4P

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 CI. III NEMA/EFC 3, 7CD, 9FG, 12 Explosionproof

Dust-Ignitionproof Raintight Wet Locations

APJ/NPJ† and DP Arktite Plugs

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 The circuit breaker cannot be closed until the plug is fully inserted and the plug cannot be withdrawn unless the breaker is open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
- 4

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

Groundina:

• 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.



30, 60 and 100 ampere size EPC



200 ampere size EPC

Options:

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

Description

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 221/2° clockwise when viewed from face of receptacle	
and plug changed to match	. S4
Side bosses drilled and tapped same size as standard hubs, 30, 60 and	
100 ampere units only	- S366
Back boss drilled and tapped same size as standard hubs, 30, 60 and	
100 ampere units only	
Breather and drain (Class I, Class II)	
Breather and drain (Class I only)	. S454V

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

+Pressure connectors are standard. Crimp/solder type terminators are optionally available for 2, 3 and 4-pole 30 ampere. S and 4-pole 60 and 100 ampere. For netalis, see page 1316. To specify, add the suffix "T" to the catalog number For example: APJ3365-T (Plug).

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• CEC:

Suffix

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ΔP

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 Brooker

Enclosure

Without Ckt. Circuit Bkr. Breaker	With Circuit Breaker
Ckt. Circuit	
Amps Cat. #	Cutler-HammerGeneral Electric"EHD" Cat. #"TED" Cat. #
20 30 40* EPC43032 50*	EPC43032 WT20 2 EPC43032 TT20 2 EPC43032 WT30 2 EPC43032 TT30 2 EPC43032 WT40 2 EPC43032 TT40 2 EPC43032 WT50 2 EPC43032 TT50 2
20 30 40* EPC43042 50*	EPC43042 WT20 3 EPC43042 TT20 3 EPC43042 WT30 3 EPC43042 TT30 3 EPC43042 WT40 3 EPC43042 TT40 3 EPC43042 WT50 3 EPC43042 TT50 3
50 50 EPC46032 70* 90* 100* EPC66032	EPC46032 WT50 2 EPC46032 TT50 2 EPC66032 WT60 2 EPC66032 TT60 2 EPC66032 WT70 2 EPC66032 TT70 2 EPC66032 WT90 2 EPC66032 TT90 2 EPC66032 WT100 2 EPC66032 TT100 2
50 60 EPC46042 70* 90* EPC66042 100* EPC66042	EPC46042 WT50 3 EPC46042 TT50 3 EPC66042 WT60 3 EPC66042 TT60 3 EPC66042 WT70 3 EPC66042 TT70 3 EPC66042 WT90 3 EPC66042 TT90 3 EPC66042 WT100 3 EPC66042 TT100 3
60 70 EPC61032 100	EPC61032 WT60 2 EPC61032 TT60 2 EPC61032 WT70 2 EPC61032 TT70 2 EPC61032 WT90 2 EPC61032 TT90 2 EPC61032 WT100 2 EPC61032 TT100 2
60 70 90 EPC61042 100	EPC61042 WT60 3 EPC61042 TT60 3 EPC61042 WT70 3 EPC61042 TT70 3 EPC61042 WT90 3 EPC61042 TT90 3 EPC61042 WT100 3 EPC61042 TT100 3
	mps Cat. # D EPC43032 D EPC43042 D EPC46032 D EPC66032 D EPC66042 D EPC66042 D EPC66042 D EPC61032 D EPC61042

225 Ampere Frame Size Circuit Breaker with Interchangeable Thermal Magnetic Trip⁺⁺

Circuit Breaker		Enclos	ure							
					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,	3-pole, 600VAC	3	125 150 175	EPC604 2042	EPC604 2042 WT125 3 EPC604 2042 WT150 3 EPC604 2042 WT175 3	EPC605 2042 TT125 3 EPC605 2042 TT150 3 EPC605 2042 TT175 3				
4-pole, Style 2	or 250 VDC	3	200 225*	EPC605 2042	EPC604 2042 WT200 3 EPC604 2042 WT225 3	EPC605 2042 TT200 3 EPC605 2042 TT225 3				

*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.

Crouse-Hinds by F:T·N

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

APJ10387

NPJ10386

NPJ10387

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Dust-Ignitionproof Raintight Wet Locations



APJ10487

NPJ10486

NPJ10487

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

1.00 to 1.70

0.93 to 1.21

1.21 to 1.50

1.875 to 2.50

In Inches:

100

200†

1398



Recept.	Breaker	а	b	С	d	е	f	g	h	hh	j	k	I	m
30 Amp.	20–50 Amp.	24	105/8	14 ³ /8	9 ³ / ₈	711/16	11 ³ /4	4%/16	4 ¹³ / ₁₆	7	20 ³ / ₄	7 ³ /8	2 ¹ / ₁₆	
60 Amp.	50 Amp.	24 ¹ / ₂	10⁵⁄s	143/8	9 ³ / ₈	711/16	113/4	5 ¹ / ₁₆	513/16	613/16	203/4	7 ³/8	21/16	
60 Amp.	70–100 Amp.	24 ¹ / ₂	12 ¹³ /16	14 ³ /8	9 ³ / ₈	711/16	11 ³ / ₄	5 ¹ / ₁₆	5 ¹³ /16	613/16	20 ³ / ₄	9 ¹ / ₄	2 ⁵ /8	
100 Amp. 200 Amp.	70–100 Amp. 125–225 Amp.	25¹/₄ 36	12¹³/₁₀ 18	14³/₃ 27	9³/8	7 ¹¹ / ₁₆ 13 ¹ / ₂	113/4	513/16	65/8	73/4	20 ³ / ₄ 34 ¹ / ₄	91/4	25/8	51/2

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

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