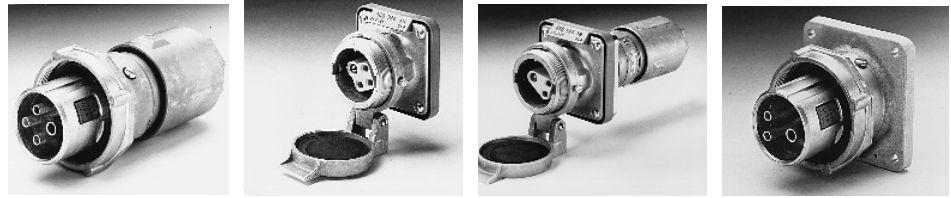


30 Amp Plugs, Receptacles, Connectors, Motor Plugs

Heavy-Duty Voltage Polarized Circuit Breaking NEMA 3R Rainproof UL/CSA



| Amps | Poles | Volt Rating | Color | Plug Cat. No. | Receptacle w/Spring Door* Cat. No. | Connector w/Spring Door* Cat. No. | Motor Plug** Cat. No. |
|------|-------|----------------|-----------|---------------|------------------------------------|-----------------------------------|-----------------------|
| 30 | 3 | 120 VAC 1Ø | Yellow | APJC33B | ARC33B | APRC33B | APQC33B |
| 30 | 3 | 240 VAC 1Ø | Blue | APJC33E | ARC33E | APRC33E | APQC33E |
| 30 | 3 | 250 VDC | Brown | APJC33F | ARC33F | APRC33F | APQC33F |
| 30 | 3 | 277 VAC 1Ø | Gray | APJC33H | ARC33H | APRC33H | APQC33H |
| 30 | 3 | 347 VAC 1Ø | Pink | APJC33L | ARC33L | APRC33L | APQC33L |
| 30 | 3 | 480 VAC 1Ø | Red | APJC33P | ARC33P | APRC33P | APQC33P |
| 30 | 4 | 120/240 VAC 1Ø | Orange | APJC34D | ARC34D | APRC34D | APQC34D |
| 30 | 4 | 208 VAC 3Ø | Dark Blue | APJC34K | ARC34K | APRC34K | APQC34K |
| 30 | 4 | 240 VAC 3Ø | Blue | APJC34E | ARC34E | APRC34E | APQC34E |
| 30 | 4 | 480 VAC 3Ø | Red | APJC34P | ARC34P | APRC34P | APQC34P |
| 30 | 4 | 600 VAC 3Ø | Black | APJC34W | ARC34W | APRC34W | APQC34W |
| 30 | 5 | 208Y/120 VAC | Blue | APJC35C | ARC35C | APRC35C | APQC35C |
| 30 | 5 | 480Y/277 VAC | Red | APJC35N | ARC35N | APRC35N | APQC35N |
| 30 | 5 | 600Y/347 VAC | Black | APJC35U | ARC35U | APRC35U | APQC35U |

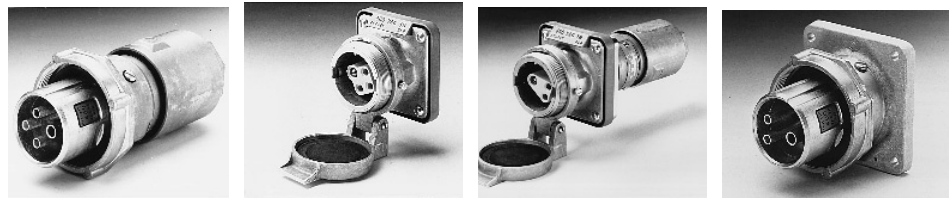
* To order with threaded capp add suffix -S1

** Protective cap included with APQC Motor Plug

Back Box Ordering Information – See pages 957 and 958.

60 Amp Plugs, Receptacles, Connectors, Motor Plugs

Heavy-Duty Voltage Polarized Circuit Breaking NEMA 3R Rainproof UL/CSA



| Amps | Poles | Volt Rating | Color | Plug Cat. No. | Receptacle w/Spring Door* Cat. No. | Connector w/Spring Door* Cat. No. | Motor Plug** Cat. No. |
|------|-------|----------------|-----------|---------------|------------------------------------|-----------------------------------|-----------------------|
| 60 | 3 | 120 VAC 1Ø | Yellow | APJC63B | ARC63B | APRC63B | APQC63B |
| 60 | 3 | 240 VAC 1Ø | Blue | APJC63E | ARC63E | APRC63E | APQC63E |
| 60 | 3 | 250 VDC | Brown | APJC63F | ARC63F | APRC63F | APQC63F |
| 60 | 3 | 277 VAC 1Ø | Gray | APJC63H | ARC63H | APRC63H | APQC63H |
| 60 | 3 | 347 VAC 1Ø | Pink | APJC63L | ARC63L | APRC63L | APQC63L |
| 60 | 3 | 480 VAC 1Ø | Red | APJC63P | ARC63P | APRC63P | APQC63P |
| 60 | 4 | 120/240 VAC 1Ø | Orange | APJC64D | ARC64D | APRC64D | APQC64D |
| 60 | 4 | 208 VAC 3Ø | Dark Blue | APJC64K | ARC64K | APRC64K | APQC64K |
| 60 | 4 | 240 VAC 3Ø | Blue | APJC64E | ARC64E | APRC64E | APQC64E |
| 60 | 4 | 480 VAC 3Ø | Red | APJC64P | ARC64P | APRC64P | APQC64P |
| 60 | 4 | 600 VAC 3Ø | Black | APJC64W | ARC64W | APRC64W | APQC64W |
| 60 | 5 | 208Y/120 VAC | Blue | APJC65C | ARC65C | APRC65C | APQC65C |
| 60 | 5 | 480Y/277 VAC | Red | APJC65N | ARC65N | APRC65N | APQC65N |
| 60 | 5 | 600Y/347 VAC | Black | APJC65U | ARC65U | APRC65U | APQC65U |

* To order with threaded cap add suffix -S1

** Protective cap included with APQC Motor Plug

Back Box Ordering Information – See pages 957 and 958.

1P Plugs and Receptacles

Industrial Heavy Duty Application and Selection

Application:

- Distribution of secondary electrical power
- Provide quick disconnect from power source

Considerations for Selection:

Electrical System:

- Amperage and voltage required for application
- Wiring system and number of conductors required. See page 938 for contact sizes.

Compatibility with System:

- Need for interchangeability with plugs in existing system and within parts of new system. Grounding styles. Two styles utilized. See page 937 for complete description to determine which is suitable for needs.

Mounting Arrangement:

- Three types of mounting available – surface, flush and panel

Application:

- Fixed receptacle for power outlet; cable connectors for portable cable extensions

Other Considerations:

- Wire sizes and recess dimensions available. See page 938 for complete details. National Electrical Code, UL, NEMA, Canadian Electrical Code, CSA compliances
- Environment – need for operation in harsh, dirty or corrosive conditions.

Options:

- Special polarity arrangements available as well as special back boxes and hub arrangements. See listing pages for details.

Quick Selector Chart

| Electrical Characteristics | | | | | | | |
|----------------------------|-----------------|---------------------------|------------------|----------------------|------------------|-------------------------|-----------------------|
| Receptacle Series | Receptacle Type | Amperage (Range) | Volts (Max.) | No. of Poles (Range) | Grounding Style† | Mounting | Mating Plug |
| APR | Portable cable | 20, 30, 60, 100, 200, 400 | 600VAC 250VDC | 2-5 | 1-2 | | APJ, NPJ, APQ, AP |
| APRC | Portable cable | 30, 60, 100 | 600VAC 250VDC | 3-5 | 2 | | APJC, APQC |
| AR | Fixed | 20, 30, 60, 100, 200, 400 | 600VAC 250VDC | 2-5 | 1-2 | Back box (surface) | APJ, NPJ, AP |
| ARC | Fixed | 30, 60, 100 | 600VAC 250VDC | 3-5 | 2 | Back box (surface) | APJC |
| AR | Fixed | 30, 60, 100, 200 | 600VAC 250VDC | 2-4 | 1-2 | Panel mtg. (semi-flush) | APJ, NPJ, AP |
| NPR | Portable cable | 30, 60, 100 | 600VAC 250VDC | 3-4 | 2 | | NPQ, APJ, NPJ (fixed) |
| NR | Fixed | 30, 60, 100 | 600VAC 250VDC | 3-4 | 2 | Back box (surface) | APJ, NPJ |

† See page 937 for detailed explanation.

Industrial Heavy Duty Non-Hazardous Areas

Application:

Arktite circuit breaking plugs and receptacles are used:

- to supply power to portable electrically operated devices such as motor-generator sets, compressors, heating and cooling units, welders, conveyors, lighting systems and similar equipment
- where temporary power is needed, such as at trailers, building units, heavy machinery and similar equipment
- wherever electrical loads must be quickly disconnected from power source
- in a typical installation, where a large machine utilizes a number of electrical motor drives and for ease of adjustment, removal, maintenance and replacement, each motor is connected by portable cord and Arktite receptacles rather than permanently wired
- in areas where dust, dirt, moisture and corrosion are a problem
- indoors and outdoors in non-hazardous areas of chemical plants, process industry facilities, meat packing plants, manufacturing plants and similar industrial locations

Features:

- Circuit breaking: Plugs through 200 ampere rating may be disconnected under load; 400 ampere units are for service disconnect use only.
- Receptacles accept only plugs of the same amperage rating, style and number of poles, making it impossible to mismatch, and provides for positive polarization.
- Extra wide electrical spacing allows for maximum safety.
- Insulator materials are the result of intensive testing. Selection has been made based on highest dielectric strength, maximum mechanical and impact resistance, lowest moisture absorption and highest arc tracking resistance.
- A variety of installations is possible due to the availability of several types of back boxes.
- Designed to withstand rough usage and the effects of adverse environments.
- Reversible interiors, 30, 60 and 100 ampere (except 30 and 60 ampere, 5-pole) Arktite plug and receptacle interiors are interchangeable using a screwdriver. This makes it possible to feed a normally deenergized receptacle from an energized plug with usual Arktite safety; no energized contacts are exposed.
- Additional features are indicated in the view at right:
 - 1 Grounding contact in Style 2 is bonded to the receptacle housing.
 - 2 Easily wired interior assemblies in receptacles and plugs. See table on page 938 for type of contacts in units.
 - 3 Arktite Style 2, illustrated here, has an extra grounding contact which forms a parallel circuit with the circuit formed by the plug sleeve and receptacle detent spring, and assures continuity of the grounding

safety circuit under severe service. Grounding contact is no longer than the others, so grounding circuit is made first and broken last.

4 The arc formed by pulling the plug is instantly snuffed in the deep, confined insulated arcing chamber while the plug contact is still a considerable distance inside. The arc cannot travel over to the other side of the circuit or to the housing.

5 Detent spring forms a grounding path from plug sleeve to receptacle housing. Arktite plugs and receptacles are made in two styles. With either style, the portable appliance is grounded before it is energized and remains grounded until after it is deenergized. (Arktite Style 1, not

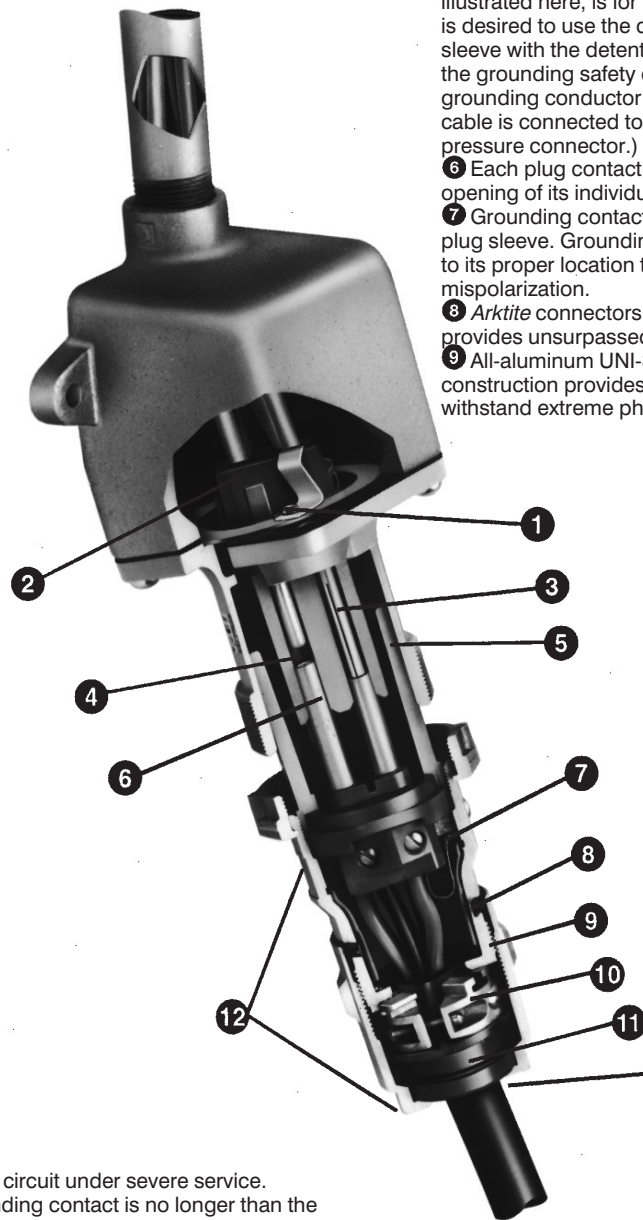
illustrated here, is for conditions where it is desired to use the contact of the plug sleeve with the detent spring to complete the grounding safety circuit. The extra grounding conductor in the portable cable is connected to the plug sleeve by a pressure connector.)

6 Each plug contact fits closely the opening of its individual arcing chamber.

7 Grounding contact is bonded to the plug sleeve. Grounding contact is keyed to its proper location to prevent mispolarization.

8 Arktite connectors' gasketing system provides unsurpassed watertight integrity.

9 All-aluminum UNI-SHELL™ threaded construction provides added strength to withstand extreme physical abuse.



NEW!
NEMA 4
Rating

Arktite Style 2
60 ampere

NEW!
Smaller
Cable
Range

10 Arktite's TRI-LOCK™ cable grip has three clamps that tighten around the cable to securely lock it in place, even when subjected to extreme flexing and jerking.

11 The unique SURE-SEAL™ cable gland provides a complete environmental seal by distributing pressure equally around the circumference of the cable.

12 Wrenching surfaces make Arktite connector quick and easy to assemble.

Arktite® Heavy Duty Circuit Breaking Plugs and Receptacles

NEMA 4 Watertight

1P

Industrial Heavy Duty Non-Hazardous Areas

Grounding:

Crouse-Hinds utilizes two methods for completing the grounding circuit in plugs and receptacles (See diagrams below). Refer to National Electrical Code Article 250.

Style 1:

A Style 1 plug is one in which the grounding conductor in the flexible cable is bonded to the plug sleeve by a pressure connector. A Style 1 receptacle is one which is grounded by virtue of the fact that it is an integral part of a grounded conduit system. On insertion, the plug sleeve makes contact with detent springs of the grounded receptacle housing

before line and load poles engage, and on withdrawal, remains in contact until after line and load poles disengage. Therefore, exposed metal parts of the portable equipment or plug are suitably grounded.

Style 2:

A Style 2 metallic housing plug is one in which the grounding conductor in the flexible cable is bonded to the extra (grounding) pole and metal plug sleeve by a pressure connector. A Style 2 metallic housing receptacle is one in which the extra (grounding) pole is electrically connected to the equipment grounding conductor and the metal receptacle housing which itself is

grounded by virtue of the fact that it is an integral part of a grounded conduit system. In Style 2, non-metallic housing plugs and receptacles, the extra pole is used for grounding since the housings are non-conductive. In a Style 2 receptacle, the grounding connection is made before line and load poles engage, and is broken after the line load poles disengage. Furthermore, upon insertion, the plug sleeve of metal shelled units, makes contact with detent springs of the grounded receptacle housing before line and load poles engage, and on withdrawal, remains in contact until after line and load poles disengage. Therefore, exposed metal parts of the portable equipment or plug are suitably grounded.

Corrosive Locations:

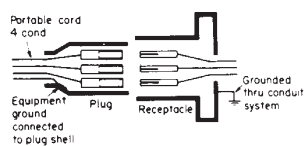
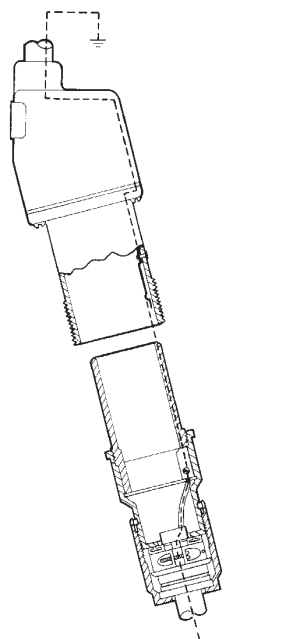
Section 300-6 of the *National Electrical Code/Canadian Electrical Code* requires that, under conditions favorable to corrosion, all equipment, including enclosures and conduit, be protected against corrosion since they form an essential grounding path. In alternating current systems, running a separate conductor, usually of copper, back to the common grounding electrode may be advisable. This may be run through the conduit containing the circuit conductors. At the receptacle, this grounding conductor should be connected to the extra (grounding) pole by the pressure connector provided for that purpose. Where such an extra grounding conductor is used, Style 2 receptacles should be used.

Standard Materials:

- Metallic receptacle housings, plug and cord connector bodies – high impact strength copper-free aluminum
- Nonmetallic receptacles, plugs and cord connectors – Krydon® fiberglass-reinforced polyester material
- Back boxes: 20, 30, 60, 100 and 200 ampere – cast aluminum; 400 ampere – Feraloy® iron alloy
- Insulation (metallic products): (2-, 3-, and 4-pole) 30, 60, 100, 200, 400 ampere – fiberglass-reinforced polyester; 20, 30 ampere (5-pole) – melamine
- Contacts: pressure, solder, binding screw – brass; crimp/solder – leaded red brass; 20, 30, 60, 100 ampere – tellurium copper; 200, 400 ampere

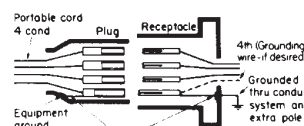
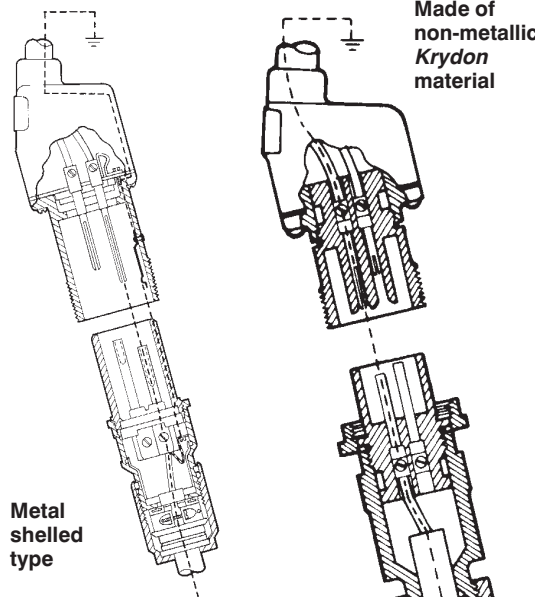
Standard Finishes:

- Feraloy—electrogalvanized and aluminum acrylic paint
- Aluminum – natural
- Krydon fiberglass-reinforced polyester material – grey
- Fiberglass-reinforced polyester insulation – (red)
- Melamine – natural (brown)
- Brass – natural
- Leaded red brass – electro-tin-plate



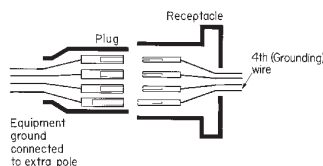
Typical 3-wire, 3-pole plug and receptacle

Style 1 units ground the portable device and the plug via the grounding conductor and the plug shell to the receptacle housing. The receptacle is grounded by virtue of its being an integral part of the conduit system.



Typical 3-wire, 4-pole plug and receptacle

Style 2 units with a metallic housing have an extra (grounding) contact which forms a parallel circuit with the circuit formed by the plug sleeve and receptacle detent spring. Style 2 units with nonmetallic housings utilize the extra contact only for connecting the grounding circuit.



Configured Arktite® Heavy Duty Power Connectors

Rainproof
30 to 100 A
600 VAC/250 VDC
60-400 hertz

1P

Voltage/Color Configurations

A 16 position 'face' is used to illustrate the grounding contact location for receptacles. To identify the system voltage, identify the housing color and position of the receptacle grounding contact or marking on the polarizer.

Standard Materials:

- Metallic receptacle housings, plug, and connector bodies – high impact strength copper-free aluminum
- Back boxes – cast aluminum
- Insulators: 3, 4, and 5 pole – fiberglass-reinforced polyester
- Contacts: Pressure screw type – brass
- Polarizers – PBT polyester

Standard Finishes:

- Aluminum – natural
- Fiberglass-reinforced polyester insulator – gray
- Brass – natural

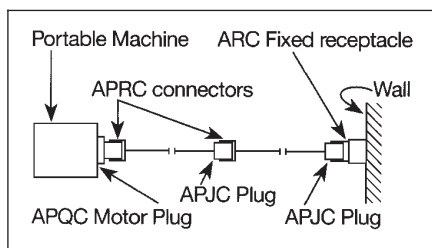
Certifications and Compliances:

- UL Standards: 1682 and 1686
- CSA Standard: C22.2 No. 182.1

Electrical Rating Ranges:

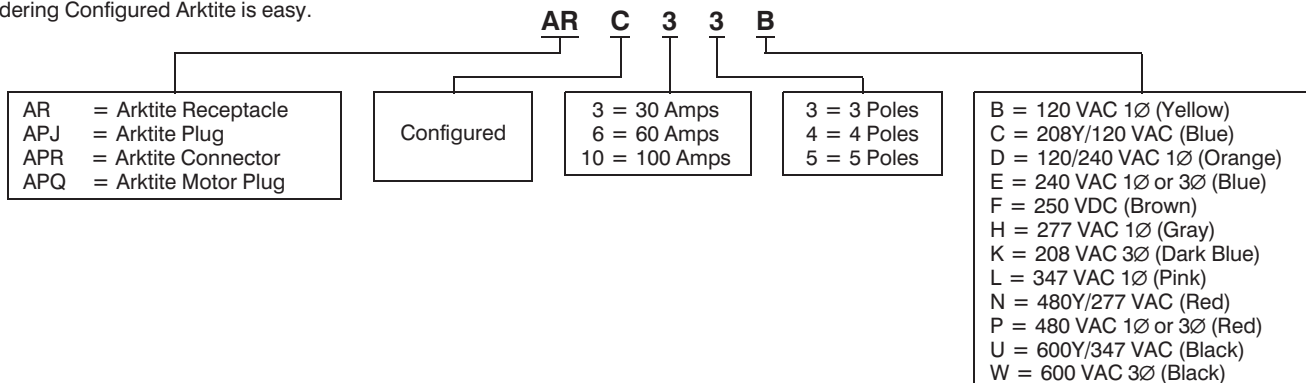
- Voltage – 600 VAC; 60 to 400 hertz; 250 VDC
- Amperes – 30, 60, and 100
- Horsepower Rating – same as standard product. See page 938.

Typical Installation:



Catalog Numbering System:

Ordering Configured Arktite is easy.



Features

Grounding contact is bonded to the receptacle housing.

Each plug contact closely fits the opening of its individual arcing chamber.

Large ground contact is keyed by location to prevent mispolarization.

Simple and easy color, part number, and voltage identification

Wrenching surfaces make Configured Arktite connector quick and easy to assemble.

Simple and easy color, part number, and voltage identification

The arc formed by pulling the plug is instantly snuffed in the deep, confined insulated arcing chamber while the plug contact is still a considerable distance inside. The arc cannot travel over to the other side of the circuit or to the housing.

Easily wired interior assemblies in receptacles and plugs.

Grounding contact is bonded to the plug sleeve.

Configured Arktite connectors' gasketing system provides unsurpassed watertight integrity.

All-aluminum UNI-SHELL™ threaded construction provides added strength to withstand extreme physical abuse.

The unique SURE-SEAL™ cable gland provides a complete environmental seal by distributing pressure equally around the circumference of the cable. One size accommodates the complete range of cable diameters.

Configured Arktite's TRI-LOCK™ cable grip has three clamps that tighten around the cable to securely lock it in place, even when subjected to extreme flexing and jerking.