

EPC Circuit Breakers and Enclosures with Interlocked Arkrite® Receptacles

APJ/NPJ† and DP Arkrite 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 The circuit breaker cannot be closed until the plug is fully inserted and the plug cannot be withdrawn unless the breaker is open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.

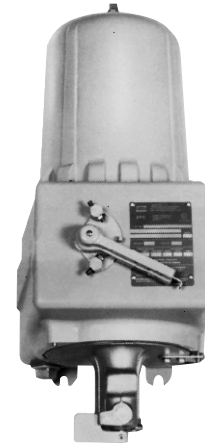
Options:

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.....	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	S367
Breather and drain (Class I, Class II)	S198V
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 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 1267. 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

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Cl. II, Div. 1 and 2, Groups F, G
Cl. III
NEMA/EFC 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 TT20 2
						EPC43032 WT30 2	EPC43032 TT30 2
						EPC43032 WT40 2	EPC43032 TT40 2
						EPC43032 WT50 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 TT20 3
						EPC43042 WT30 3	EPC43042 TT30 3
						EPC43042 WT40 3	EPC43042 TT40 3
						EPC43042 WT50 3	EPC43042 TT50 3
60 amp. 2-wire, 3 pole, Style 2	2-pole, 480VAC‡ or 250 VDC	600VAC†	1¼	50	EPC46032	EPC46032 WT50 2	EPC46032 TT50 2
				60		EPC66032 WT60 2	EPC66032 TT60 2
			2	70*	EPC66032	EPC66032 WT70 2	EPC66032 TT70 2
				90*		EPC66032 WT90 2	EPC66032 TT90 2
60 amp. 3-wire, 4-pole, Style 2	3-pole, 480VAC‡ or 250 VDC	600VAC†	1¼	50	EPC46042	EPC46042 WT50 3	EPC46042 TT50 3
				60		EPC66042 WT60 3	EPC66042 TT60 3
			2	70*	EPC66042	EPC66042 WT70 3	EPC66042 TT70 3
				90*		EPC66042 WT90 3	EPC66042 TT90 3
100 amp. 2-wire, 3-pole, Style 2	2-pole, 480VAC‡ or 250 VDC	600VAC†	2	60	EPC61032	EPC61032 WT60 2	EPC61032 TT60 2
				70		EPC61032 WT70 2	EPC61032 TT70 2
				90		EPC61032 WT90 2	EPC61032 TT90 2
				100		EPC61032 WT100 2	EPC61032 TT100 2
100 amp. 3-wire, 4-pole, Style 2	3-pole, 480VAC‡ or 250VDC	600VAC†	2	60	EPC61042	EPC61042 WT60 3	EPC61042 TT60 3
				70		EPC61042 WT70 3	EPC61042 TT70 3
				90		EPC61042 WT90 3	EPC61042 TT90 3
				100		EPC61042 WT100 3	EPC61042 TT100 3

225 Ampere Frame Size Circuit Breaker with Interchangeable Thermal 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 "KB" Cat. #	General Electric "TFK" Cat. #
200 amp. 3-wire, 4-pole, Style 2	3-pole, 600VAC or 250 VDC	3	125	EPC604 2042	EPC604 2042 WT125 3	EPC605 2042 TT125 3
			150		EPC604 2042 WT150 3	EPC605 2042 TT150 3
			175		EPC604 2042 WT175 3	EPC605 2042 TT175 3
			200		EPC604 2042 WT200 3	EPC605 2042 TT200 3
Style 2	250 VDC	3	225*	EPC605 2042	EPC604 2042 WT225 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.

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4P

APJ/NPJ† and DP Arktite® 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

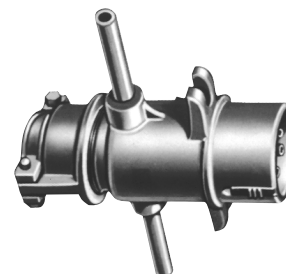
Dust-Ignitionproof
Raintight
Wet Locations



APJ Plug



NPJ Plug



DP Plug

Ordering Information - APJ/NPJ and DP Arktite Plugs

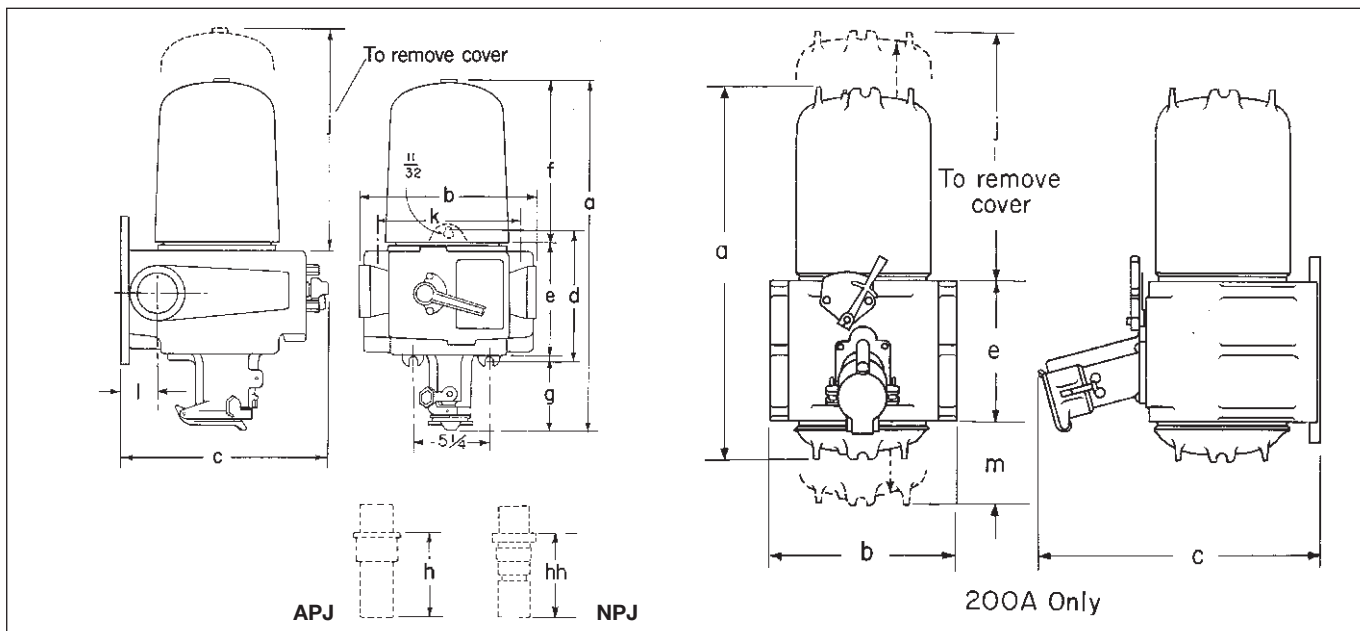
600VAC/250VDC with Cable Grip and Neoprene Bushing – Style 2

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
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:



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

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