Arktite® Circuit Breaking CPS Receptacles and CPP Plugs

Delayed Action Factory Sealed

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

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



Fia. 1



Fig. 2



Fig. 3

Features:

- The delayed action feature permits the plug to be used as an emergency pushpull 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Figure 2 shows the plug withdrawn until it is stopped by the delayed action mechanism.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 – 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.

Certifications and Compliances:

- NEC/CEC:
- Class I, Division 1 and 2, Groups C, D
- UL Standard: 1203
- CSA Standard: C22.2 No. 30

Standard Materials:

- Receptacle housings die cast copperfree 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 Arktite 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 nonhazardous areas

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



Delayed Action Factory Sealed

Options:

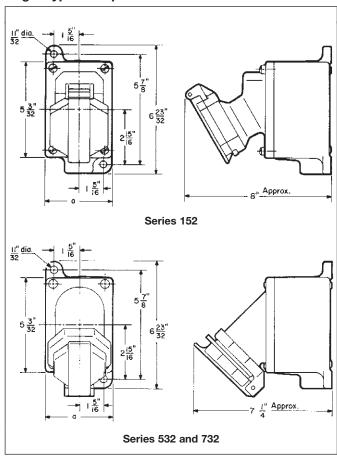
The following special options are available from factory by adding suffix to Cat. #:

Description	Suffix
Material: copper-free aluminum, natural finish, is available on certain back boxes. See listings	SA
Receptacle interior rotated 221/2° 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

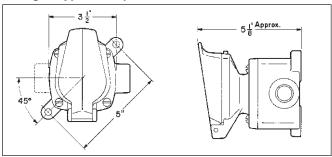
In Inches:

Angle Type Receptacles

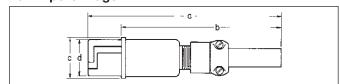


31/2 for single gang 73/16 for two gang

Straight Type Receptacles



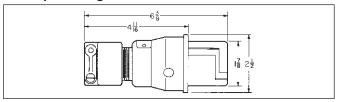
20 Ampere Plugs



Cat. #	a†	b†	С	d	
CPP516‡	83/8	67/8	13/4	19/16	
CPP512‡	7	51/2	13/4	19/16	

- †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



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

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CPS152 - Single gang angle type



CPS152 - Two gang angle type



CPS152R - Receptacle unit only

Plug with



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. #	High Impact Molded Composition Handle Cat. #	Receptacle Unit only Cat. #
20A, 1 HP, 125–250VAC,	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
60 hertz, 20A, 18VDC		Through $\frac{1/2}{3/4}$ Feed 1		CPS152 111* CPS152 211* CPS152 311*	11* CPS152 112* ^J 11* CPS152 212*	,			
30A, 1½ HP, 125–250VAC, 60 hertz, 7A, ½ 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	J			
30A, 3 HP, 125–250VAC, 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 -	275 +0 075+	CPP4752		CPS732R
7A, 1 HP, 480VAC**, 60 hertz		Through Feed	1/ ₂ 3/ ₄ 1	CPS732 111 CPS732 211 CPS732 311	CPS732 112 . CPS732 212 CPS732 312	.375 to .875†	GPP4/32		073/32K

^{*}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.

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CPS Straight Type

2-wire, 3-pole

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

CPS Dead End



Hub	Assembly	Body
Size (In.)	Cat. #	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



туре	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

