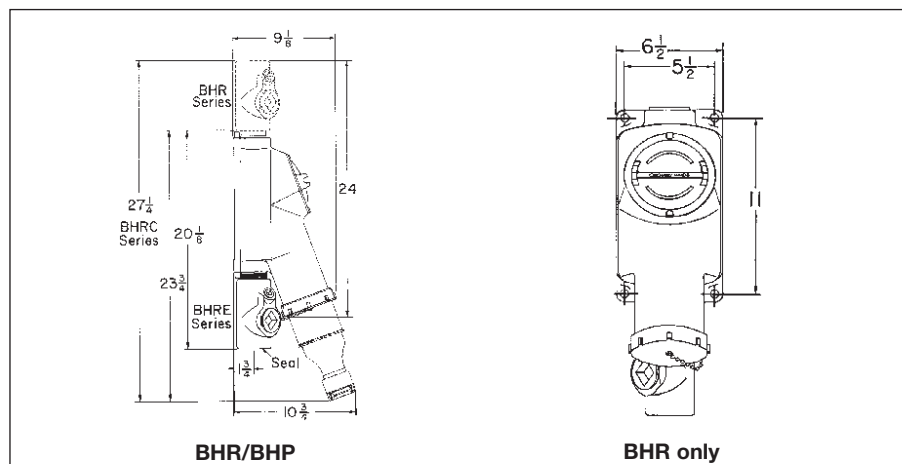
### Grounding:

- BHR receptacles and BHP plugs are provided with an extra grounding pole. In plugs, provision is made for attachment of the grounding wire to the grounding pole. In addition, direct connection is provided between the plug and receptacle housings and the grounding pole. In the receptacle, grounding is accomplished through the conduit system

**CAUTION:** To reduce the risk of ignition of hazardous atmospheres, do not use plugs or receptacles in Class II, Group F locations that contain electrically conductive dusts.

### Dimensions

#### In Inches:



BHR/BHP in use.



BHR/BHP separated showing helical driver.

# BHR Dead Front Interlocked Receptacles with Factory Sealed Switch

Cl. I, Div. 1 and 2, Groups B, C, D  
Cl. II, Div. 1 and 2, Groups F, G  
Cl. III  
NEMA 3, 4, 7BCD, 9FG, 12

Explosionproof  
Dust-Ignitionproof  
Raintight  
Wet Locations

**4P**

## BHP Plugs, 480 VAC, 60–400 hertz

### Receptacles

Receptacles are supplied ready to install with a threaded cap. Through feed hubs are standard. Sealing fittings, nipples and closure plugs ordered separately depending on application. Receptacles can be configured for Top Feed, Bottom feed or Through feed.

Amps	Config.	Hub Size (In.)	Cat. #
30	2-wire, 3-pole	3/4	<b>BHRC3382N</b>
	2-wire, 3-pole	1	<b>BHRC3383N</b>
	3-wire, 4-pole	3/4	<b>BHRC3482D</b>
	3-wire, 4-pole	1	<b>BHRC3483D</b>
	4-wire, 5-pole	1	<b>BHRC3583 NW</b>
	4-wire, 5-pole	1 1/4	<b>BHRC3584 NW</b>
60	2-wire, 3-pole	1 1/4	<b>BHRC6384N</b>
	2-wire, 3-pole	1 1/2	<b>BHRC6385N</b>
	3-wire, 4-pole	1 1/4	<b>BHRC6484D</b>
	3-wire, 4-pole	1 1/2	<b>BHRC6485D</b>
	4-wire, 5-pole	1 1/4	<b>BHRC6584 NW</b>
	4-wire, 5-pole	1 1/2	<b>BHRC6585 NW</b>
100	2-wire, 3-pole	1 1/4	<b>BHRC10384N</b>
	2-wire, 3-pole	1 1/2	<b>BHRC10385N</b>
	3-wire, 4-pole	1 1/2	<b>BHRC10485D</b>
	3-wire, 4-pole	2	<b>BHRC10486D</b>
	4-wire, 5-pole	1 1/2	<b>BHRC10585 NW</b>
	4-wire, 5-pole	2	<b>BHRC10586 NW</b>



### Plugs

Plugs mate to BHR receptacles. Plugs are supplied with threaded locking ring that threads onto receptacle housing for secure connection and environmental seal. Mechanical external cord grip and neoprene bushing provided for secure cord retention and environmental seal.

Amps	Config.	Cable Dia.	Cat. #
30	2-wire, 3-pole	.500 - .875	<b>BHP3383N</b>
	2-wire, 3-pole	.875 - 1.375	<b>BHP3385N</b>
	3-wire, 4-pole	.500 - .875	<b>BHP3483D</b>
	3-wire, 4-pole	.875 - 1.375	<b>BHP3485D</b>
	4-wire, 5-pole	.500 - .875	<b>BHP3583 NW</b>
	4-wire, 5-pole	.875 - 1.375	<b>BHP3585 NW</b>
60	2-wire, 3-pole	.500 - .875	<b>BHP6383N</b>
	2-wire, 3-pole	.875 - 1.375	<b>BHP6385N</b>
	3-wire, 4-pole	.500 - .875	<b>BHP6483D</b>
	3-wire, 4-pole	.875 - 1.375	<b>BHP6485D</b>
	4-wire, 5-pole	.875 - 1.375	<b>BHP6585 NW</b>
	4-wire, 5-pole	1.375 - 1.875	<b>BHP6587 NW</b>
100	2-wire, 3-pole	.875 - 1.375	<b>BHP10385N</b>
	2-wire, 3-pole	1.375 - 1.875	<b>BHP10387N</b>
	3-wire, 4-pole	.875 - 1.375	<b>BHP10485D</b>
	3-wire, 4-pole	1.375 - 1.875	<b>BHP10487D</b>
	4-wire, 5-pole	.875 - 1.375	<b>BHP10585 NW</b>
	4-wire, 5-pole	1.375 - 1.875	<b>BHP10587 NW</b>



# SRD Dead Front Interlocked Receptacles with Factory Sealed Switch

SP Plugs, 480 VAC, 60–400 hertz

Cl. I, Div. 1 and 2, Group D  
Cl. II, Div. 1 and 2, Groups F, G  
Cl. III  
NEMA 3, 7D, 9FG, 12  
Explosionproof

Dust-Ignitionproof  
Raintight  
Wet Locations

## Applications:

SRD dead front interlocked receptacles, switches, and SP plugs are used:

- To supply power to portable electrical equipment such as motor-generator sets, compressors, heating and cooling units, lighting systems, conveyors and similar equipment
- In areas which are hazardous due to the presence of flammable vapors or gases and combustible dusts
- In damp, wet or corrosive locations
- Indoors or outdoors at petroleum refineries, chemical and petrochemical plants, as well as facilities for processing and handling grain, flour and starch

## Features:

- SRD receptacles feature a built-in rotary switch that operates automatically when the plug is inserted and withdrawn. The switch, capable of making and breaking the circuit at full rated load, is operated by a helical blade in the center of the plug.
- The plug and receptacle contacts cannot be made or broken under load. When the plug is inserted, the plug and receptacle contacts engage before the switch closes. When the plug is withdrawn, the switch opens before the plug and receptacle contacts disengage. This sequence of operation provides the maximum safety of a dead front receptacle. Arcing is isolated in a flame and dust-tight chamber.
- Operation is simple, safe and positive. To disconnect the portable device, the plug is simply pulled straight out. No separate interlock device or operating handle need be actuated.
- Positive engagement without mismatching is assured by a distinct physical polarization of plug and receptacle in every rating.
- Plugs are furnished with pressure terminations. Receptacles are furnished with flexible leads for splicing to the supply conductors. A threaded cover at the top provides access to the wiring compartment.
- Back box is provided with 1 1/4" vertical through feed hubs.

## Standard Materials:

- Back box – *Feraloy*® iron alloy
- Threaded cover – copper-free aluminum
- Receptacle housings and plug exteriors – copper-free aluminum
- Insulation – high impact glass filled phenolic
- Contacts – brass

## Standard Finishes:

- *Feraloy* iron alloy – electrogalvanized and aluminum acrylic paint
- Copper-free aluminum – natural
- Phenolic – natural (black)
- Brass – silver plated

## Options:

- Special polarity – where two or more receptacles of the same ampere rating and number of poles are to be installed in the same area for use on different voltages, alternate polarizations can be furnished. Details on request.

## Electrical Rating Ranges:

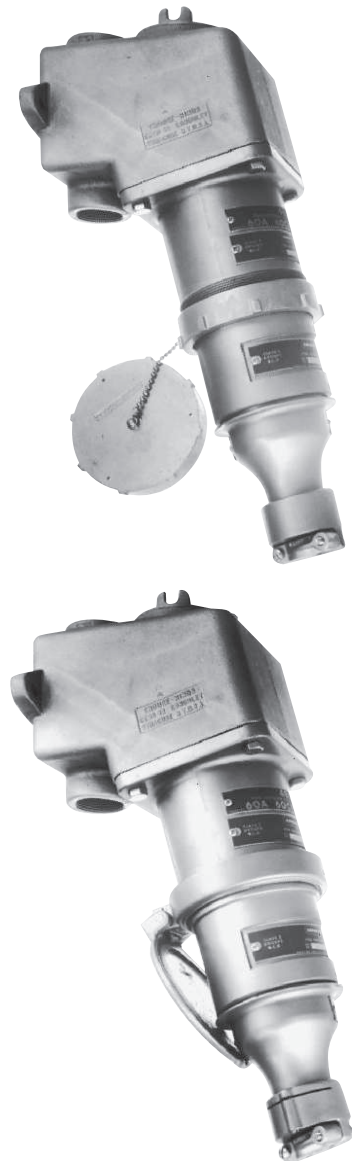
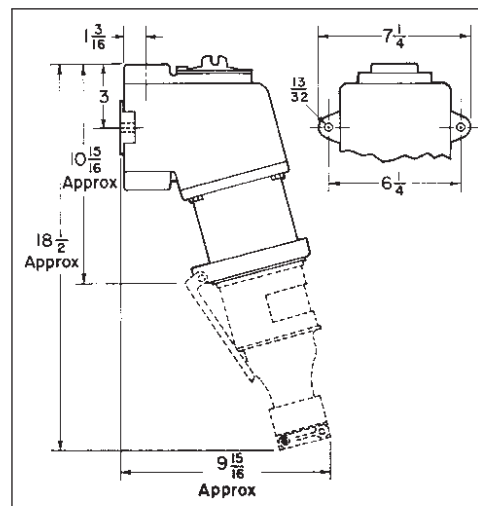
- 30 and 60 amperes, 480VAC

## Grounding:

- SRD receptacles and SP plugs are provided with an extra grounding pole. In plugs, provision is made for attachment of a grounding wire to the grounding pole. In addition, direct connection is provided between plug and receptacle housings and the grounding pole. In the receptacle, grounding is accomplished through the conduit system.

**CAUTION:** To reduce the risk of ignition of hazardous atmospheres, do not use plugs or receptacles in Class II, Group F locations that contain electrically conductive dusts.

## Dimensions In Inches:



## Certifications and Complies:

- NEC:  
Class I, Division 1 and 2, Group D  
Class II, Division 1 and 2, Groups F, G  
Class III
- NEMA 3, 7D, 9FG, 12
- ANSI/UL Standard: 1010

# SRD Dead Front Interlocked Receptacles with Factory Sealed Switch

SP Plugs, 480 VAC, 60–400 hertz

Cl. I, Div. 1 and 2, Group D  
Cl. II, Div. 1 and 2, Groups F, G  
Cl. III  
NEMA 3, 7D, 9FG, 12  
Explosionproof

Dust-Ignitionproof  
Raintight  
Wet Locations

4P



SRD Receptacle with spring door



SP Plug



SRD Receptacle with threaded cap



SP Plug with fastening ring cap

## Back Box – 1¼" Vertical Through Feed Hubs

Rating	Description	With Spring Door	With Cable Grip and Neoprene Bushing		With Threaded Cap	With Cable Grip and Neoprene Bushing	
		Cat. #	Cable Dia.	Cat. #	Cat. #	Cable Dia.	Cat. #
30 amp.	2-wire, 3-pole	SRD3324N	[.500 to .875 .875 to 1.375]	SP3363N SP3365N	SRD3384N	[.500 to .875 .875 to 1.375]	SP3383N SP3385N
	3-wire, 4-pole	SRD3424D	[.500 to .875 .875 to 1.375]	SP3463D SP3465D	SRD3484D	[.500 to .875 .875 to 1.375]	SP3483D SP3485D
	4-wire, 5-pole	SRD3524 NW	[.500 to .875 .875 to 1.375]	SP3563 NW SP3565 NW	SRD3584 NW	[.500 to .875 .875 to 1.375]	SP3583 NW SP3585 NW
60 amp.	2-wire, 3-pole	SRD6324N	[.500 to .875 .875 to 1.375]	SP6363N SP6365N	SRD6384N	[.500 to .875 .875 to 1.375]	SP6383N SP6385N
	3-wire, 4-pole	SRD6424D	[.500 to .875 .875 to 1.375]	SP6463D SP6465D	SRD6484D	[.500 to .875 .875 to 1.375]	SP6483D SP6485D
	4-wire, 5-pole	SRD6524 NW	[.875 to 1.375 1.375 to 1.875]	SP6565 NW SP6567 NW	SRD6584 NW	[.875 to 1.375 1.375 to 1.875]	SP6585 NW SP6587 NW



# EPC Circuit Breakers and Enclosures with Interlocked Arktime® Receptacles

APJ/NPJ† and DP Arktime Plugs

Cl. I, Div. 1 and 2, Groups C, D  
Cl. II, Div. 1 and 2, Groups F, G  
Cl. III  
NEMA/EFC 3, 7CD, 9FG, 12  
Explosionproof

Dust-Ignitionproof  
Raintight  
Wet Locations

## Applications:

- The EPC interlock receptacle is designed for use as a service outlet for portable equipment
- It is designed for use in damp, wet and corrosive locations, indoors or outdoors, in areas which are hazardous due to flammable vapors, gases or combustible dust. For example: refineries, chemical plants, and other processing and handling facilities of a hazardous nature

## Features:

- Mechanical interlock mechanism for dead front construction
- Receptacles are mechanically interlocked with circuit breakers to provide disconnect means, short circuit protection and thermal time delay overload protection
- A spring door receptacle, located at bottom of 30, 60 and 100 ampere units and at front of 200 ampere units, is mechanically interlocked with the circuit breaker operating mechanism for maximum safety
- Plug and receptacle contacts cannot be made or broken under load. The circuit breaker cannot be closed until the plug is fully inserted and the plug cannot be withdrawn unless the breaker is open
- Operating handles can be padlocked in either "ON" or "OFF" positions. Breakers are trip-free of the handles and will open under short circuit or overload even if the handle is locked in the "ON" position
- Quick installation and leveling is provided by the three-point mounting arrangement which has one keyhole slot at top and two open slots at bottom
- Bodies have four taper-tapped conduit hubs with integral bushings. Two are located at top and two directly below. Sizes are as shown in the listings.

## Certifications and Compliances:

- NEC:  
Class I, Division 1 and 2, Groups C, D  
Class II, Division 1 and 2, Groups F, G  
Class III
- NEMA: 3, 7CD, 9FG, 12
- ANSI/UL Standard: 1010
- CEC:  
Class I, Division 1 and 2, Groups C, D  
Class II, Division 1 and 2, Group G  
Class III  
Encl. 3, 4

## Standard Materials:

- Bodies, covers and receptacle housings – copper-free aluminum
- Operating handles – copper-free aluminum
- Operating shafts – stainless steel
- Interior parts – sheet steel
- Insulation (receptacles and plugs) – fiberglass-reinforced polyester
- Pressure contacts – brass
- Crimp/solder contacts – leaded red brass

## Standard Finishes:

- Copper-free aluminum – natural
- Stainless steel – natural
- Sheet steel – electrogalvanized with chromate finish
- Brass – natural
- Fiberglass-reinforced polyester – natural (red)
- Leaded red brass – electro-tin-plate

## Electrical Rating Ranges:

- Receptacle ratings: 30, 60, 100 and 200 amperes
- Circuit breakers: 100 and 225 ampere frame sizes

## Grounding:

- EPC interlocked receptacles and matching plugs are provided with an extra grounding pole for attaching a grounding wire. In addition, direct connection is provided between plug and receptacle and the grounding pole. If a separate grounding wire is not installed in the enclosure, grounding is accomplished through the conduit system.

## Options:

The following special options are available by adding suffix to Cat. #:

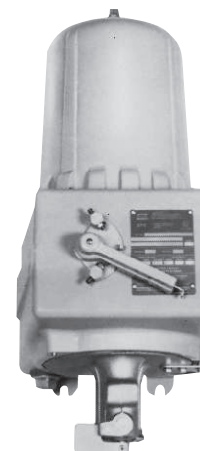
### Description

### Suffix

Special polarity – used where two or more receptacles of the same ampere rating, style and number of poles are to be installed in the same area for use on different voltages. Available on 30, 60 and 100 ampere units as follows: Receptacle interior rotated 22½° clockwise when viewed from face of receptacle and plug changed to match.....	<b>S4</b>
Side bosses drilled and tapped same size as standard hubs, 30, 60 and 100 ampere units only .....	<b>S366</b>
Back boss drilled and tapped same size as standard hubs, 30, 60 and 100 ampere units only .....	<b>S367</b>
Breather and drain (Class I, Class II) .....	<b>S198V</b>
Breather and drain (Class I only).....	<b>S454V</b>

**CAUTION:** To reduce the risk of ignition of hazardous atmospheres, do not use plugs or receptacles in Class II, Group F locations that contain electrically conductive dusts.

†Pressure connectors are standard. Crimp/solder type terminators are optionally available for 2, 3 and 4-pole 30 ampere, 3 and 4-pole 60 and 100 ampere. For details, see page 1233. To specify, add the suffix "T" to the catalog number. For example: APJ3365-T (Plug).



30, 60 and 100 ampere size EPC



200 ampere size EPC



# EPC Circuit Breakers and Enclosures with Interlocked Arktite® Receptacles

Cl. I, Div. 1 and 2, Groups C, D  
Cl. II, Div. 1 and 2, Groups F, G  
Cl. III  
NEMA/IEC 3, 7CD, 9FG, 12  
Explosionproof

Dust-Ignitionproof  
Raintight  
Wet Locations

**4P**

## Interchangeability of Plugs with Other Hazardous and Non-hazardous Location Receptacles:

- Plugs listed for use with 30, 60 and 100 ampere EPC assemblies are standard *Arktite* APJ/NPJ plugs. Other standard APJ and CPH plugs of the same rating, style and number of poles may be used with EPC receptacles, as well as with DBR, EBBR and EPCB receptacles listed elsewhere in this section.
- As a result, portable equipment suitable for the location and equipped with the proper plug can be used with AR/NR series receptacles for non-hazardous locations: EBBR, EPC and EPCB receptacles for Class I hazardous locations; DR and DBR receptacles for Class II hazardous locations.

## Ordering Information:

### 100 Ampere Frame Size Thermal-magnetic Circuit Breaker with Non-interchangeable Thermal Trip and Non-adjustable Magnetic Trip

Circuit Breaker		Enclosure					
Receptacle with Spring Door Housing	Rating		Hub Size (In.)	Ckt. Bkr. Amps	Without Circuit Breaker Cat. #	With Circuit Breaker	
						Cutler-Hammer "EHD" Cat. #	General Electric "TED" Cat. #
30 amp. 2-wire, 3-pole, Style 2	2-pole, 480VAC† or 250 VDC	600VAC†	1¼	20 30 40* 50*	EPC43032	EPC43032 WT20 2 EPC43032 WT30 2 EPC43032 WT40 2 EPC43032 WT50 2	EPC43032 TT20 2 EPC43032 TT30 2 EPC43032 TT40 2 EPC43032 TT50 2
30 amp. 3-wire, 4-pole, Style 2	3-pole, 480VAC† or 250 VDC	600VAC†	1¼	20 30 40* 50*	EPC43042	EPC43042 WT20 3 EPC43042 WT30 3 EPC43042 WT40 3 EPC43042 WT50 3	EPC43042 TT20 3 EPC43042 TT30 3 EPC43042 TT40 3 EPC43042 TT50 3
60 amp. 2-wire, 3 pole, Style 2	2-pole, 480VAC† or 250 VDC	600VAC†	1¼	50 60 70* 90*	EPC46032	EPC46032 WT50 2 EPC66032 WT60 2 EPC66032 WT70 2 EPC66032 WT90 2	EPC46032 TT50 2 EPC66032 TT60 2 EPC66032 TT70 2 EPC66032 TT90 2
			2	100*	EPC66032	EPC66032 WT100 2	EPC66032 TT100 2
60 amp. 3-wire, 4-pole, Style 2	3-pole, 480VAC† or 250 VDC	600VAC†	1¼	50 60 70* 90*	EPC46042	EPC46042 WT50 3 EPC66042 WT60 3 EPC66042 WT70 3 EPC66042 WT90 3	EPC46042 TT50 3 EPC66042 TT60 3 EPC66042 TT70 3 EPC66042 TT90 3
			2	100*	EPC66042	EPC66042 WT100 3	EPC66042 TT100 3
100 amp. 2-wire, 3-pole, Style 2	2-pole, 480VAC† or 250 VDC	600VAC†	2	60 70 90 100	EPC61032	EPC61032 WT60 2 EPC61032 WT70 2 EPC61032 WT90 2 EPC61032 WT100 2	EPC61032 TT60 2 EPC61032 TT70 2 EPC61032 TT90 2 EPC61032 TT100 2
100 amp. 3-wire, 4-pole, Style 2	3-pole, 480VAC† or 250VDC	600VAC†	2	60 70 90 100	EPC61042	EPC61042 WT60 3 EPC61042 WT70 3 EPC61042 WT90 3 EPC61042 WT100 3	EPC61042 TT60 3 EPC61042 TT70 3 EPC61042 TT90 3 EPC61042 TT100 3

### 225 Ampere Frame Size Circuit Breaker with Interchangeable Thermal Magnetic Trip††

Circuit Breaker		Enclosure				With Circuit Breaker	
Receptacle with Spring Door Housing	Rating	Hub Size (In.)	Ckt. Bkr. Amps		Without Circuit Breaker Cat. #	Cutler-Hammer "KB" Cat. #	General Electric "TFK" Cat. #
200 amp. 3-wire, 4-pole, Style 2	3-pole, 600VAC or 250 VDC	3	125 150 175 200 225*		EPC604 2042	EPC604 2042 WT125 3 EPC604 2042 WT150 3 EPC604 2042 WT175 3 EPC604 2042 WT200 3 EPC604 2042 WT225 3	EPC605 2042 TT125 3 EPC605 2042 TT150 3 EPC605 2042 TT175 3 EPC605 2042 TT200 3 EPC605 2042 TT225 3
		3			EPC605 2042		

\*Circuit breaker trip rating may exceed receptacle rating for welding equipment applications only, as higher trip rating may not protect wiring.  
††200 ampere units are suitable for Class I, Group D (NEMA 7D).  
‡Enclosures with 600 volt circuit breakers from U.S.A. are available. Information on request.  
†CSA Certified units are supplied with 600VAC FDB frame circuit breakers.

**CAUTION:** To reduce the risk of ignition of hazardous atmospheres, do not use plugs or receptacles in Class II, Group F locations that contain electrically conductive dusts.

4P

# APJ/NPJ† and DP Arktime® Plugs with Cable Grip and Neoprene Bushing

Cl. I, Div. 1 and 2, Groups C, D  
Cl. II, Div. 1 and 2, Groups F, G  
Cl. III  
NEMA/EFC 3, 7CD, 9FG, 12  
Explosionproof

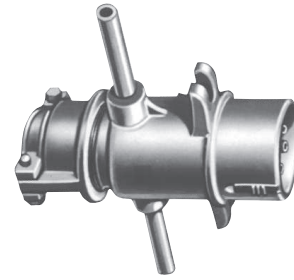
Dust-Ignitionproof  
Raintight  
Wet Locations



APJ Plug



NPJ Plug



DP Plug

## Ordering Information - APJ/NPJ and DP Arktime Plugs

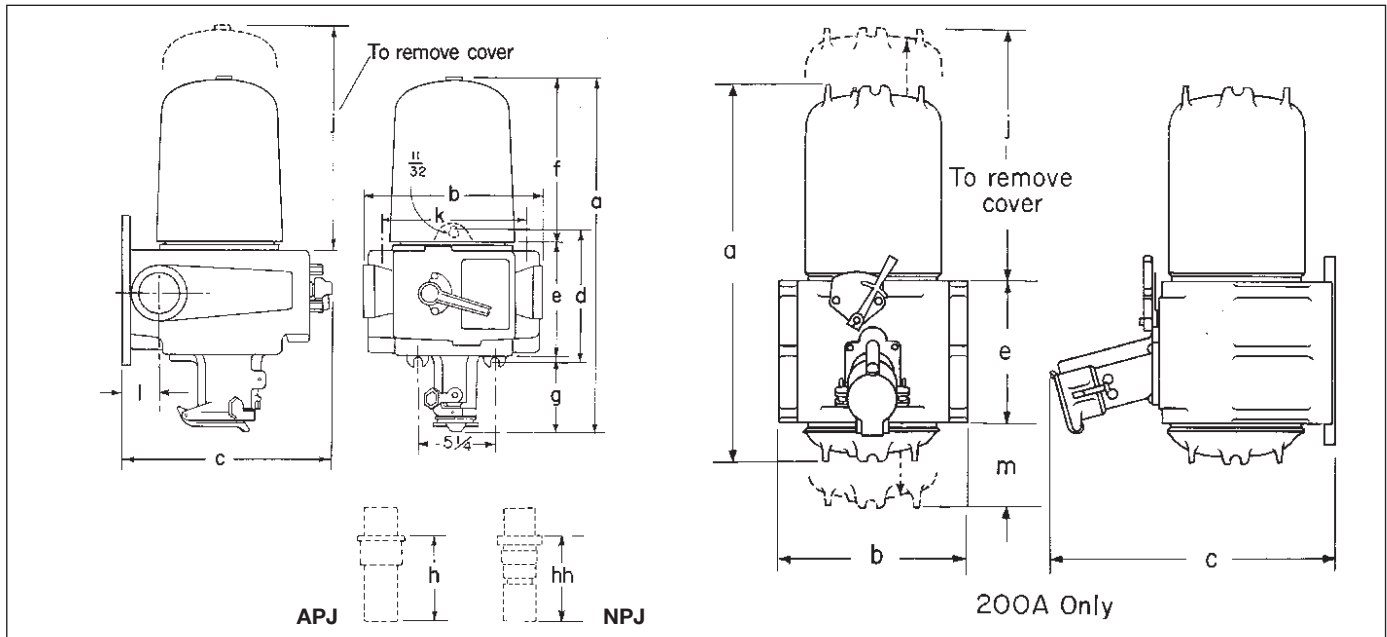
### 600VAC/250VDC with Cable Grip and Neoprene Bushing – Style 2

Amps	Cable O.D. Range	2-wire, 3-pole Cat. #	3-wire, 4-pole Cat. #
30	0.60 to 1.20	APJ3385	APJ3485
	0.55 to 0.70	NPJ3383	NPJ3483
	0.70 to 0.85	NPJ3384	NPJ3484
60	0.75 to 1.45	APJ6385	APJ6485
	0.75 to 1.07	NPJ6384	NPJ6484
	1.07 to 1.35	NPJ6385	NPJ6485
100	1.00 to 1.70	APJ10387	APJ10487
	0.93 to 1.21	NPJ10386	NPJ10486
	1.21 to 1.50	NPJ10387	NPJ10487
200†	1.875 to 2.50		DP20468

†Pressure connectors are supplied as standard. To specify crimp/solder type terminations add the suffix "T" to the catalog number. For example: APJ3385-T (Plug).

## Dimensions

In Inches:



Recept.	Breaker	a	b	c	d	e	f	g	h	hh	j	k	l	m
30 Amp.	20–50 Amp.	24	10 <sup>3</sup> / <sub>8</sub>	14 <sup>3</sup> / <sub>8</sub>	9 <sup>3</sup> / <sub>8</sub>	7 <sup>11</sup> / <sub>16</sub>	11 <sup>3</sup> / <sub>4</sub>	4 <sup>9</sup> / <sub>16</sub>	4 <sup>13</sup> / <sub>16</sub>	7	20 <sup>3</sup> / <sub>4</sub>	7 <sup>3</sup> / <sub>8</sub>	2 <sup>1</sup> / <sub>16</sub>	
60 Amp.	50 Amp.	24 <sup>1</sup> / <sub>2</sub>	10 <sup>3</sup> / <sub>8</sub>	14 <sup>3</sup> / <sub>8</sub>	9 <sup>3</sup> / <sub>8</sub>	7 <sup>11</sup> / <sub>16</sub>	11 <sup>3</sup> / <sub>4</sub>	5 <sup>1</sup> / <sub>16</sub>	5 <sup>13</sup> / <sub>16</sub>	6 <sup>13</sup> / <sub>16</sub>	20 <sup>3</sup> / <sub>4</sub>	7 <sup>3</sup> / <sub>8</sub>	2 <sup>1</sup> / <sub>16</sub>	
60 Amp.	70–100 Amp.	24 <sup>1</sup> / <sub>2</sub>	12 <sup>13</sup> / <sub>16</sub>	14 <sup>3</sup> / <sub>8</sub>	9 <sup>3</sup> / <sub>8</sub>	7 <sup>11</sup> / <sub>16</sub>	11 <sup>3</sup> / <sub>4</sub>	5 <sup>1</sup> / <sub>16</sub>	5 <sup>13</sup> / <sub>16</sub>	6 <sup>13</sup> / <sub>16</sub>	20 <sup>3</sup> / <sub>4</sub>	9 <sup>1</sup> / <sub>4</sub>	2 <sup>5</sup> / <sub>8</sub>	
100 Amp.	70–100 Amp.	25 <sup>1</sup> / <sub>4</sub>	12 <sup>13</sup> / <sub>16</sub>	14 <sup>3</sup> / <sub>8</sub>	9 <sup>3</sup> / <sub>8</sub>	7 <sup>11</sup> / <sub>16</sub>	11 <sup>3</sup> / <sub>4</sub>	5 <sup>13</sup> / <sub>16</sub>	6 <sup>5</sup> / <sub>8</sub>	7 <sup>3</sup> / <sub>4</sub>	20 <sup>3</sup> / <sub>4</sub>	9 <sup>1</sup> / <sub>4</sub>	2 <sup>5</sup> / <sub>8</sub>	
200 Amp.	125–225 Amp.	36	18	27		13 <sup>1</sup> / <sub>2</sub>					34 <sup>1</sup> / <sub>4</sub>			5 <sup>1</sup> / <sub>2</sub>

Dim. "h" and "hh" are exposed portion of plug when engaged with receptacle.

# EPCB Circuit Breakers and Enclosures with Interlocked Arktite® Receptacles

## APJ/NPJ Arktite Plugs†

Cl. I, Div. 1 and 2, Groups B, C, D  
Cl. II, Div. 1 and 2, Groups F, G  
Cl. III  
NEMA/EFC 3, 7BCD, 9FG, 12  
Explosionproof

Dust-Ignitionproof  
Raintight  
Wet Locations

**4P**

### Applications:

- The EPCB interlock receptacle is designed for use as a service outlet for portable equipment. The circuit breaker provides overcurrent and short circuit protection
- It has a mechanical interlock mechanism for dead front construction and no load make or break feature
- It is designed for use in damp, wet and corrosive locations, indoors or outdoors, in areas which are hazardous due to flammable vapors, gases or combustible dust. For example: refineries, chemical plants, and other processing and handling facilities of a hazardous nature

### Features:

- Spring door receptacle located at the bottom is mechanically interlocked with the circuit breaker operating mechanism for maximum safety. Plug and receptacle contacts cannot be made or broken under load. The circuit breaker cannot be closed until the plug is fully inserted and the plug cannot be withdrawn unless the breaker is open
- Operating handles can be padlocked in either "ON" or "OFF" positions. Breakers are trip-free of the handles and will open under short circuit or overload even if the handle is locked in the "ON" position
- Quick installation and leveling is provided by the three-point mounting arrangement having one keyhole slot at top and two open slots at bottom
- Bodies have four 1 1/4" taper tapped conduit hubs with integral bushings. Two are located at top and two directly below
- When installing, seals suitable for Class I, Group B hazardous areas must be located within 1 1/2" of each conduit opening

### Certifications and Compliances:

- NEC:
  - Class I, Division 1 and 2, Groups B, C, D
  - Class II, Division 1 and 2, Groups F, G
  - Class III
- NEMA: 3, 7BCD, 9FG, 12
- ANSI/UL Standard: 1010
- CEC:
  - Class I, Division 1 and 2, Groups B, C, D
  - Class II, Division 1 and 2, Group G
  - Class III
- Encl. 3, 4

### Standard Materials:

- Bodies, covers and receptacle housings – copper-free aluminum
- Operating handles – copper-free aluminum
- Operating shafts – stainless steel
- Interior parts – sheet steel
- Insulation – fiberglass-reinforced polyester
- Pressure contacts – brass
- Crimp/solder contacts – leaded red brass

### Standard Finishes:

- Copper-free aluminum – natural
- Stainless steel – natural
- Sheet steel – zinc electroplate with chromate finish
- Brass – natural
- Fiberglass-reinforced polyester – natural (red)
- Leaded red brass – electro-tin-plate

### Electrical Rating Ranges:

- Receptacle ratings: 30, 60 and 100 amperes
- Circuit breakers: 100 ampere frame size

### Options:

The following special options are available by adding the suffix to the Cat. #:

#### Description

- Special polarity. For use where two or more receptacles of the same ampere rating, style and number of poles are to be installed in the same area for use on different voltages. Receptacle interior rotated 22 1/2° to right (viewed from face) and plug changed to match ..... **S4**
- Side bosses drilled and tapped same size as standard hubs ..... **S366**
- Back boss drilled and tapped same size as standard hubs ..... **S367**

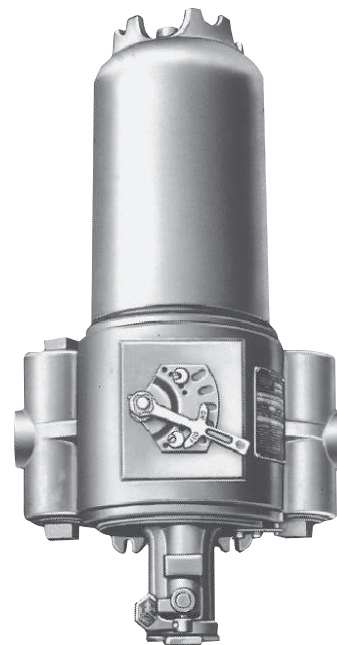
#### Suffix

### Interchangeability of Plugs with Other Hazardous and Non-hazardous Location Receptacles:

- Plugs listed for use with EPCB assemblies are standard Arktite APJ/NPJ plugs. Other standard APJ and CPH plugs of the same rating, style and number of poles may be used with EPCB receptacles as well as DBR and EPC receptacles listed elsewhere in this section
- As a result, portable equipment suitable for the location and equipped with the proper plug can be used with AR/NR series receptacles for non-hazardous locations; EBBR, EPC and EPCB receptacles for Class I hazardous locations; DR and DBR receptacles for Class II hazardous locations

### Grounding:

- EPCB interlocked receptacles and matching plugs are provided with an extra grounding pole for attaching a grounding wire. In addition, direct connection is provided between plug and receptacle and the grounding pole. If a separate grounding wire is not installed in the enclosure, grounding is accomplished through the conduit system



†Pressure connectors are supplied as standard. To specify crimp/solder type terminations add the suffix "T" to the catalog number. For example: APJ3365-T (Plug).

# EPCB Circuit Breakers and Enclosures with Interlocked Arktite® Receptacles

## APJ/NPJ Arktite Plugs†

Cl. I, Div. 1 and 2, Groups B, C, D  
Cl. II, Div. 1 and 2, Groups F, G  
Cl. III  
NEMA/EFC 3, 7BCD, 9FG, 12  
Explosionproof

Dust-Ignitionproof  
Raintight  
Wet Locations

### Ordering Information:

#### 100 Ampere Frame Size Thermal-magnetic Circuit Breaker with Non-interchangeable Thermal Trip and Non-adjustable Magnetic Trip

Circuit Breaker Receptacle with Spring Door Housing		Enclosure with Circuit Breaker			
Rating		Hub Size (In.)	Ckt. Bkr. Amps	Cutler-Hammer	General Electric
30 amp. 2-wire, 3-pole, Style 2	2-pole, 600VAC or 250 VDC	1 1/4	20	EPCB43632 WT20HFD 2	EPCB43632 TT20TED 2
			30	EPCB43632 WT30HFD 2	EPCB43632 TT30TED 2
			40*	EPCB43632 WT40HFD 2	EPCB43632 TT40TED 2
			50*	EPCB43632 WT50HFD 2	EPCB43632 TT50TED 2
30 amp. 3-wire, 4-pole, Style 2	3-pole, 600VAC or 250 VDC	1 1/4	20	EPCB43642 WT20HFD 3	EPCB43642 TT20TED 3
			30	EPCB43642 WT30HFD 3	EPCB43642 TT30TED 3
			40*	EPCB43642 WT40HFD 3	EPCB43642 TT40TED 3
			50*	EPCB43642 WT50HFD 3	EPCB43642 TT50TED 3
60 amp. 2-wire, 3-pole, Style 2	2-pole, 600VAC or 250 VDC	1 1/4	50	EPCB46632 WT50HFD 2	EPCB46632 TT50TED 2
			60*	EPCB46632 WT60HFD 2	EPCB46632 TT60TED 2
			70*	EPCB46632 WT70HFD 2	EPCB46632 TT70TED 2
			90*	EPCB46632 WT90HFD 2	EPCB46632 TT90TED 2
			100*	EPCB46632 WT100HFD 2	EPCB46632 TT100TED 2
60 amp. 3-wire, 4-pole, Style 2	3-pole, 600VAC or 250 VDC	1 1/4	50	EPCB46642 WT50HFD 3	EPCB46642 TT50TED 3
			60*	EPCB46642 WT60HFD 3	EPCB46642 TT60TED 3
			70*	EPCB46642 WT70HFD 3	EPCB46642 TT70TED 3
			90*	EPCB46642 WT90HFD 3	EPCB46642 TT90TED 3
			100*	EPCB46642 WT100HFD 3	EPCB46642 TT100TED 3
100 amp. 2-wire, 3-pole, Style 2	2-pole, 600VAC or 250 VDC	1 1/4	70	EPCB41632 WT70HFD 2	EPCB41632 TT70TED 2
			90	EPCB41632 WT90HFD 2	EPCB41632 TT90TED 2
			100	EPCB41632 WT100HFD 2	EPCB41632 TT100TED 2
100 amp. 3-wire, 4-pole, Style 2	3-pole, 600VAC or 250 VDC	1 1/4	70†	EPCB41642 WT70HFD 3	EPCB41642 TT70TED 3
			90†	EPCB41642 WT90HFD 3	EPCB41642 TT90TED 3
			100†	EPCB41642 WT100HFD 3	EPCB41642 TT100TED 3

‡Pressure connectors are supplied as standard.  
To specify crimp/solder type terminators add the suffix "T" to the catalog number. For example: APJ3385-T (Plug).

\*Circuit breaker trip rating may exceed receptacle rating for welding equipment applications only, as higher trip rating may not protect wiring.

†For detailed information on circuit breaker selection see Section 3C.

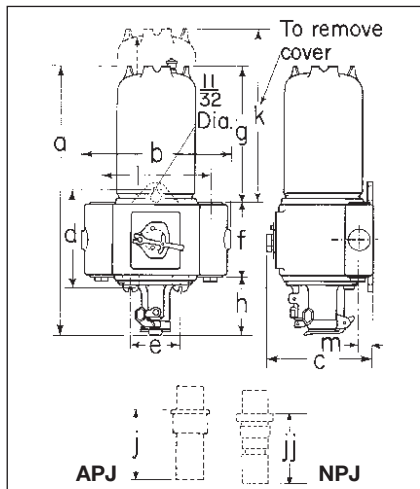


APJ Plug



NPJ Plug

### Dimensions In Inches:



### APJ/NPJ Arktite Plugs 600VAC/250VDC with Cable Grip and Neoprene Bushing – Style 2

Amps	Cable O.D. Range	2-wire, 3-pole Cat. #	3-wire, 4-pole Cat. #
30	0.60 to 1.20	APJ3385	APJ3485
	0.55 to 0.70	NPJ3383	NPJ3483
	0.70 to 0.85	NPJ3384	NPJ3484
60	0.75 to 1.45	APJ6385	APJ6485
	0.75 to 1.07	NPJ6384	NPJ6484
	1.07 to 1.35	NPJ6385	NPJ6485
100	1.00 to 1.70	APJ10387	APJ10487
	0.93 to 1.21	NPJ10386	NPJ10486
	1.21 to 1.50	NPJ10387	NPJ10487

Receptacle	a	b	c	d	e	f
30 Amp.	26 1/4	11 5/16	11 3/4	8 5/8	5	7 3/4
60 Amp.	26 3/4	11 5/16	11 3/4	8 5/8	5	7 3/4
100 Amp.	27 1/2	11 5/16	11 3/4	8 5/8	5	7 3/4

Receptacle	g	h	j	jj	k	l	m
30 Amp.	13 9/16	4 15/16	4 13/16	7	24 3/4	8 3/16	1 5/8
60 Amp.	13 9/16	5 7/16	5 13/16	6 13/16	24 3/4	8 3/16	1 5/8
100 Amp.	13 9/16	6 3/16	6 5/8	7 3/4	24 3/4	8 3/16	1 5/8

Dim "j" and "jj" are exposed portion of plug when engaged with receptacle.



# DBR Interlocked Arktite® Receptacles With Enclosed Circuit Breakers

## APJ/NPJ Arktite Plugs‡

Cl. II, Div. 1 and 2, Groups F, G  
Cl. III  
NEMA/EEMAC 3, 9FG, 12  
Dust-Ignitionproof  
Raintight

4P

### Applications:

DBR interlocked *Arktite* receptacles with enclosed circuit breakers and APJ/NPJ *Arktite* plugs are used:

- To supply power to portable electrical equipment such as motor-generator sets, compressors, heating and cooling units, conveyors, and similar equipment
- In locations where hazardous dusts are present, as in grain processing and handling plants, chemical plants and certain food processing industries
- Indoors or outdoors in damp, wet or corrosive locations

### Features:

- Receptacles are mechanically interlocked with circuit breakers to provide disconnect means, short circuit protection and thermal time delay overload protection.
- Enclosures are compact and rectangular in shape permitting close spacing.
- For maximum safety, the spring door receptacle at the bottom is mechanically interlocked with the circuit breaker operating mechanism. The circuit breaker cannot be closed until the plug is fully inserted and the plug cannot be withdrawn unless the breaker is open.
- Operating handles can be padlocked in either "ON" or "OFF" positions. Breakers are trip-free of the handles and will open under short circuit or overload even if the handle is locked in the "ON" position.
- Enclosure is provided with a drilled and tapped conduit opening at top center, equipped with a threaded-in bushing. The size furnished is 1½", and removing the bushing permits the use of a 2" conduit.

### Certifications and Compliances:

- NEC:  
Class II, Division 1 and 2, Groups F, G  
Class III
- NEMA/EEMAC: 3, 9FG, 12
- UL Standard: 698, 1010
- CEC:  
Class II, Division 1 and 2, Group G  
Class III
- Encl. 3, 5

### Standard Materials:

- Bodies, covers and operating handles – copper-free aluminum
- Operating shafts – stainless steel
- Receptacle housings and plug exteriors – copper-free aluminum
- Insulation: plugs and receptacles – fiberglass-reinforced polyester
- Pressure contacts – brass
- Crimp/solder contacts – leaded red brass

### Standard Finishes:

- Copper-free aluminum – plug exterior, enclosure and receptacle housing – natural
- Stainless steel – natural
- Brass – natural
- Fiberglass-reinforced polyester – natural (red)
- Leaded red brass – electro-tin-plate

### Options:

The following special options are available by adding suffix to Cat. #:

- | Description   | Suffix |
|---|--------|
| • Special polarity – for use where two or more receptacles of the same ampere rating, style and number of poles are to be installed in the same area for use on different voltages. Receptacle interior rotated 22½° clockwise when viewed from receptacle face and plug changed to match ..... | S4     |
| • Breather (drain furnished as standard).....   | S219   |
| • Conduit arrangements other than standard can be supplied. Details on request.   |        |

### Electrical Rating Ranges:

- Receptacle ratings: 30, 60 and 100 amperes
- Circuit breakers: 100 ampere frame size

### Interchangeability of Plugs with Other Hazardous and Non-hazardous Location Receptacles:

- Plugs listed for use with DBR assemblies are standard *Arktite* APJ/NPJ plugs. Other standard APJ/NPJ and CPH plugs of the same rating, style and number of poles may be used with DBR receptacles, as well as with EBBR, EPC and EPCB receptacles listed in Section 4P.
- As a result, portable equipment suitable for the locations and equipped with the proper plug can be used with AR receptacles for non-hazardous locations, with EBBR, EPC and EPCB receptacles for Class I hazardous locations, and with DR and DBR interlocked receptacles for Class II hazardous locations.

### Dimensions:

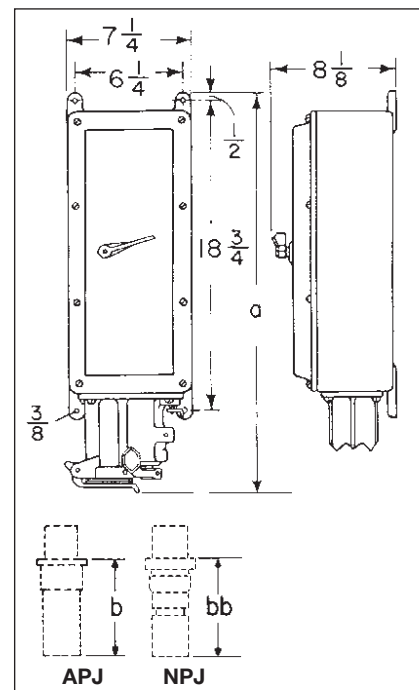
Amps	a	b	bb
30	21 <sup>3</sup> / <sub>4</sub>	6 <sup>1</sup> / <sub>2</sub>	7
60	22 <sup>3</sup> / <sub>4</sub>	8 <sup>1</sup> / <sub>2</sub>	6 <sup>13</sup> / <sub>16</sub>
100	23 <sup>1</sup> / <sub>2</sub>	10 <sup>1</sup> / <sub>8</sub>	7 <sup>3</sup> / <sub>4</sub>

Dim. "b" and "bb" are exposed portion of plug when engaged with receptacle.



**CAUTION:** To reduce the risk of ignition of hazardous atmospheres, do not use plugs or receptacles in Class II, Group F locations that contain electrically conductive dusts.

### Dimensions In Inches:



‡Pressure connectors are standard. Crimp/solder type terminators are optionally available for 3 and 4-pole, 30, 60 and 100 ampere. For details, see page 1233. To specify, add the suffix "T" to the catalog number. For example: AP3375-T (Plug).

# DBR Interlocked Arktite® Receptacles With Enclosed Circuit Breakers

Cl. II, Div. 1 and 2, Groups F, G  
Cl. III  
NEMA/EEMAC 3, 9FG, 12  
Dust-Ignitionproof  
Raintight

## Ordering Information:

100 Ampere Frame Size with Non-interchangeable Thermal Trip  
and Non-adjustable Magnetic Trip

Receptacle With Spring Door Housing†	Circuit Breaker Rating	Enclosure		Without Circuit Breaker Cat. #	With Circuit Breaker Cat. # Cutler-Hammer "FDB"
		Hub Size (In.)	Ckt. Bkr. Amps		
30 amp., 3-wire, 3-pole, Style 1	3-pole 600VAC	1½	20	<b>DBR53731</b>	<b>DBR53731 WT20 3</b>
			30		<b>DBR53731 WT30 3</b>
			40		<b>DBR53731 WT40 3*</b>
			50		<b>DBR53731 WT50 3*</b>
30 amp., 2-wire, 3-pole, Style 2	2-pole 600VAC or 250 VDC	1½	20	<b>DBR53732</b>	<b>DBR53732 WT20 2</b>
			30		<b>DBR53732 WT30 2</b>
			40		<b>DBR53732 WT40 2*</b>
			50		<b>DBR53732 WT50 2*</b>
30 amp., 3-wire, 4-pole, Style 2	3-pole 600VAC	1½	20	<b>DBR53742</b>	<b>DBR53742 WT20 3</b>
			30		<b>DBR53742 WT30 3</b>
			40		<b>DBR53742 WT40 3*</b>
			50		<b>DBR53742 WT50 3*</b>
60 amp., 3-wire, 3-pole, Style 1	3-pole 600VAC	1½	50	<b>DBR56731</b>	<b>DBR56731 WT50 3</b>
			60		<b>DBR56731 WT60 3</b>
			70		<b>DBR56731 WT70 3*</b>
			90		<b>DBR56731 WT90 3*</b>
			100		<b>DBR56731 WT100 3*</b>
60 amp., 2-wire, 3-pole, Style 2	2-pole 600VAC or 250 VDC	1½	50	<b>DBR56732</b>	<b>DBR56732 WT50 2</b>
			60		<b>DBR56732 WT60 2</b>
			70		<b>DBR56732 WT70 2*</b>
			90		<b>DBR56732 WT90 2*</b>
			100		<b>DBR56732 WT100 2*</b>
60 amp., 3-wire, 4-pole, Style 2	3-pole 600VAC	1½	50	<b>DBR56742</b>	<b>DBR56742 WT50 3</b>
			60		<b>DBR56742 WT60 3</b>
			70		<b>DBR56742 WT70 3*</b>
			90		<b>DBR56742 WT90 3*</b>
			100		<b>DBR56742 WT100 3*</b>
100 amp., 3-wire, 3-pole, Style 1	3-pole 600VAC	1½	60	<b>DBR51731</b>	<b>DBR51731 WT60 3</b>
			70		<b>DBR51731 WT70 3</b>
			90		<b>DBR51731 WT90 3</b>
			100		<b>DBR51731 WT100 3</b>
100 amp., 2-wire, 3-pole, Style 2	2-pole 600VAC or 250 VDC	1½	60	<b>DBR51732</b>	<b>DBR51732 WT60 2</b>
			70		<b>DBR51732 WT70 2</b>
			90		<b>DBR51732 WT90 2</b>
			100		<b>DBR51732 WT100 2</b>
100 amp., 3-wire, 4-pole, Style 2	3-pole 600VAC	1½	60	<b>DBR51742</b>	<b>DBR51742 WT60 3</b>
			70		<b>DBR51742 WT70 3</b>
			90		<b>DBR51742 WT90 3</b>
			100		<b>DBR51742 WT100 3</b>

\*Circuit breaker trip rating may exceed receptacle rating for welding equipment applications only, as higher trip rating may not protect wiring.

‡ For detailed information on circuit breaker selection, see Section 3C.

†Style 1 – Grounded through shell. Style 2 – Grounded through extra pole and shell. For a detailed description of these grounding methods, see page 1231.

## APJ/NPJ Arktite Plugs



APJ Plug



NPJ Plug

Amps	Cable O.D. Range	Style 1†	Style 2†	
		3-wire, 3-pole Cat. #	2-wire, 3-pole Cat. #	3-wire, 4-pole Cat. #
30	0.60 to 1.20	<b>APJ3375</b>	<b>APJ3385</b>	<b>APJ3485</b>
	0.55 to 0.70		<b>NPJ3383</b>	<b>NPJ3483</b>
	0.70 to 0.85		<b>NPJ3384</b>	<b>NPJ3484</b>
60	0.75 to 1.45	<b>APJ6375</b>	<b>APJ6385</b>	<b>APJ6485</b>
	0.75 to 1.07		<b>NPJ6384</b>	<b>NPJ6484</b>
	1.07 to 1.35		<b>NPJ6385</b>	<b>NPJ6485</b>
100	1.00 to 1.70	<b>APJ10377</b>	<b>APJ10387</b>	<b>APJ10487</b>
	0.93 to 1.21		<b>NPJ10386</b>	<b>NPJ10486</b>
	1.21 to 1.50		<b>NPJ10387</b>	<b>NPJ10487</b>