CES and CESD Arktite® Receptacles

Delayed Action Circuit Breaking CPH Plugs

 $\begin{array}{l} {\sf CESD-CI.~I,~Div.~1~\&~2,~Group~D^*} \\ {\sf CES-CI.~I,~Div.~1~\&~2,~Groups~C,D} \end{array}$ Explosionproof Wet Locations Factory Sealed



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	Circuit 2-wire, 3-pole	Phase 1	Max. HP ½ 1½	Max. Amps 7 30	Volts at 60 Cycles AC 480① 120 to 240	CES Cat. #	CESD Cat. #
3/4	3-wire, 4-pole	3 {	1 3	7 30	480① 120 to 240	CES2214	CESD2214
11/4	2-wire, 3-pole	1	3	30 60	480① 120 to 240	CES4233	CESD4233
11/4	3-wire, 4-pole	3	5	30 60	480① 120 to 240	CES4234	CESD4234



CPH Plugs with mechanical cable grip and **Neoprene bushing**

CPH Plugs

Circuit 2-wire, 3-pole	Phases	Max. HP 1½ 1½	Max. Amps 7 30	Volts at 60 Cycles AC 480① 120 to 240
3-wire, 4-pole	3	1 3	7 30	480① 120 to 240
2-wire, 3-pole	1	3	30 60	480① 120 to 240
3-wire, 4-pole	3	5	30 60	480① 120 to 240

.375 to .875	.500 to .875	.875 to 1.375		
CPH7713		CPH7913		
CPH7714		CPH7914		
	CPH7733	CPH7933		
	CPH7734	CPH7934		

CABLE DIA.



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

① CSA certified units are rated at 600 volts.

Delayed Action Circuit Breaking **CPH Plugs**

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

Application:

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 below:



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 Figure 2 shows the plug withdrawn until it is stopped by the delayed action sleeve.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

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.

- Receptacles are factory sealed to simplify installation and wiring. External seals are not
- The 30 ampere receptacles are provided with pressure terminals for field connection. The 60 ampere receptacles have flexible leads. Plugs are equipped with solder
- Two arrangements are provided for the 3/4" and 11/4" conduit hubs, as shown in the listings and dimensions on page 1012.

Grounding:

• NEC article 501 and CEC Part 1 Section 18 require that metal frames or exposed noncurrent-carrying metal parts of portable devices used in hazardous locations be grounded through an extra conductor in the portable cord.

Options:

• The following special options are available from factory by adding suffix to Cat. No.:

• 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 locatioins 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

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:

- Feralov electrogalvanized and aluminum acrylic paint
- Copper-free aluminum natural
- Krydon material red
- Brass and copper natural

Electrical Rating Ranges:

• 30 and 60 amperes

Certifications and **Compliances:**

• NEC/CEC:

CES - Class I, Division 1 and 2, Groups

CESD - Class I, Division 1 and 2, Group D*

- ANSI/UL Standard: 1010
- CSA Standard C22.2 No. 182.1

Suffix to be Added to

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. Available as follows:

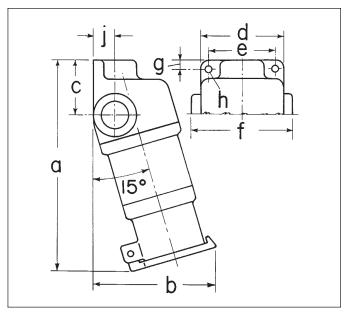
Receptacle interior rotated 221/2 degrees clockwise when viewed from face and plug changed to match

 $[\]mbox{\ensuremath{^{\star}}}$ For U.S. CESD are also suitable for Class I, Group C when used with immediately adjacent seals.

2P

CES and CESD Arktite Receptacles

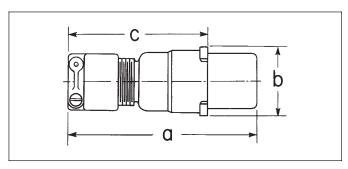
Circuit Breaking Delayed Action, CPH Plugs Dimensions CESD — CI. I, Div. 1 and 2, Group D* CES — CI. I, Div. 1 and 2, Groups C,D Explosionproof Wet Locations Factory Sealed



g h h
a
b

CES									
Cat. # CES2213 CES2214	а	b	С	d	е	f	g	h	j
	7 ½16	45/8	2 ³ / ₁₆	33//8	23/4	41/8	5⁄16	11/32	7/8
CES4233 CES4234	12	7	27/8	51/4	43/8	61//8	7/16	13/32	1 ½

CESD							
Cat. # CESD2213	а	b	е	f	g	h	j
DESD2214	7 5⁄8	63/8	41/4	5	17⁄8	11/32	13/16
CESD4233 CESD4234	13½	95/8	61/4	71/4	3	13/32	1 3⁄16



CPH

Cat. #	а	b	С
CPH7713	6	2 3/8	4 5/16
CPH7913	6 7/16	2 3/8	43/4
CPH7714	6	2 3/8	4 5/16
CPH7914	6 7/16	2 3/8	43/4
CPH7733	73/4	23/4	5
CPH7933	81/8	23/4	53/8
CPH7734	7 3/4	31/16	5
CPH7934	8 1/ ₈	31/16	53/9



