

DBR Interlocked Arktite® Receptacles With Enclosed Circuit Breakers

APJ/NPJ Arktite Plugs‡

Cl. II, Div. 1 and 2, Groups F, G
Cl. III
NEMA/EEMAC 3, 9FG, 12
Dust-Ignitionproof
Raintight

4P

Applications:

DBR interlocked *Arktite* receptacles with enclosed circuit breakers and APJ/NPJ *Arktite* plugs are used:

- To supply power to portable electrical equipment such as motor-generator sets, compressors, heating and cooling units, conveyors, and similar equipment
- In locations where hazardous dusts are present, as in grain processing and handling plants, chemical plants and certain food processing industries
- Indoors or outdoors in damp, wet or corrosive locations

Features:

- Receptacles are mechanically interlocked with circuit breakers to provide disconnect means, short circuit protection and thermal time delay overload protection.
- Enclosures are compact and rectangular in shape permitting close spacing.
- For maximum safety, the spring door receptacle at the bottom is mechanically interlocked with the circuit breaker operating mechanism. The circuit breaker cannot be closed until the plug is fully inserted and the plug cannot be withdrawn unless the breaker is open.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.
- Enclosure is provided with a drilled and tapped conduit opening at top center, equipped with a threaded-in bushing. The size furnished is 1½", and removing the bushing permits the use of a 2" conduit.

Certifications and Compliances:

- NEC:
Class II, Division 1 and 2, Groups F, G
Class III
- NEMA/EEMAC: 3, 9FG, 12
- UL Standard: 698, 1010
- CEC:
Class II, Division 1 and 2, Group G
Class III
- Encl. 3, 5

Standard Materials:

- Bodies, covers and operating handles – copper-free aluminum
- Operating shafts – stainless steel
- Receptacle housings and plug exteriors – copper-free aluminum
- Insulation: plugs and receptacles – fiberglass-reinforced polyester
- Pressure contacts – brass
- Crimp/solder contacts – leaded red brass

Standard Finishes:

- Copper-free aluminum – plug exterior, enclosure and receptacle housing – natural
- Stainless steel – natural
- Brass – natural
- Fiberglass-reinforced polyester – natural (red)
- Leaded red brass – electro-tin-plate

Options:

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

- | Description | Suffix |
|---|-------------|
| • 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 22½° clockwise when viewed from receptacle face and plug changed to match | S4 |
| • Breather (drain furnished as standard)..... | S219 |
| • Conduit arrangements other than standard can be supplied. Details on request. | |

Electrical Rating Ranges:

- Receptacle ratings: 30, 60 and 100 amperes
- Circuit breakers: 100 ampere frame size

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

- Plugs listed for use with DBR assemblies are standard *Arktite* APJ/NPJ plugs. Other standard APJ/NPJ and CPH plugs of the same rating, style and number of poles may be used with DBR receptacles, as well as with EBBR, EPC and EPCB receptacles listed in Section 4P.
- As a result, portable equipment suitable for the locations and equipped with the proper plug can be used with AR receptacles for non-hazardous locations, with EBBR, EPC and EPCB receptacles for Class I hazardous locations, and with DR and DBR interlocked receptacles for Class II hazardous locations.

Dimensions:

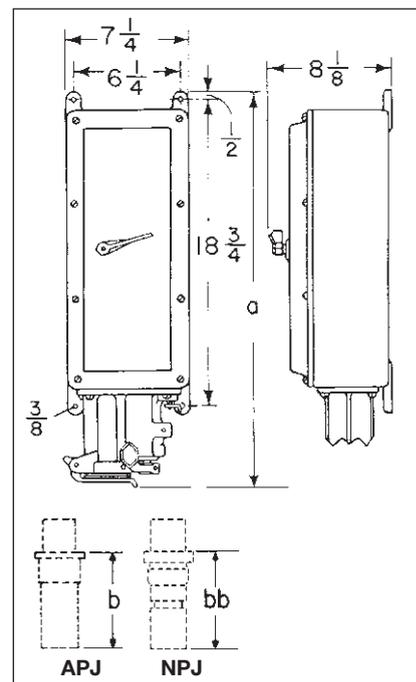
Amps	a	b	bb
30	21¾	6½	7
60	22¾	8½	6 ¹³ / ₁₆
100	23½	10 ⁵ / ₈	7¾

Dim. "b" and "bb" are exposed portion of plug when engaged with receptacle.



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.

Dimensions In Inches:



‡Pressure connectors are standard. Crimp/solder type terminators are optionally available for 3 and 4-pole, 30, 60 and 100 ampere. For details, see page 1267. To specify, add the suffix "T" to the catalog number. For example: AP3375-T (Plug).

4P

4P DBR Interlocked Arktite® Receptacles With Enclosed Circuit Breakers

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Ordering Information:

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

Receptacle With Spring Door Housing†	Circuit Breaker Rating	Enclosure		Without Circuit Breaker Cat. #	With Circuit Breaker Cat. # Cutler-Hammer "FDB"
		Hub Size (In.)	Ckt. Bkr. Amps		
30 amp., 3-wire, 3-pole, Style 1	3-pole 600VAC	1½	20	DBR53731	DBR53731 WT20 3 DBR53731 WT30 3 DBR53731 WT40 3* DBR53731 WT50 3*
			30		
			40		
			50		
30 amp., 2-wire, 3-pole, Style 2	2-pole 600VAC or 250 VDC	1½	20	DBR53732	DBR53732 WT20 2 DBR53732 WT30 2 DBR53732 WT40 2* DBR53732 WT50 2*
			30		
			40		
			50		
30 amp., 3-wire, 4-pole, Style 2	3-pole 600VAC	1½	20	DBR53742	DBR53742 WT20 3 DBR53742 WT30 3 DBR53742 WT40 3* DBR53742 WT50 3*
			30		
			40		
			50		
60 amp., 3-wire, 3-pole, Style 1	3-pole 600VAC	1½	50	DBR56731	DBR56731 WT50 3 DBR56731 WT60 3 DBR56731 WT70 3* DBR56731 WT90 3* DBR56731 WT100 3*
			60		
			70		
			90		
			100		
60 amp., 2-wire, 3-pole, Style 2	2-pole 600VAC or 250 VDC	1½	50	DBR56732	DBR56732 WT50 2 DBR56732 WT60 2 DBR56732 WT70 2* DBR56732 WT90 2* DBR56732 WT100 2*
			60		
			70		
			90		
			100		
60 amp., 3-wire, 4-pole, Style 2	3-pole 600VAC	1½	50	DBR56742	DBR56742 WT50 3 DBR56742 WT60 3 DBR56742 WT70 3* DBR56742 WT90 3* DBR56742 WT100 3*
			60		
			70		
			90		
			100		
100 amp., 3-wire, 3-pole, Style 1	3-pole 600VAC	1½	60	DBR51731	DBR51731 WT60 3 DBR51731 WT70 3 DBR51731 WT90 3 DBR51731 WT100 3
			70		
			90		
			100		
100 amp., 2-wire, 3-pole, Style 2	2-pole 600VAC or 250 VDC	1½	60	DBR51732	DBR51732 WT60 2 DBR51732 WT70 2 DBR51732 WT90 2 DBR51732 WT100 2
			70		
			90		
			100		
100 amp., 3-wire, 4-pole, Style 2	3-pole 600VAC	1½	60	DBR51742	DBR51742 WT60 3 DBR51742 WT70 3 DBR51742 WT90 3 DBR51742 WT100 3
			70		
			90		
			100		

*Circuit breaker trip rating may exceed receptacle rating for welding equipment applications only, as higher trip rating may not protect wiring.
†Style 1 – Grounded through shell. Style 2 – Grounded through extra pole and shell. For a detailed description of these grounding methods, see page 0000.

APJ/NPJ Arktite Plugs



APJ Plug



NPJ Plug

Amps	Cable O.D. Range	Style 1†	Style 2†	
		3-wire, 3-pole Cat. #	2-wire, 3-pole Cat. #	3-wire, 4-pole Cat. #
30	0.60 to 1.20	APJ3375	APJ3385	APJ3485
	0.55 to 0.70		NPJ3383	NPJ3483
	0.70 to 0.85		NPJ3384	NPJ3484
60	0.75 to 1.45	APJ6375	APJ6385	APJ6485
	0.75 to 1.07		NPJ6384	NPJ6484
	1.07 to 1.35		NPJ6385	NPJ6485
100	1.00 to 1.70	APJ10377	APJ10387	APJ10487
	0.93 to 1.21		NPJ10386	NPJ10486
	1.21 to 1.50		NPJ10387	NPJ10487