EPCB Circuit Breakers and Enclosures with Interlocked Arktite® Receptacles

APJ/NPJ Arktite Plugs‡

Cl. I, Div. 1 and 2, Groups B, C, D Cl. II, Div. 1 and 2, Groups F, G NEMA/EFC 3, 7BCD, 9FG, 12 **Explosionproof**

Dust-Ignitionproof Raintight Wet Locations

Applications:

- The EPCB interlock receptacle is designed for use as a service outlet for portable equipment. The circuit breaker provides overcurrent and short circuit protection
- It has a mechanical interlock mechanism for dead front construction and no load make or break feature
- 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:

- Spring door receptacle located at the bottom 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 The circuit breaker cannot be closed until the plug is fully inserted and the plug cannot be withdrawn unless the breaker is open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 having one keyhole slot at top and two open slots at bottom
- Bodies have four 1¹/₄" taper tapped conduit hubs with integral bushings. Two are located at top and two directly below
- When installing, seals suitable for Class I, Group B hazardous areas must be located within 11/2" of each conduit openina

Certifications and Compliances:

Class I, Division 1 and 2, Groups B, C, D Class II, Division 1 and 2, Groups F, G Class III

- NEMA: 3, 7BCD, 9FG, 12
- ANSI/UL Standard: 1010

Class I, Division 1 and 2, Groups B, 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 fiberglass-reinforced polyester
- · Pressure contacts brass
- Crimp/solder contacts leaded red brass

Standard Finishes:

- Copper-free aluminum natural
- Stainless steel natural
- Sheet steel zinc electroplate with chromate finish
- Brass natural
- · Fiberglass-reinforced polyester natural (red)
- · Leaded red brass electro-tin-plate

Electrical Rating Ranges:

- amperes

• Receptacle ratings: 30, 60 and 100

· Circuit breakers: 100 ampere frame size

Options:

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

 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. Receptacle interior rotated 221/2° to right (viewed from face) and plug

Interchangeability of Plugs with Other Hazardous and Non-hazardous Location **Receptacles:**

- Plugs listed for use with EPCB 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 EPCB receptacles as well as DBR and EPC receptacles listed elsewhere in this
- 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

Grounding:

· EPCB 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

Suffix



EPCB Circuit Breakers and Enclosures with Interlocked Arktite® Receptacles APJ/NPJ Arktite Plugs‡

Cl. I, Div. 1 and 2, Groups B, C, D Cl. II, Div. 1 and 2, Groups F, G CI. III NEMA/EFC 3, 7BCD, 9FG, 12

Explosionproof

EPCB41642 TT70TED 3 EPCB41642 TT90TED 3 **Dust-Ignitionproof** Raintight Wet Locations

Ordering Information:

100 Ampere Frame Size Thermal-magnetic Circuit Breaker with Non-interchangeable Thermal Trip and Non-adjustable Magnetic Trip

Enclosure with Circuit Breaker Circuit Breaker Receptacle Hub Ckt. with Spring Size Bkr. **General Electric Door Housing** Rating Amps Cutler-Hammer (In.) 30 amp. 2-pole, 20 **EPCB43632 WT20HFD 2 EPCB43632 TT20TED 2** 30 EPCB43632 WT30HFD 2 **EPCB43632 TT30TED 2** 2-wire, 600VAC 11/4 40* EPCB43632 WT40HFD 2 **EPCB43632 TT40TED 2** 3-pole, 50* Style 2 250 VDC **EPCB43632 WT50HFD 2 EPCB43632 TT50TED 2** 30 amp. 3-pole, 20 **EPCB43642 WT20HFD 3 EPCB43642 TT20TED 3 EPCB43642 WT30HFD3 EPCB43642 TT30TED 3** 3-wire, 600VAC 30 11/4 40* **EPCB43642 WT40HFD 3 EPCB43642 TT40TED 3** 4-pole, or 50* **EPCB43642 WT50HFD 3 EPCB43642 TT50TED 3** 250 VDC Style 2 50 **EPCB46632 WT50HFD 2** EPCB46632 TT50TED 2 60 amp. 2-pole, 603 **EPCB46632 WT60HFD 2 EPCB46632 TT60TED 2** 600VAC 2-wire. **EPCB46632 WT70HFD 2 EPCB46632 TT70TED 2** 11/4 70* 3-pole, or **EPCB46632 WT90HFD 2** 90* **EPCB46632 TT90TED 2** 250 VDC Style 2 1009 EPCB46632 WT100HFD 2 EPCB46632 TT100TED 2 50 **EPCB46642 WT50HFD 3 EPCB46642 TT50TED 3** 60 amp. 3-pole. 60* **EPCB46642 WT60HFD 3 EPCB46642 TT60TED 3** 3-wire. 600VAC **EPCB46642 TT70TED 3** 11/4 70* **EPCB46642 WT70HFD 3** 4-pole, 90* EPCB46642 WT90HFD 3 **EPCB46642 TT90TED 3** 250 VDC Style 2 100* EPCB46642 WT100HFD 3 **EPCB46642 TT100TED 3** 100 amp. 2-pole. 70 EPCB41632 WT70HFD 2 **EPCB41632 TT70TED 2 EPCB41632 TT90TED 2** 600VAC EPCB41632 WT90HFD 2 2-wire, 90 11/4 100 EPCB41632 WT100HFD 2 **EPCB41632 TT100TED 2** 3-pole. or

‡Pressure connectors are supplied as standard. To specify crimp/solder type terminators add the suffix "T" to the catalog number. For example: APJ3385-T (Plug).

*Circuit breaker trip rating may exceed receptacle rating for welding equipment applications only, as higher trip rating may not protect wiring. †For detailed information on circuit breaker selection see Section 3C.



250 VDC

70†

90+

100+

11/4

3-pole.

600VAC

250 VDC



EPCB41642 WT70HFD 3

EPCB41642 WT90HFD 3

EPCB41642 WT100HFD 3 EPCB41642 TT100TED 3

NPJ Plug

APJ Plug Dimensions

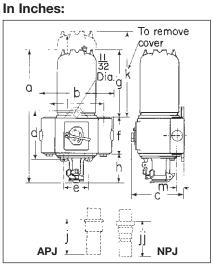
Style 2

3-wire,

4-pole.

Style 2

100 amp.



APJ/NPJ Arktite Plugs 600VAC/250VDC with Cable Grip and Neoprene Bushing - Style 2 2-wire. 3-wire,

Amps	Cable	3-pole	4-pole	
	O.D. Range	Cat. #	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	

Receptacle	а	b	С	d	е	f	
30 Amp.	261/4	115/16	113/4	85/8	5	73/4	
60 Amp.	263/4	115/16	113/4	85/8	5	73/4	
100 Amp.	271/2	115/16	113/4	85/8	5	73/4	
Receptacle	g	h	j	jj	k	1	m
30 Amp.	139/16	415/16	413/16	7	243/4	83/16	15/8
60 Amp.	139/16	57/16	5 ¹³ / ₁₆	613/16	243/4	83/16	1 5/8
100 Amp.	139/16	63/16	6 ⁵ / ₈	73/4	243/4	83/16	15/8

Dim "j" and "jj" are exposed portion of plug when engaged with receptacle

