# Arktite circuit breaking CPS receptacles and CPP plugs

### Delayed action Factory sealed

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

### Applications:

Arktite<sup>®</sup> 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



Figure 1



Figure 2



Figure 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Figure 2 shows the plug withdrawn until it is stopped by the delayed action mechanism.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 twogang bodies and dead end or through feed hubs – ½" to 1" sizes
- Back boxes used for straight type receptacles are available with a variety of hub arrangements in ½" and ¾" sizes
- All receptacles and 30 ampere plugs are provided with pressure terminals for ease of field wiring; 20 ampere plugs have solder terminals and pressure terminals options

### Certifications and compliances:

#### NEC/CEC:

• Class I, Divisions 1 & 2, Groups C, D **UL standard**:

### • UL1203

### CSA standard:

• C22.2 No. 30

### Standard materials:

- Receptacle housings die cast copperfree aluminum
- EDS back boxes Feraloy<sup>®</sup> iron alloy (U.S.); copper-free aluminum (Canada)
- Other back boxes Feraloy iron alloy
- Plug exteriors copper-free aluminum or Krydon<sup>®</sup> fiberglass-reinforced polyester (see listings)
- Insulation (all receptacles and plugs) Krydon fiberglass-reinforced polyester
- 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 ratings:**

- 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 Arktite AR 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.

ANo CSA certification on CPP516M plug.

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CPS152 – single-gang angle type



CPP plugs with mechanical cable grip and neoprene bushing



CPS152 – two-gang angle type



CPP plug with pressure contacts

# Ordering information – Style 2, grounded through extra pole and shell:

| Rating  | Descrip           | tion            | Hub<br>size | Cat. #<br>Single-gang<br>receptacle<br>assembly | Cat. #<br>Two-gang<br>receptacle<br>assembly | Cable dia. | Cat. #<br>Plug with<br>aluminum<br>handles | Cat. #<br>Plug with<br>high impact<br>molded<br>composition<br>handle | Cat. #<br>Receptacle<br>unit only |
|---|-------------------|-----------------|-------------|---|--|------------|--|---|-----------------------------------|
| 20A, 1 HP,<br>125-250 VAC, 60 Hz,<br>20A, 18 VDC  | 2-wire.           | Dead<br>end     | 1/2"        | CPS152 1010                                     | CPS152 1020                                  | _          | CPP516 <b>ੳ</b><br>CPP516M <b>ੳ</b>        | CPP512 <b>0</b>   | CPS152R                           |
|   |                   |                 | 3/4"        | CPS152 201 <b>G</b>                             | CPS152 202                                   | 0.312 -    |  |   |                                   |
|   | - 1               |                 | 1/2"        | CPS152 301G                                     | CPS152 302 <b>G</b>                          | 0.625"     |  |   |                                   |
|   | 3-pole            | Through<br>feed | 3/4"        | CPS152 1110                                     | CPS152 112 <b>G</b>                          | 0.025      |  |   |                                   |
|   |                   |                 | 1"          | CPS152 211 <b>G</b><br>CPS152 311 <b>G</b>      | CPS152 212 <b>G</b><br>CPS152 312 <b>G</b>   |            |  |   |                                   |
| 30A, 1 <sup>1</sup> / <sub>2</sub> HP,<br>125-250 VAC, 60 Hz,<br>7A, <sup>1</sup> / <sub>2</sub> HP,<br>480VAC <b>G</b> , 60 Hz |                   | Dead<br>end     | 1/2"        | CPS152 3110<br>CPS532 101                       | CPS532 102                                   |            | CPP4553                                    |   | CPS532R                           |
|   |                   |                 | 3/4"        | CPS532 201                                      | CPS532 202                                   |            |  |   |                                   |
|   | 2-wire.           |                 | 1"          | CPS532 301                                      | CPS532 302                                   | 0.375 -    |  |   |                                   |
|   | 3-pole            | Through feed    | 1/2"        | CPS532 111                                      | CPS532 112                                   | 0.875"     |  |   |                                   |
|   |                   |                 | 3/4"        | CPS532 211                                      | CPS532 212                                   |            |  |   |                                   |
|   |                   |                 | 1″          | CPS532 311                                      | CPS532 312                                   |            |  |   |                                   |
| 30A, 3 HP,<br>125-250 VAC, 60 Hz,<br>7A, 1 HP,<br>480VAC�, 60 Hz  | 3-wire,<br>4-pole | Dead<br>end     | 1/2"        | CPS732 101                                      | CPS732 102                                   |            | CPP4752                                    |   | CPS732R                           |
|   |                   |                 | 3/4"        | CPS732 201                                      | CPS732 202                                   |            |  |   |                                   |
|   |                   |                 | 1″          | CPS732 301                                      | CPS732 302                                   | 0.375 -    |  |   |                                   |
|   |                   | Through<br>feed | 1/2"        | CPS732 111                                      | CPS732 112                                   | 0.875" 🖸   |  |   |                                   |
|   |                   |                 | 3/4"        | CPS732 211                                      | CPS732 212                                   |            |  |   |                                   |
|   |                   |                 | 1″          | CPS732 311                                      | CPS732 312                                   |            |  |   |                                   |

CSA certified units are rated at 600 VAC at 7A. CPP516M is not CSA certified.

Back boxes are available in copper-free aluminum. To order, add suffix 'SA' to end of catalog number.

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

©20A plugs are furnished with solder terminations at standard; ground contacts have pressure terminations.

GCPP516M 20A plug is furnished with pressure terminations at standard.



**2P** 



CPS152R - receptacle unit only

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# Delayed action Factory sealed

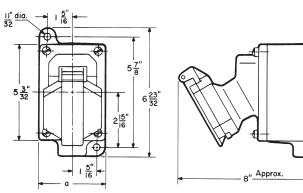
Cl. I, Div. 1 & 2, Groups C, D Explosionproof Wet Locations

#### **Options:** 2P

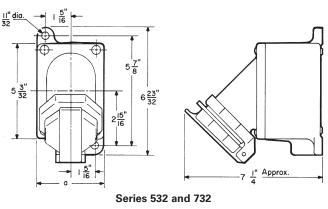
| optionio  |         |
|---|---------|
| Description   | Suffix  |
| • Material – copper-free aluminum, natural finish   | SA      |
| Available on certain back boxes (see listings)  |         |
| Special polarity  | S4      |
| Receptacle interior rotated 22½° to right (viewed from face) and plug changed to match  | 7       |
| Available on 30A units only   |         |
| • Combination of receptacles and EFS/EFD or EDS devices,<br>such as pilot lights, switches, pushbutton stations, etc.,<br>can be furnished using three-, four- and five-gang bodies | Specify |
| <ul> <li>Hub arrangements other than those listed can be</li> </ul>   |         |
| supplied  | Specify |

## **Dimensions (in inches):**

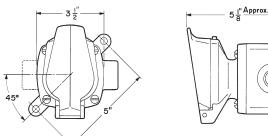
### Angle type receptacles



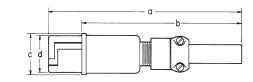
### Series 152



### Straight type receptacles

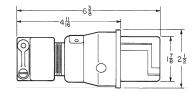


### 20A plugs



| Cat. #           | a                 | b <b>O</b> | С    | d    |
|------------------|-------------------|------------|------|------|
| CPP516M <b>G</b> | 83/8              | 67/8       | 13/4 | 13/4 |
| CPP516           | 8 <sup>3</sup> /8 | 67/8       | 13/4 | 13/4 |
| CPP512           | 719/32            | 65/32      | 13/4 | 13/4 |

### **30A plugs**



 $a = 3^{1}/_{2}$  for single-gang 73/16 for two-gang

**G**CPP516M 20A plug is furnished with pressure terminations at standard.

©20A plugs are furnished with solder terminations at standard; ground contacts have pressure terminations.

• These dimensions are approximate and vary with cable size.