

Arktite DBR interlocked receptacles with enclosed circuit breakers

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

4P

Applications:

Arktite® DBR interlocked receptacles with enclosed circuit breakers and Arktite APJ/NPJ 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operating mechanism; the circuit breaker cannot be closed until the plug is fully inserted and the plug cannot be withdrawn unless the breaker is open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, Divisions 1 & 2, Groups F, G
- Class III

NEMA/EEMAC:

- NEMA/EEMAC 3, 9FG, 12

UL standards:

- UL698
- UL1010

CEC:

- Class II, Divisions 1 & 2, Group G
- Class III

Enclosure:

- 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 – natural
- Stainless steel – natural
- Brass – natural
- Fiberglass-reinforced polyester – natural (red)
- Leaded red brass – electro-tin-plate

Options:

- | Description | Suffix |
|--|-----------------------------|
| • Special polarity..... | S4 |
| <i>Receptacle interior rotated 22½° to right (viewed from face) and plug changed to match</i> | |
| <i>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</i> | |
| • Breather (drain furnished as standard) | S219 |
| • Conduit arrangements other than standard..... | Details upon request |

Electrical ratings:

- Receptacles – 30, 60, 100 amperes
- Circuit breakers – 100 ampere frame size

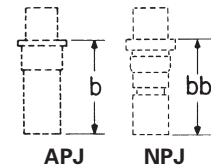
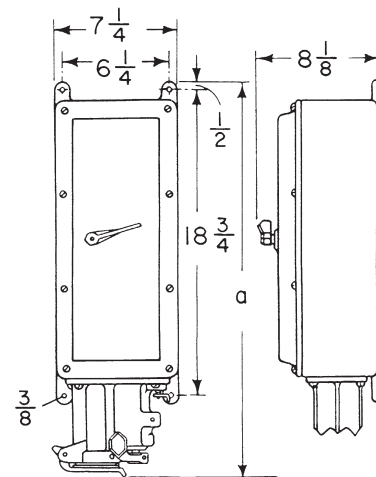
Interchangeability of plugs with other hazardous and non-hazardous location receptacles:

- 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

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):



Amperage	a	b	bb
30	21 ³ / ₄	6 ¹ / ₂	7
60	22 ³ / ₄	8 ¹ / ₂	6 ¹³ / ₁₆
100	23 ¹ / ₂	10 ¹ / ₈	7 ³ / ₄

Dimensions 'b' and 'bb' are exposed portion of plug when engaged with receptacle.

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Ordering information:

100A frame size with non-interchangeable thermal trip and non-adjustable magnetic trip

Receptacle with spring door housing ^A	Circuit breaker rating	Enclosure		Cat. # Without circuit breaker	Cat. # With Cutler-Hammer "FDB" circuit breaker
		Hub size	Circuit breaker amperage		
30A 3-wire, 3-pole Style 1	3-pole, 600 VAC	1½"	20	DBR53731	DBR53731 WT20 3
			30		DBR53731 WT30 3
			40		DBR53731 WT40 3 ^B
			50		DBR53731 WT50 3 ^B
30A 2-wire, 3-pole Style 2	2-pole, 600 VAC or 250 VDC	1½"	20	DBR53732	DBR53732 WT20 2
			30		DBR53732 WT30 2
			40		DBR53732 WT40 2 ^B
			50		DBR53732 WT50 2 ^B
30A 3-wire, 4-pole Style 2	3-pole, 600 VAC	1½"	20	DBR53742	DBR53742 WT20 3
			30		DBR53742 WT30 3
			40		DBR53742 WT40 3 ^B
			50		DBR53742 WT50 3 ^B
60A 3-wire, 3-pole Style 1	3-pole, 600 VAC	1½"	50	DBR56731	DBR56731 WT50 3
			60		DBR56731 WT60 3
			70		DBR56731 WT70 3 ^B
			90		DBR56731 WT90 3 ^B
60A 2-wire, 3-pole Style 2	2-pole, 600 VAC or 250 VDC	1½"	100	DBR56732	DBR56731 WT100 3 ^B
			50		DBR56732 WT50 2
			60		DBR56732 WT60 2
			70		DBR56732 WT70 2 ^B
60A 3-wire, 4-pole Style 2	3-pole, 600 VAC	1½"	90	DBR56742	DBR56732 WT90 2 ^B
			100		DBR56732 WT100 2 ^B
			50		DBR56742 WT50 3
			60		DBR56742 WT60 3
100A 3-wire, 3-pole Style 1	3-pole, 600 VAC	1½"	70	DBR51731	DBR56742 WT70 3 ^B
			90		DBR56742 WT90 3 ^B
			100		DBR56742 WT100 3 ^B
			60		DBR51731 WT60 3
100A 2-wire, 3-pole Style 2	2-pole, 600 VAC or 250 VDC	1½"	70	DBR51732	DBR51731 WT70 3
			90		DBR51731 WT90 3
			100		DBR51731 WT100 3
			60		DBR51732 WT60 2
100A 3-wire, 4-pole Style 2	3-pole, 600 VAC	1½"	70	DBR51742	DBR51732 WT70 2
			90		DBR51732 WT90 2
			100		DBR51732 WT100 2
			60		DBR51742 WT60 3
			70		DBR51742 WT70 3
			90		DBR51742 WT90 3
			100		DBR51742 WT100 3

Arktite APJ/NPJ[®] plugs

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



APJ plug



NPJ plug

^A Style 1 – grounded through shell. Style 2 – grounded through extra pole and shell. For a detailed description of these grounding methods, see Section 1P.

^B Circuit breaker trip rating may exceed receptacle rating for welding equipment applications only, as higher trip rating may not protect wiring.

^C Pressure connectors are standard. Crimp/solder type terminators are optionally available for 3- and 4-pole, 30A, 60A and 100A. For details, see Section 1P. To order, add suffix 'T' to end of catalog number. For example: AP3375-T (plug).