

## Industrial Heavy Duty Non-hazardous Areas

### Applications:

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 100 ampere rating may be disconnected under load; 150-400 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 de-energized receptacle from an energized plug with usual Arktite safety; no energized contacts are exposed.

### Certifications and Compliances:

- UL Standards: 1203\*; 1682, 1686
- CSA Standard: C22.2 No. 182.1
- CE (LVD) 2006/95/EEC\*\*



1P

\* APJ and NPJ plugs only

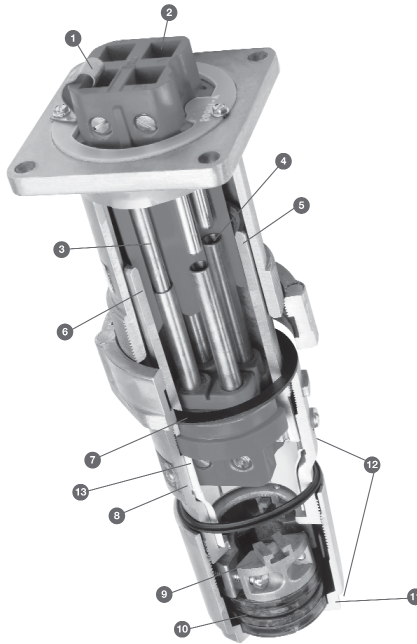
\*\* Excludes 200A and 400A APR Connectors

# Arktite® Heavy Duty Circuit Breaking Plugs and Receptacles

NEMA 4 Watertight

1P

## Industrial Heavy Duty Non-hazardous Areas



### Split Pin Contact Design:

- Provides nearly 360° of contact at every insertion, ensuring protection against heat rise and eliminating arcing on critical surfaces
- Continuous contact over length and circumference of mated pins provides superior safety and long-term performance
- Self-wiping at every insertion to prevent environmental contamination build-up



### The additional features below are called out in the illustration on this page

- 1 The ground contact is bonded to the receptacle housing (Style 2)
- 2 Unimpeded, easy-access phase and ground terminals make wire termination quick and easy
- 3 Grounding contacts that make-first and break-last in the unlikely event of keyway failure
- 4 An arc formed when the plug is being removed is instantly snuffed in the deep confined insulated arcing chamber
- 5 A detent spring forms a parallel grounding path through the metallic plug sleeve and receptacle housing and is the first contact to make and the last to break
- 6 The plug sleeve is keyed to the receptacle to prevent mispolarization
- 7 The gasketing system provides unsurpassed watertight integrity (NEMA 4)
- 8 All aluminum Uni-Shell™ construction provides superior strength in abusive environments
- 9 The Tri-Lock™ cable grip has 3-piece design that equally distributes gripping power around perimeter of cable. Cord jacket does not get pinched, eliminating potential for damage to both internal conductors and external cable jacket. Cable grip is located inside plug housing, eliminating corrosion of vital hardware and making plug maintenance easy.
- 10 The unique Sure-Seal™ cable gland has two gasket sizes which fit entire range of cable diameters, reducing risk of improper assembly. The gasket ratchets into the Tri-lock™ cable grip to prevent plug from turning or loosening in high vibration areas.
- 11 Wrenching surfaces make Arktite plugs quick and easy to assemble
- 12 Smooth and contoured design of plug housing eliminates occurrence of cable grip snagging or breaking off. Tri-Lock™ screws are captive so cable grip cannot come apart during assembly. Prevents critical screws from getting lost during installation.
- 13 Plastic sleeve between insulator body and housing minimizes possibility of electrical shock in event of ground failure. Increases creepage and clearance protection.

## Arktite® Advantage Features:

### Internal Plug Safety Insulator

- Plastic barrier between insulator body and metal housing minimizes risk of energizing handle body due to stray conductor strands
- Increases creepage and clearance protection

### CE Marked

- Offers a borderless solution with no additional inspection or documentation required for approval

### Lockout Plug

- Allows users to comply with OSHA lockout/tagout requirements
- Ensures plug cannot be inserted into receptacle when maintenance is being performed downstream of power supply

### Tri-Lock Cable Grip

- Three-piece design equally distributes grip around perimeter of cable
- Cable jacket does not get pinched, eliminating potential for damage to internal conductors
- Captive screws allow maximum extension of cord grip without risk of loose components

### Sure-Seal Cable Gland

- Two gasket sizes fit entire cable range, reducing risk of improper assembly
- Gasket ratches into Tri-Lock cable grip to provide environmental protection in high vibration areas



### Plug Housing

- Smooth design eliminates occurrence of cable grip snagging or breaking off
- Houses Tri-Lock cable grip to eliminate corrosion of vital hardware and increase ease of maintenance



### Combination Drive Stainless Steel Hardware

- Increases ease of installation by allowing for more than one option for installation tools
- Stainless steel external hardware eliminates corrosion on critical components and extends product life



### Insulator Assemblies

- Unimpeded, easy access phase and ground terminals make wire termination quick and easy
- Lug screws secured with tape to prevent them from vibrating loose and falling out during shipping



### Combination Slot and Hex Mechanical Lugs\*

- Increases ease of installation by allowing for more than one option for installation tools
- Hex head allows for easy achievement of specified torque value



### Receptacle Cover

- Automatic weatherproof seal every time plug is disengaged
- Field replaceable design allows for new cover to be threaded on quickly and easily



\*60, 100, and 150A offering.

# 1P Arktite® Heavy Duty Circuit Breaking Plugs and Receptacles

NEMA 4 Watertight

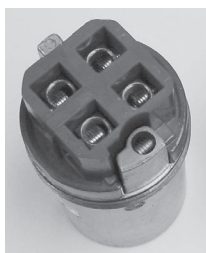
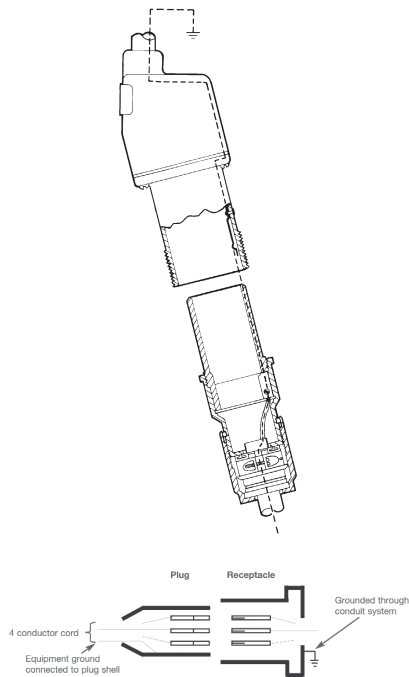
**Industrial Heavy Duty  
Non-hazardous Areas**

## Grounding: Style 1 vs. Style 2

Eaton's Crouse-Hinds Arktite devices utilize two methods, or styles, for completing the grounding circuit in plugs and receptacles. NEC reference 250.138 (A) & (B).

### Style 1 – Metallic

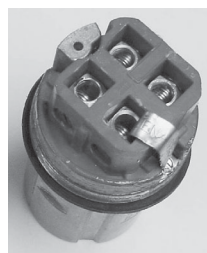
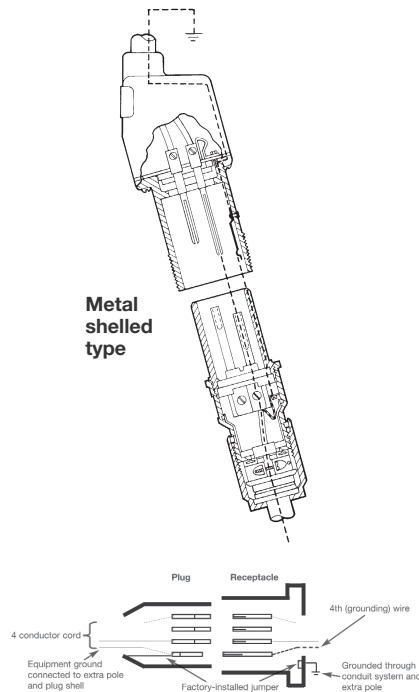
A Style 1 plug is one in which the grounding conductor in the flexible cable is bonded to the plug sleeve by a pressure connector. A Style 1 receptacle is one which is grounded by virtue of the fact that it is an integral part of a grounded conduit system. On insertion, the plug sleeve makes contact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

### Style 2 – Metallic

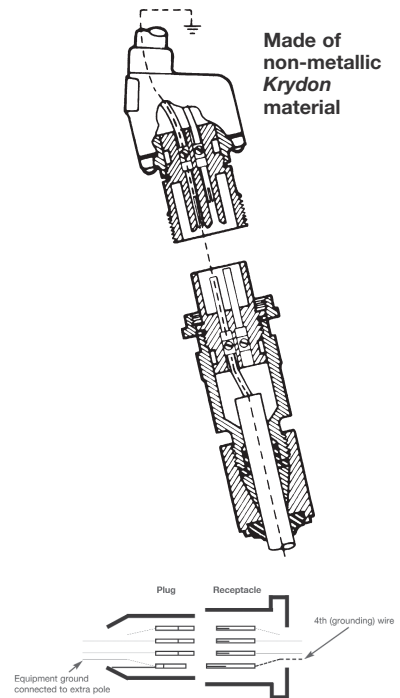
A Style 2 metallic housing plug is one in which the grounding conductor in the flexible cable is bonded to the extra (grounding) pole and metal plug sleeve by a pressure connector. A Style 2 metallic housing receptacle is one in which the extra (grounding) pole is electrically connected to the equipment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



**Style 2**  
Ground conductor  
attaches to contact,  
which is bonded to  
shell.

### Style 2 – Non-metallic

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.



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# Arktite® Heavy Duty Circuit Breaking Plugs and Receptacles

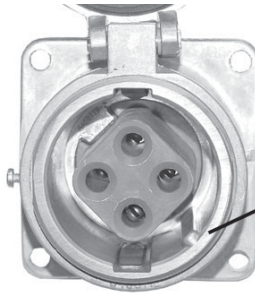
NEMA 4 Watertight

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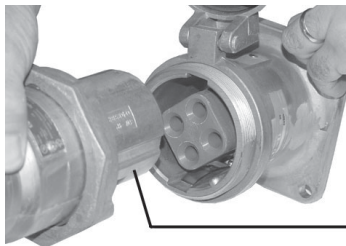
## Industrial Heavy Duty Non-hazardous Areas

### Standard Materials:

- Metallic receptacle housings, plug and cord connector bodies – high impact strength copper-free aluminum
- Non-metallic receptacles, plugs and cord connectors – *Krydon*® fiberglass-reinforced polyester material
- Back boxes: 20, 30, 60, 100, 150 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 20, 30, 60, 100 ampere – leaded red brass; crimp/solder 150, 200, 400 ampere – tellurium copper



Arktite receptacles have a cast raised rib located inside the receptacle sleeve. The location of the rib is in a specific relationship to the receptacle insulator that houses the contacts.



The mating plug has a cast groove located on the outside of the plug sleeve. This groove lines up with the raised rib.

### Standard Finishes:

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

### Accessories:

- Accessories include a variety of angle adapters, panel adapters and back boxes for *Arktite* receptacles, see pages 1332–1335.
- Included throughout 1P are wire mesh cable grips and protective caps for *Arktite* plugs.

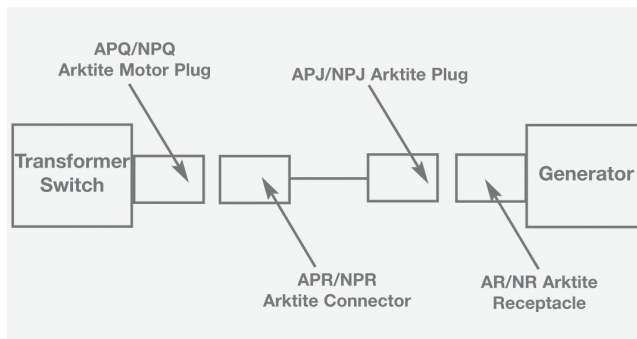
### Options:

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

- | Description   | Suffix |
|---|--------|
| • Reversed contacts. Receptacle assembled with plug interior (exposed contacts), plug assembled with receptacle interior (recessed contacts). For applications where plug is energized to feed normally de-energized receptacle. Available on 30 through 400 ampere units... <b>S22</b> |        |
| • 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 and/or frequencies. Prevents insertion of a plug in a receptacle with different electrical rating.    |        |

Available on 20 through 400 ampere units as follows:

- Receptacle interior rotated 22½° to right and plug changed to match (see photo to right).....**S4**
- Corro-free™ epoxy powder finish for added corrosion resistance.....**S752**



Typical Installation

§150A, 200A and 400A rated units are for service disconnect use only.

# 1P Arktime® Heavy Duty Circuit Breaking Plugs and Receptacles

NEMA 4 Watertight

## Industrial Heavy Duty Non-hazardous Areas

### Arktime Horsepower Ratings Locked-Rotor Interrupting

Ampere Rating Plug and Receptacle	Motor Horsepower†			
	120 Volts	240 Volts	480 Volts	600 Volts
<b>Single-phase Electrical System</b>				
30	2	3	7.5	10
60	5	10	25	20
100	10	20		
200	15	40		
<b>Three-phase Electrical System</b>				
30	3	5	10	10
60	10	20	40	50
100	15	30	40	25
200	30	60	25	15

### Maximum Horsepower for Plug and Receptacle Combinations by Input Voltage\*

Following values are typical horsepower ratings based on NEC Article 430 tables.

HP Ratings are based on the largest conductor size for each plug and receptacle combination per the Wire Size table below.

Ampere Rating Plug and Receptacle	Motor Horsepower‡		
	240 Volts	480 Volts	600 Volts
30	15	30	40
60	20	40	50
100	30	60	75
150	40	75	100
200	60	125	150

### Wire Sizes:

The table below lists the diameter of the wire recess in *Arktime* plug and receptacle contacts so that maximum size of bare conductor can be figured. Range of wire sizes shown in table is intended only as a guide. Depending on type of wire used (building wire, flexible or extra flexible cable) and its construction (number and size of strands), bare copper diameters vary widely.

### Diameter of Wire Recess in Plug and Receptacle Contacts

Ampere Rating	Contact Type	Diameter of Recess	Wire Size‡	
			Building	Extra Flex
20	Binding Screw	N/A	#14-#12	#14-#12
30 (2, 3, & 4-pole)	Pressure	.281	#10-#6	#10-#8
30 (2, 3, & 4-pole)	Crimp/Solder	.180	#10-#8**	#10-#8
30 (5-pole)	Solder	.188	#12-#6	#12-#8
60 (2, 3, 4 & 5-pole)	Pressure	.312	#6-#4	#8-#4
60 (3 & 4-pole)	Crimp/Solder	.277	#6-#4**	#8-#4
100 (2, 3 & 4-pole)	Pressure	.390	#4-#1	#4-#2
100 (3 & 4-pole)	Crimp/Solder	.390	#2-#1**	#2-#2
150 (4-pole)	Pressure	.390	#2-2/0	#2-1/0
200 (3 & 4-pole)	Pressure	.687	2/0-4/0	2/0-3/0
200 (Std. 3 & 4-pole)	Crimp/Solder	.560	#1-4/0	#1-3/0
200 (Lg. 3 & 4-pole)	Crimp/Solder	.750	4/0-250MCM	3/0-250MCM
400 (Std. 3 & 4-pole)	Crimp/Solder	.840	250-500MCM	250-400MCM
400 (Lg. 3 & 4-pole)	Crimp/Solder	1.25	500-1000MCM	400-750MCM

‡150A, 200A and 400A rated units are for service disconnect use only.

† Horsepower ratings are based on Eaton's Crouse-Hinds testing in which locked-rotor currents were interrupted by withdrawing the plug from the receptacle. It is highly recommended, however, that such use be limited to emergency conditions only, and that a horsepower rated switch be used for motor disconnect.

\* This guide is for reference only. Consult your local electrical codes before installation.

‡ Eaton's Crouse-Hinds does not recommend our plug and receptacle be used for disconnect under load.

\*\*Smaller sizes may be used with well reducers - information available upon request.

‡Do not use wire size smaller than minimum size recommended.

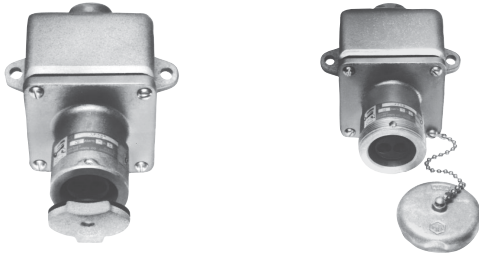
1P

# Arktite® Heavy Duty Circuit Breaking Receptacles, Plugs and Connectors

NEMA 4 Watertight

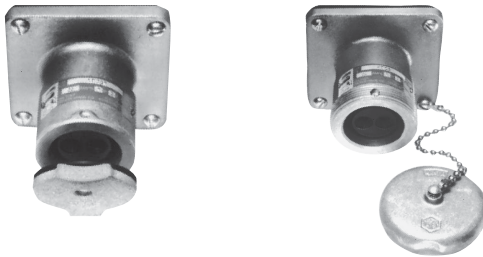
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20 A, 600 VAC/250 VDC, 50\*\* – 400 hertz



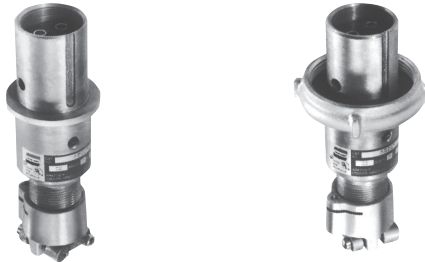
## Receptacle with Back Box

Config.	Hub Size	Descrip.	Cat. #
2W 2P	1/2	Spring Door	ARE2211
	1/2	Threaded Cap	ARE2271
2W 2P	3/4	Spring Door	ARE2212
	3/4	Threaded Cap	ARE2272



## Receptacle

Config.	Descrip.	Cat. #
2W 2P	Spring Door	AR221
	Threaded Cap	AR227



## Plug

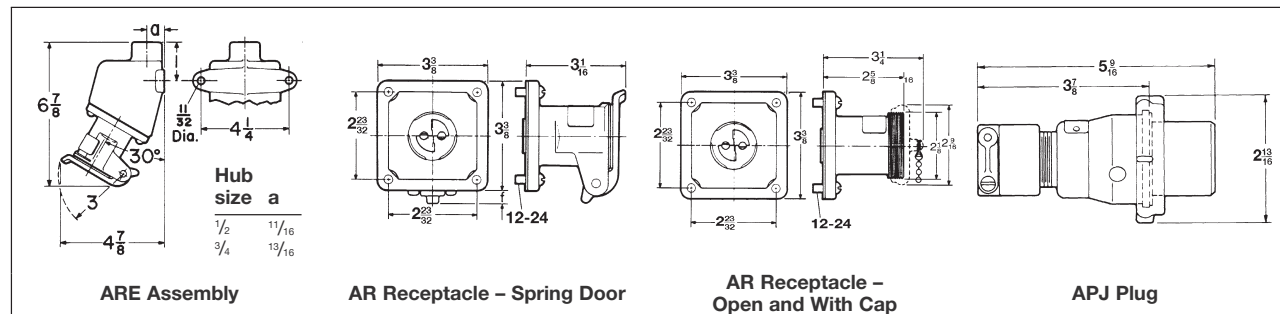
Config.	Cable Dia.	Descrip.	Cat. #
2W 2P	.250-.500	Fastening Ring	APJ2271
	.250-.500	Without Fastening Ring	APJ2251
2W 2P	.500-.875	Fastening Ring	APJ2273
	.500-.875	Without Fastening Ring	APJ2253



## Connector

Config.	Cable Dia.	Descrip.	Cat. #
2W 2P	.250-.500	Connector	APR2251
	.500-.850	Connector	APR2253

## Dimensions In Inches:



Note: For listing of additional back boxes, see page 1333.

\*\*When used on systems less than 60 hertz, the receptacles, plugs and connectors are for disconnect use only.

## Industrial Heavy Duty Non-hazardous Areas

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- 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
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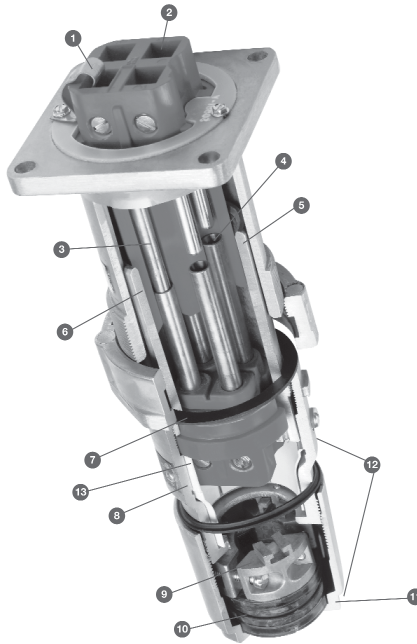
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NEMA 4 Watertight

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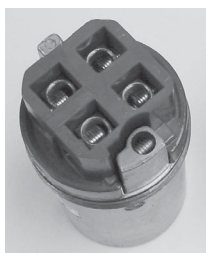
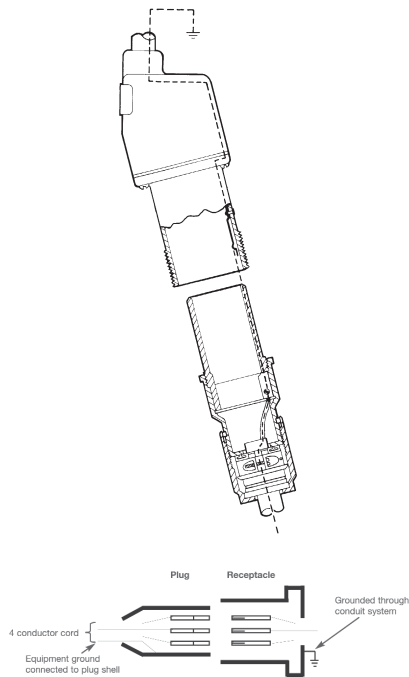
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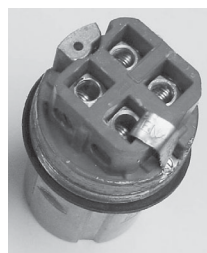
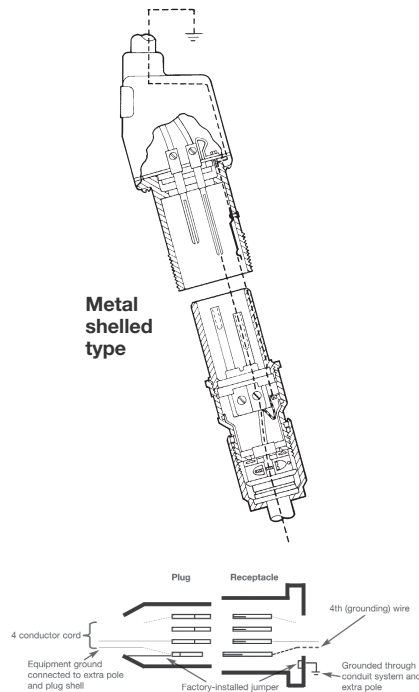
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**Style 1**  
Ground conductor  
attaches to shell.

### Style 2 – Metallic

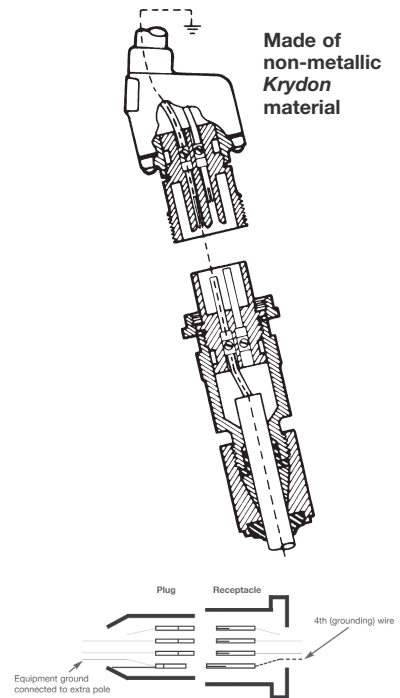
A Style 2 metallic housing plug is one in which the grounding conductor in the flexible cable is bonded to the extra (grounding) pole and metal plug sleeve by a pressure connector. A Style 2 metallic housing receptacle is one in which the extra (grounding) pole is electrically connected to the equipment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



**Style 2**  
Ground conductor  
attaches to contact,  
which is bonded to  
shell.

### Style 2 – Non-metallic

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.



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# Arktite® Heavy Duty Circuit Breaking Plugs and Receptacles

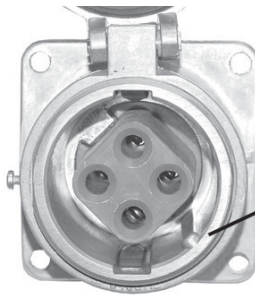
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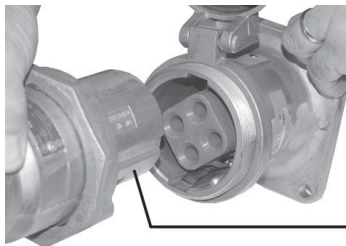
## Industrial Heavy Duty Non-hazardous Areas

### Standard Materials:

- Metallic receptacle housings, plug and cord connector bodies – high impact strength copper-free aluminum
- Non-metallic receptacles, plugs and cord connectors – *Krydon*® fiberglass-reinforced polyester material
- Back boxes: 20, 30, 60, 100, 150 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 20, 30, 60, 100 ampere – leaded red brass; crimp/solder 150, 200, 400 ampere – tellurium copper



Arktite receptacles have a cast raised rib located inside the receptacle sleeve. The location of the rib is in a specific relationship to the receptacle insulator that houses the contacts.



The mating plug has a cast groove located on the outside of the plug sleeve. This groove lines up with the raised rib.

### Standard Finishes:

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

### Accessories:

- Accessories include a variety of angle adapters, panel adapters and back boxes for *Arktite* receptacles, see pages 1332–1335.
- Included throughout 1P are wire mesh cable grips and protective caps for *Arktite* plugs.

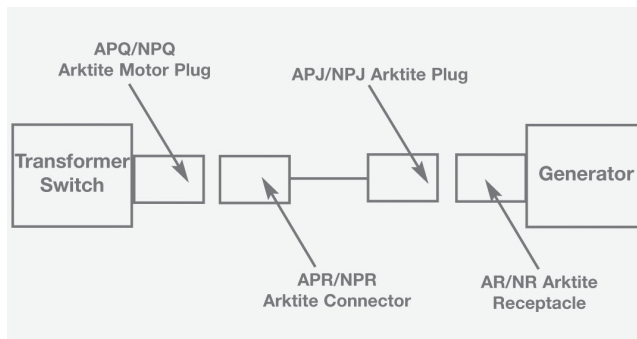
### Options:

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

- | Description   | Suffix |
|---|--------|
| • Reversed contacts. Receptacle assembled with plug interior (exposed contacts), plug assembled with receptacle interior (recessed contacts). For applications where plug is energized to feed normally de-energized receptacle. Available on 30 through 400 ampere units... <b>S22</b> |        |
| • 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 and/or frequencies. Prevents insertion of a plug in a receptacle with different electrical rating.    |        |

Available on 20 through 400 ampere units as follows:

- Receptacle interior rotated 22½° to right and plug changed to match (see photo to right).....**S4**
- Corro-free™ epoxy powder finish for added corrosion resistance.....**S752**



Typical Installation

§150A, 200A and 400A rated units are for service disconnect use only.

# 1P Arktime® Heavy Duty Circuit Breaking Plugs and Receptacles

NEMA 4 Watertight

## Industrial Heavy Duty Non-hazardous Areas

### Arktime Horsepower Ratings Locked-Rotor Interrupting

Ampere Rating Plug and Receptacle	Motor Horsepower†			
	120 Volts	240 Volts	480 Volts	600 Volts
<b>Single-phase Electrical System</b>				
30	2	3	7.5	10
60	5	10	25	20
100	10	20		
200	15	40		
<b>Three-phase Electrical System</b>				
30	3	5	10	10
60	10	20	40	50
100	15	30	40	25
200	30	60	25	15

### Maximum Horsepower for Plug and Receptacle Combinations by Input Voltage\*

Following values are typical horsepower ratings based on NEC Article 430 tables.

HP Ratings are based on the largest conductor size for each plug and receptacle combination per the Wire Size table below.

Ampere Rating Plug and Receptacle	Motor Horsepower‡		
	240 Volts	480 Volts	600 Volts
30	15	30	40
60	20	40	50
100	30	60	75
150	40	75	100
200	60	125	150

### Wire Sizes:

The table below lists the diameter of the wire recess in *Arktime* plug and receptacle contacts so that maximum size of bare conductor can be figured. Range of wire sizes shown in table is intended only as a guide. Depending on type of wire used (building wire, flexible or extra flexible cable) and its construction (number and size of strands), bare copper diameters vary widely.

### Diameter of Wire Recess in Plug and Receptacle Contacts

Ampere Rating	Contact Type	Diameter of Recess	Wire Size‡	
			Building	Extra Flex
20	Binding Screw	N/A	#14-#12	#14-#12
30 (2, 3, & 4-pole)	Pressure	.281	#10-#6	#10-#8
30 (2, 3, & 4-pole)	Crimp/Solder	.180	#10-#8**	#10-#8
30 (5-pole)	Solder	.188	#12-#6	#12-#8
60 (2, 3, 4 & 5-pole)	Pressure	.312	#6-#4	#8-#4
60 (3 & 4-pole)	Crimp/Solder	.277	#6-#4**	#8-#4
100 (2, 3 & 4-pole)	Pressure	.390	#4-#1	#4-#2
100 (3 & 4-pole)	Crimp/Solder	.390	#2-#1**	#2-#2
150 (4-pole)	Pressure	.390	#2-2/0	#2-1/0
200 (3 & 4-pole)	Pressure	.687	2/0-4/0	2/0-3/0
200 (Std. 3 & 4-pole)	Crimp/Solder	.560	#1-4/0	#1-3/0
200 (Lg. 3 & 4-pole)	Crimp/Solder	.750	4/0-250MCM	3/0-250MCM
400 (Std. 3 & 4-pole)	Crimp/Solder	.840	250-500MCM	250-400MCM
400 (Lg. 3 & 4-pole)	Crimp/Solder	1.25	500-1000MCM	400-750MCM

‡150A, 200A and 400A rated units are for service disconnect use only.

† Horsepower ratings are based on Eaton's Crouse-Hinds testing in which locked-rotor currents were interrupted by withdrawing the plug from the receptacle. It is highly recommended, however, that such use be limited to emergency conditions only, and that a horsepower rated switch be used for motor disconnect.

\* This guide is for reference only. Consult your local electrical codes before installation.

‡ Eaton's Crouse-Hinds does not recommend our plug and receptacle be used for disconnect under load.

\*\*Smaller sizes may be used with well reducers - information available upon request.

‡Do not use wire size smaller than minimum size recommended.

1P

1P

# Arktite® Heavy Duty Circuit Breaking Receptacle Assemblies and Housings

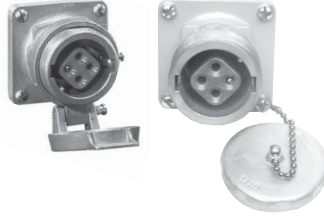
NEMA 4 Watertight

30 A, 600 VAC/250 VDC, 50† – 400 hertz

## Ordering Information:



Receptacle Assembly



Receptacle



Mating Plug



Mating Connector

With ARE Back Boxes

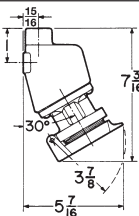
Receptacle Housings Only

Mating APJ Plugs†

Mating APR Connectors

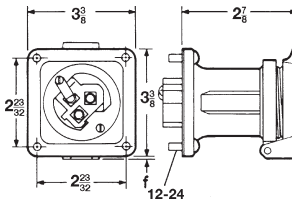
Description	Hub Size (In.)	Spring Door Cat. #	Spring Door Cat. #	Threaded Cap Only Cat. #	Cat. #	Cable Dia.	Cat. #	Cable Dia.
<b>Style 1</b>								
2-wire, 2-pole }	1/2	ARE3211	AR321	AR327	APJ3275	0.39 to 1.20	APR3255	0.39 to 1.20
3-wire, 3-pole }	3/4	ARE3312	AR331	AR337	APJ3375	0.39 to 1.20	APR3355	0.39 to 1.20
4-wire, 4-pole }	1	ARE3412	AR341	AR347	APJ3475	0.39 to 1.20	APR3455	0.87 to 1.20
5-wire, 5-pole }	1	ARE3513	AR351		APJ3573	.500 to .875	APR3553	.500 to .875
<b>Style 2</b>								
2-wire, 3-pole }	3/4	ARE3322	AR332	AR338	APJ3385	0.39 to 1.20	APR3365	0.39 to 1.20
3-wire, 4-pole }	1	ARE3422	AR342	AR348	APJ3485	0.39 to 1.20	APR3465	0.39 to 1.20
4-wire, 5-pole }	1	ARE3523	AR352		APJ3583 APJ3585	.500 to .875 .875 to 1.375	APR3563 APR3565	.500 to .875 .875 to 1.375

## Dimensions In Inches:

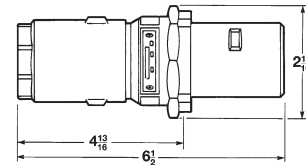


30A  
2,3 and 4 POLE

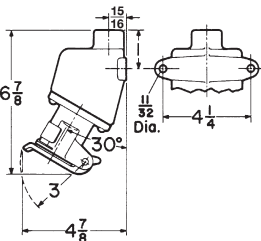
ARE Assembly



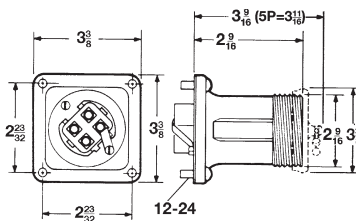
AR Receptacle - Spring Door



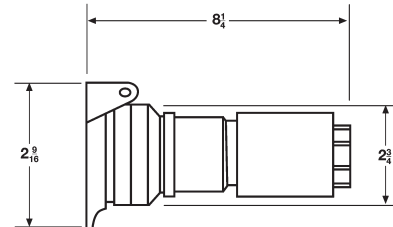
Plug



30 A  
5 POLE



AR Receptacle - Open and With Cap



Connector

†For use on systems less than 60 hertz the receptacles, plugs and connectors are for disconnect use only.

1P

# Arktite® Heavy Duty Circuit Breaking Receptacle Assemblies and Housings

NEMA 4 Watertight

1P

30 A, 600 VAC/250 VDC, 50† – 400 hertz

## Plug Closure Caps:

### Applications:

CPK caps for Arktite plugs are used:

- Where portable equipment is on a standby basis and plugs are not in use
- To effectively protect insulation and contacts from excessive moisture, dirt, dust and corrosion
- With 30, 60, 100, 150 and 200 ampere plugs with fastening ring and standard 200 ampere plugs for the clamp door housing



### Ordering Information:

Config.	Cat. #
2P & 3P & 4P	CPK13
5P	CPK32

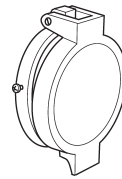
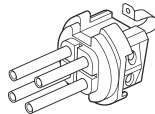
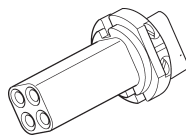
### Standard Materials:

- Copper-free aluminum

### Standard Finishes:

- Natural

### Replacement Parts:



Config.	Receptacle Interior	Plug Interior	Spring Door	Screw Cap
2W 2P	ATP275	ATP270	QE50	QE13
2W 3P	ATP278	ATP273		
3W 3P	ATP276	ATP271		
3W 4P	ATP279	ATP274		
4W 4P	ATP277	ATP272	N/A	N/A
4W 5P	ATP125	ATP109		
5W 5P	ATP94	ATP73		

### Replacement Pin & Sleeve Contacts:

Description	Recep	Plug
Available as a kit only. 5 phase contacts & 1 ground contact included.	AR30CONKIT	AP30CONKIT

†For use on systems less than 60 hertz the receptacles, plugs and connectors are for disconnect use only.

1P

## Industrial Heavy Duty Non-hazardous Areas

### Applications:

*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 100 ampere rating may be disconnected under load; 150-400 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 de-energized receptacle from an energized plug with usual *Arktite* safety; no energized contacts are exposed.

### Certifications and Compliances:

- UL Standards: 1203\*; 1682, 1686
- CSA Standard: C22.2 No. 182.1
- CE (LVD) 2006/95/EEC\*\*



1P

\* APJ and NPJ plugs only

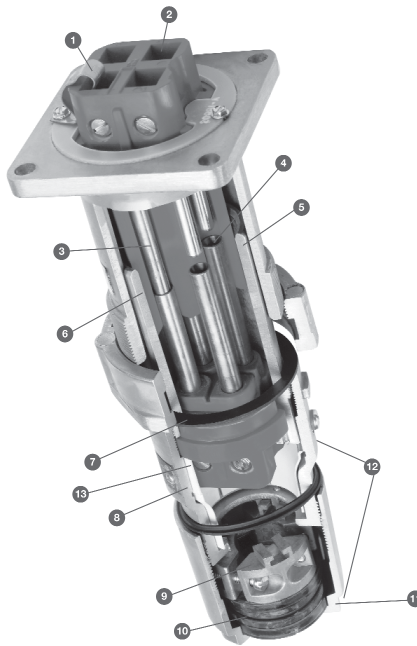
\*\* Excludes 200A and 400A APR Connectors

# Arktite® Heavy Duty Circuit Breaking Plugs and Receptacles

NEMA 4 Watertight

1P

## Industrial Heavy Duty Non-hazardous Areas



### Split Pin Contact Design:

- Provides nearly 360° of contact at every insertion, ensuring protection against heat rise and eliminating arcing on critical surfaces
- Continuous contact over length and circumference of mated pins provides superior safety and long-term performance
- Self-wiping at every insertion to prevent environmental contamination build-up



### The additional features below are called out in the illustration on this page

- 1 The ground contact is bonded to the receptacle housing (Style 2)
- 2 Unimpeded, easy-access phase and ground terminals make wire termination quick and easy
- 3 Grounding contacts that make-first and break-last in the unlikely event of keyway failure
- 4 An arc formed when the plug is being removed is instantly snuffed in the deep confined insulated arcing chamber
- 5 A detent spring forms a parallel grounding path through the metallic plug sleeve and receptacle housing and is the first contact to make and the last to break
- 6 The plug sleeve is keyed to the receptacle to prevent mispolarization
- 7 The gasketing system provides unsurpassed watertight integrity (NEMA 4)
- 8 All aluminum Uni-Shell™ construction provides superior strength in abusive environments
- 9 The Tri-Lock™ cable grip has 3-piece design that equally distributes gripping power around perimeter of cable. Cord jacket does not get pinched, eliminating potential for damage to both internal conductors and external cable jacket. Cable grip is located inside plug housing, eliminating corrosion of vital hardware and making plug maintenance easy.
- 10 The unique Sure-Seal™ cable gland has two gasket sizes which fit entire range of cable diameters, reducing risk of improper assembly. The gasket ratchets into the Tri-lock™ cable grip to prevent plug from turning or loosening in high vibration areas.
- 11 Wrenching surfaces make Arktite plugs quick and easy to assemble
- 12 Smooth and contoured design of plug housing eliminates occurrence of cable grip snagging or breaking off. Tri-Lock™ screws are captive so cable grip cannot come apart during assembly. Prevents critical screws from getting lost during installation.
- 13 Plastic sleeve between insulator body and housing minimizes possibility of electrical shock in event of ground failure. Increases creepage and clearance protection.

## Arktite® Advantage Features:

### Internal Plug Safety Insulator

- Plastic barrier between insulator body and metal housing minimizes risk of energizing handle body due to stray conductor strands
- Increases creepage and clearance protection

### CE Marked

- Offers a borderless solution with no additional inspection or documentation required for approval

### Lockout Plug

- Allows users to comply with OSHA lockout/tagout requirements
- Ensures plug cannot be inserted into receptacle when maintenance is being performed downstream of power supply

### Tri-Lock Cable Grip

- Three-piece design equally distributes grip around perimeter of cable
- Cable jacket does not get pinched, eliminating potential for damage to internal conductors
- Captive screws allow maximum extension of cord grip without risk of loose components

### Sure-Seal Cable Gland

- Two gasket sizes fit entire cable range, reducing risk of improper assembly
- Gasket ratchets into Tri-Lock cable grip to provide environmental protection in high vibration areas



### Plug Housing

- Smooth design eliminates occurrence of cable grip snagging or breaking off
- Houses Tri-Lock cable grip to eliminate corrosion of vital hardware and increase ease of maintenance



### Combination Drive Stainless Steel Hardware

- Increases ease of installation by allowing for more than one option for installation tools
- Stainless steel external hardware eliminates corrosion on critical components and extends product life



### Insulator Assemblies

- Unimpeded, easy access phase and ground terminals make wire termination quick and easy
- Lug screws secured with tape to prevent them from vibrating loose and falling out during shipping



### Combination Slot and Hex Mechanical Lugs\*

- Increases ease of installation by allowing for more than one option for installation tools
- Hex head allows for easy achievement of specified torque value



### Receptacle Cover

- Automatic weatherproof seal every time plug is disengaged
- Field replaceable design allows for new cover to be threaded on quickly and easily



\*60, 100, and 150A offering.

# 1P Arktite® Heavy Duty Circuit Breaking Plugs and Receptacles

NEMA 4 Watertight

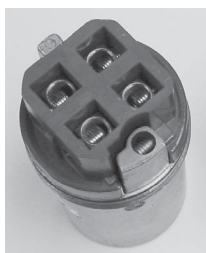
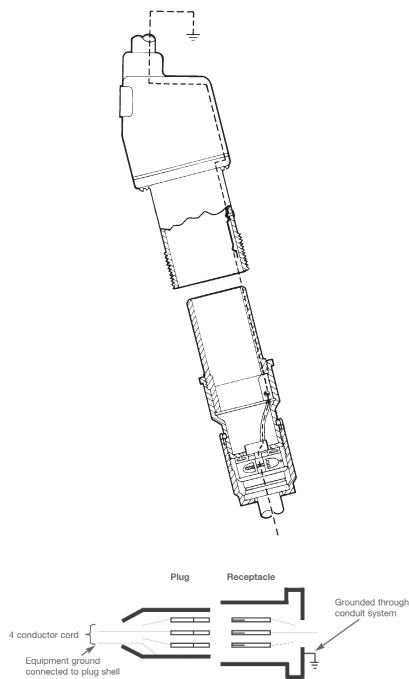
**Industrial Heavy Duty  
Non-hazardous Areas**

## Grounding: Style 1 vs. Style 2

Eaton's Crouse-Hinds Arktite devices utilize two methods, or styles, for completing the grounding circuit in plugs and receptacles. NEC reference 250.138 (A) & (B).

### Style 1 – Metallic

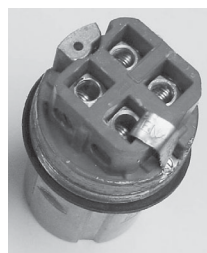
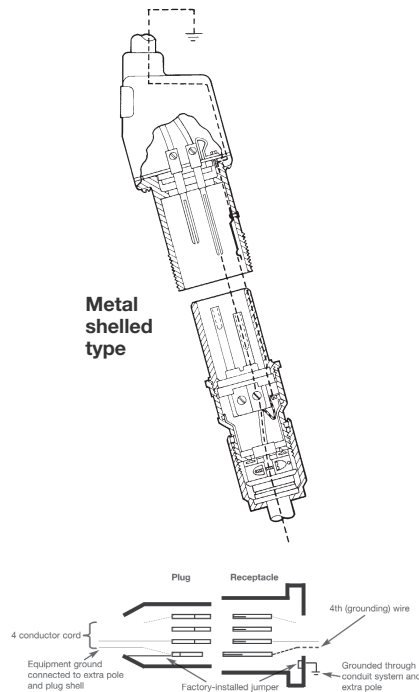
A Style 1 plug is one in which the grounding conductor in the flexible cable is bonded to the plug sleeve by a pressure connector. A Style 1 receptacle is one which is grounded by virtue of the fact that it is an integral part of a grounded conduit system. On insertion, the plug sleeve makes contact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

### Style 2 – Metallic

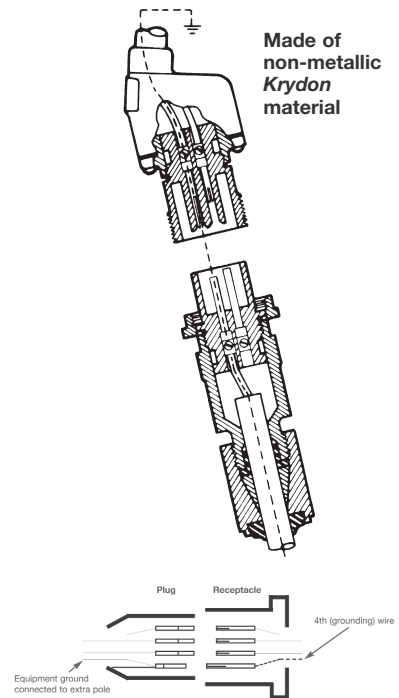
A Style 2 metallic housing plug is one in which the grounding conductor in the flexible cable is bonded to the extra (grounding) pole and metal plug sleeve by a pressure connector. A Style 2 metallic housing receptacle is one in which the extra (grounding) pole is electrically connected to the equipment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



**Style 2**  
Ground conductor attaches to contact, which is bonded to shell.

### Style 2 – Non-metallic

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.



1P



# Arktite® Heavy Duty Circuit Breaking Plugs and Receptacles

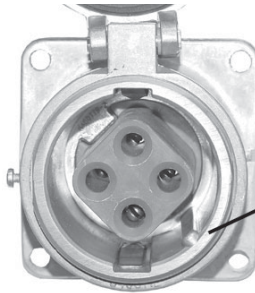
NEMA 4 Watertight

1P

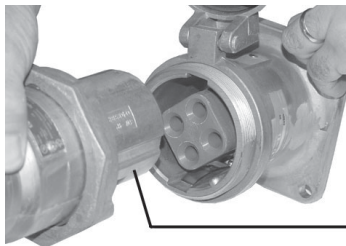
## Industrial Heavy Duty Non-hazardous Areas

### Standard Materials:

- Metallic receptacle housings, plug and cord connector bodies – high impact strength copper-free aluminum
- Non-metallic receptacles, plugs and cord connectors – *Krydon*® fiberglass-reinforced polyester material
- Back boxes: 20, 30, 60, 100, 150 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 20, 30, 60, 100 ampere – leaded red brass; crimp/solder 150, 200, 400 ampere – tellurium copper



Arktite receptacles have a cast raised rib located inside the receptacle sleeve. The location of the rib is in a specific relationship to the receptacle insulator that houses the contacts.



The mating plug has a cast groove located on the outside of the plug sleeve. This groove lines up with the raised rib.

### Standard Finishes:

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

### Accessories:

- Accessories include a variety of angle adapters, panel adapters and back boxes for *Arktite* receptacles, see pages 1332–1335.
- Included throughout 1P are wire mesh cable grips and protective caps for *Arktite* plugs.

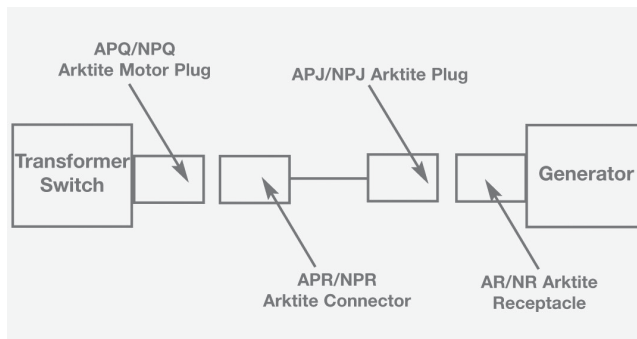
### Options:

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

- | Description   | Suffix |
|---|--------|
| • Reversed contacts. Receptacle assembled with plug interior (exposed contacts), plug assembled with receptacle interior (recessed contacts). For applications where plug is energized to feed normally de-energized receptacle. Available on 30 through 400 ampere units... <b>S22</b> |        |
| • 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 and/or frequencies. Prevents insertion of a plug in a receptacle with different electrical rating.    |        |

Available on 20 through 400 ampere units as follows:

- Receptacle interior rotated 22½° to right and plug changed to match (see photo to right).....**S4**
- Corro-free™ epoxy powder finish for added corrosion resistance.....**S752**



Typical Installation

§150A, 200A and 400A rated units are for service disconnect use only.

# 1P Arktime® Heavy Duty Circuit Breaking Plugs and Receptacles

NEMA 4 Watertight

## Industrial Heavy Duty Non-hazardous Areas

### Arktime Horsepower Ratings Locked-Rotor Interrupting

Ampere Rating Plug and Receptacle	Motor Horsepower†			
	120 Volts	240 Volts	480 Volts	600 Volts
<b>Single-phase Electrical System</b>				
30	2	3	7.5	10
60	5	10	25	20
100	10	20		
200	15	40		
<b>Three-phase Electrical System</b>				
30	3	5	10	10
60	10	20	40	50
100	15	30	40	25
200	30	60	25	15

### Maximum Horsepower for Plug and Receptacle Combinations by Input Voltage\*

Following values are typical horsepower ratings based on NEC Article 430 tables.

HP Ratings are based on the largest conductor size for each plug and receptacle combination per the Wire Size table below.

Ampere Rating Plug and Receptacle	Motor Horsepower‡		
	240 Volts	480 Volts	600 Volts
30	15	30	40
60	20	40	50
100	30	60	75
150	40	75	100
200	60	125	150

### Wire Sizes:

The table below lists the diameter of the wire recess in *Arktime* plug and receptacle contacts so that maximum size of bare conductor can be figured. Range of wire sizes shown in table is intended only as a guide. Depending on type of wire used (building wire, flexible or extra flexible cable) and its construction (number and size of strands), bare copper diameters vary widely.

### Diameter of Wire Recess in Plug and Receptacle Contacts

Ampere Rating	Contact Type	Diameter of Recess	Wire Size‡	
			Building	Extra Flex
20	Binding Screw	N/A	#14-#12	#14-#12
30 (2, 3, & 4-pole)	Pressure	.281	#10-#6	#10-#8
30 (2, 3, & 4-pole)	Crimp/Solder	.180	#10-#8**	#10-#8
30 (5-pole)	Solder	.188	#12-#6	#12-#8
60 (2, 3, 4 & 5-pole)	Pressure	.312	#6-#4	#8-#4
60 (3 & 4-pole)	Crimp/Solder	.277	#6-#4**	#8-#4
100 (2, 3 & 4-pole)	Pressure	.390	#4-#1	#4-#2
100 (3 & 4-pole)	Crimp/Solder	.390	#2-#1**	#2-#2
150 (4-pole)	Pressure	.390	#2-2/0	#2-1/0
200 (3 & 4-pole)	Pressure	.687	2/0-4/0	2/0-3/0
200 (Std. 3 & 4-pole)	Crimp/Solder	.560	#1-4/0	#1-3/0
200 (Lg. 3 & 4-pole)	Crimp/Solder	.750	4/0-250MCM	3/0-250MCM
400 (Std. 3 & 4-pole)	Crimp/Solder	.840	250-500MCM	250-400MCM
400 (Lg. 3 & 4-pole)	Crimp/Solder	1.25	500-1000MCM	400-750MCM

‡150A, 200A and 400A rated units are for service disconnect use only.

† Horsepower ratings are based on Eaton's Crouse-Hinds testing in which locked-rotor currents were interrupted by withdrawing the plug from the receptacle. It is highly recommended, however, that such use be limited to emergency conditions only, and that a horsepower rated switch be used for motor disconnect.

\* This guide is for reference only. Consult your local electrical codes before installation.

‡ Eaton's Crouse-Hinds does not recommend our plug and receptacle be used for disconnect under load.

\*\*Smaller sizes may be used with well reducers - information available upon request.

‡Do not use wire size smaller than minimum size recommended.

1P

60 A, 600 VAC/250 VDC, 50† – 400 hertz

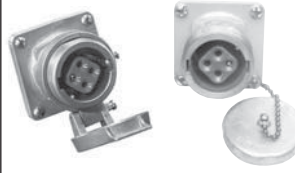
## Ordering Information:



Receptacle Assembly



Receptacle



Receptacle Housing Only



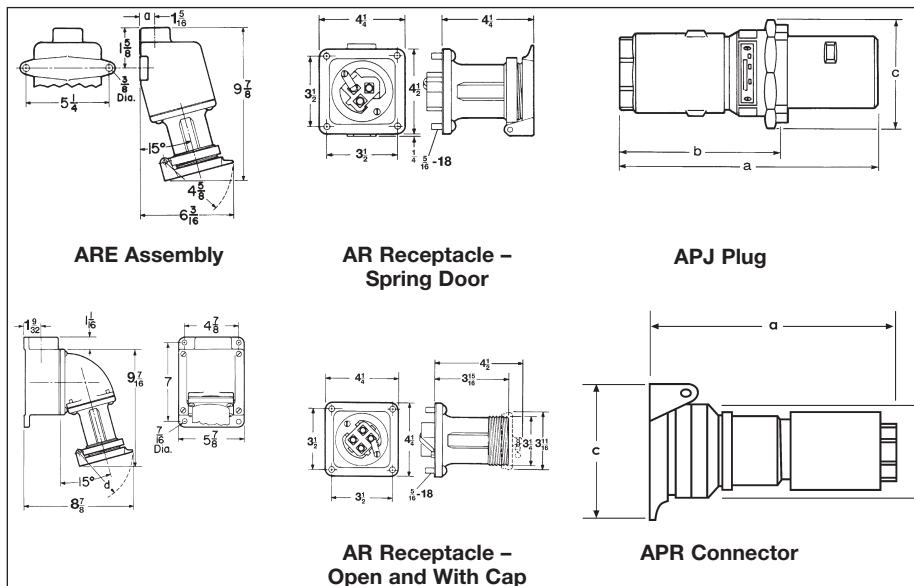
Mating Plug



Mating Connector

Description	With AJ Back Boxes and Angle Adapters			With ARE Back Boxes		Cable Dia.	Cat. #	Cat. #
	Hub Size (In.)	Spring Door Cat. #	Threaded Cap Only Cat. #	Spring Door Cat. #	Spring Door Cat. #			
<b>Style 1</b>								
2-wire, 2-pole } 2-wire, 2-pole }	1 1¼	AREA6213 AREA6214		ARE6213 ARE6214	AR621	AR627	0.50 to 1.15 APJ6275	APR6255
3-wire, 3-pole } 3-wire, 3-pole }	1 1¼	AREA6313 AREA6314		ARE6313 ARE6314	AR631	AR637	0.50 to 1.15 APJ6375	APR6355
4-wire, 4-pole } 4-wire, 4-pole }	1¼ 1½	AREA6414 AREA6415		ARE6414 ARE6415	AR641	AR647	0.50 to 1.15 APJ6475	APR6455
5-wire, 5-pole } 5-wire, 5-pole }	1¼ 1½		AREA6574 AREA6575			AR657	0.50 to 1.15 APJ6575	
<b>Style 2</b>								
2-wire, 3-pole } 2-wire, 3-pole }	1 1¼	AREA6323 AREA6324		ARE6323 ARE6324	AR632	AR638	0.50 to 1.15 APJ6385	APR6365
3-wire, 4-pole } 3-wire, 4-pole }	1¼ 1½	AREA6424 AREA6425		ARE6424 ARE6425	AR642	AR648	0.50 to 1.15 APJ6485	APR6465
4-wire, 5-pole } 4-wire, 5-pole }	1¼ 1½		AREA6584 AREA6585			AR658	0.75 to 1.15 APJ6585	APR6565 APR6567

## Dimensions (In Inches):



Config.	Plug			Connector		
	a	b	c	a	b	c
2P or 3P	8 1/2	5 3/4	3 3/8	6 1/2	3 3/8	2 15/16
4P	8 1/2	5 13/16	3 3/4	8 1/4	3 3/8	2 15/16
5P	9	6 3/16	4 7/16	8 1/4	3 3/8	3 1/4

†For use on systems less than 60 hertz the receptacles, plugs and connectors are for disconnect use only.

# Arktite® Heavy Duty Circuit Breaking Receptacle Assemblies and Housings

NEMA 4 Watertight

1P

60 A, 600 VAC/250 VDC, 50† – 400 hertz

## Plug Closure Caps:

### Applications:

CPK caps for Arktite plugs are used:

- Where portable equipment is on a standby basis and plugs are not in use
- To effectively protect insulation and contacts from excessive moisture, dirt, dust and corrosion
- With 30, 60, 100, 150 and 200 ampere plugs with fastening ring and standard 200 ampere plugs for the clamp door housing



### Ordering Information:

Config.	Cat. #
2P & 3P	CPK32
4P	CPK34

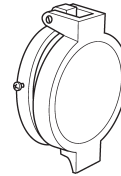
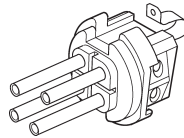
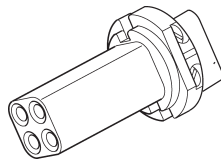
### Standard Materials:

- Copper-free aluminum

### Standard Finishes:

- Natural

### Replacement Parts:



Config.	Receptacle Interior	Plug Interior	Spring Door	Screw Cap
2W 2P	ATP295	ATP290	QE51	QE32
2W 3P	ATP298	ATP293		
3W 3P	ATP296	ATP291		
3W 4P	ATP299	ATP294	QE52	QE34
4W 4P	ATP297	ATP292		
4W 5P	ATP385	ATP387	N/A	AR:11393B
5W 5P	ATP384	ATP386	N/A	

### Replacement Pin & Sleeve Contacts:

Description	Recep	Plug
Available as a kit only. 5 phase contacts & 1 ground contact included.	AR60CONKIT	AP60CONKIT

†For use on systems less than 60 hertz the receptacles, plugs and connectors are for disconnect use only.

1P

## Industrial Heavy Duty Non-hazardous Areas

### Applications:

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 100 ampere rating may be disconnected under load; 150-400 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 de-energized receptacle from an energized plug with usual Arktite safety; no energized contacts are exposed.

### Certifications and Compliances:

- UL Standards: 1203\*; 1682, 1686
- CSA Standard: C22.2 No. 182.1
- CE (LVD) 2006/95/EEC\*\*



1P

\* APJ and NPJ plugs only

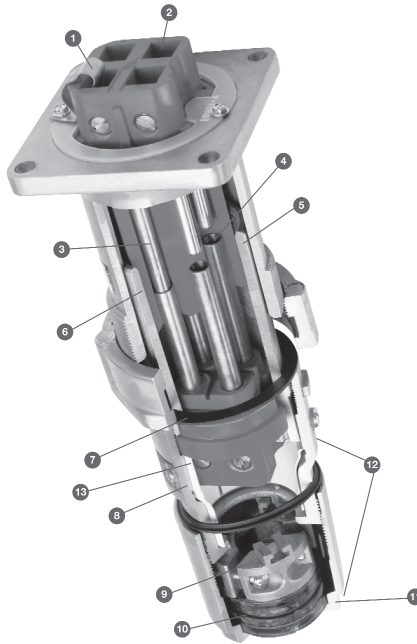
\*\* Excludes 200A and 400A APR Connectors

# Arktite® Heavy Duty Circuit Breaking Plugs and Receptacles

NEMA 4 Watertight

1P

## Industrial Heavy Duty Non-hazardous Areas



### Split Pin Contact Design:

- Provides nearly 360° of contact at every insertion, ensuring protection against heat rise and eliminating arcing on critical surfaces
- Continuous contact over length and circumference of mated pins provides superior safety and long-term performance
- Self-wiping at every insertion to prevent environmental contamination build-up



### The additional features below are called out in the illustration on this page

- 1 The ground contact is bonded to the receptacle housing (Style 2)
- 2 Unimpeded, easy-access phase and ground terminals make wire termination quick and easy
- 3 Grounding contacts that make-first and break-last in the unlikely event of keyway failure
- 4 An arc formed when the plug is being removed is instantly snuffed in the deep confined insulated arcing chamber
- 5 A detent spring forms a parallel grounding path through the metallic plug sleeve and receptacle housing and is the first contact to make and the last to break
- 6 The plug sleeve is keyed to the receptacle to prevent mispolarization
- 7 The gasketing system provides unsurpassed watertight integrity (NEMA 4)
- 8 All aluminum Uni-Shell™ construction provides superior strength in abusive environments
- 9 The Tri-Lock™ cable grip has 3-piece design that equally distributes gripping power around perimeter of cable. Cord jacket does not get pinched, eliminating potential for damage to both internal conductors and external cable jacket. Cable grip is located inside plug housing, eliminating corrosion of vital hardware and making plug maintenance easy.
- 10 The unique Sure-Seal™ cable gland has two gasket sizes which fit entire range of cable diameters, reducing risk of improper assembly. The gasket ratchets into the Tri-lock™ cable grip to prevent plug from turning or loosening in high vibration areas.
- 11 Wrenching surfaces make Arktite plugs quick and easy to assemble
- 12 Smooth and contoured design of plug housing eliminates occurrence of cable grip snagging or breaking off. Tri-Lock™ screws are captive so cable grip cannot come apart during assembly. Prevents critical screws from getting lost during installation.
- 13 Plastic sleeve between insulator body and housing minimizes possibility of electrical shock in event of ground failure. Increases creepage and clearance protection.

## Arktite® Advantage Features:

### Internal Plug Safety Insulator

- Plastic barrier between insulator body and metal housing minimizes risk of energizing handle body due to stray conductor strands
- Increases creepage and clearance protection

### CE Marked

- Offers a borderless solution with no additional inspection or documentation required for approval

### Lockout Plug

- Allows users to comply with OSHA lockout/tagout requirements
- Ensures plug cannot be inserted into receptacle when maintenance is being performed downstream of power supply

### Tri-Lock Cable Grip

- Three-piece design equally distributes grip around perimeter of cable
- Cable jacket does not get pinched, eliminating potential for damage to internal conductors
- Captive screws allow maximum extension of cord grip without risk of loose components

### Sure-Seal Cable Gland

- Two gasket sizes fit entire cable range, reducing risk of improper assembly
- Gasket ratchets into Tri-Lock cable grip to provide environmental protection in high vibration areas



### Plug Housing

- Smooth design eliminates occurrence of cable grip snagging or breaking off
- Houses Tri-Lock cable grip to eliminate corrosion of vital hardware and increase ease of maintenance



### Combination Drive Stainless Steel Hardware

- Increases ease of installation by allowing for more than one option for installation tools
- Stainless steel external hardware eliminates corrosion on critical components and extends product life



### Insulator Assemblies

- Unimpeded, easy access phase and ground terminals make wire termination quick and easy
- Lug screws secured with tape to prevent them from vibrating loose and falling out during shipping



### Combination Slot and Hex Mechanical Lugs\*

- Increases ease of installation by allowing for more than one option for installation tools
- Hex head allows for easy achievement of specified torque value



### Receptacle Cover

- Automatic weatherproof seal every time plug is disengaged
- Field replaceable design allows for new cover to be threaded on quickly and easily



\*60, 100, and 150A offering.

# 1P Arktite® Heavy Duty Circuit Breaking Plugs and Receptacles

NEMA 4 Watertight

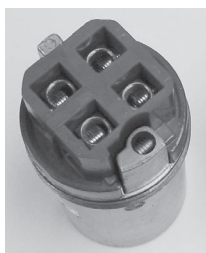
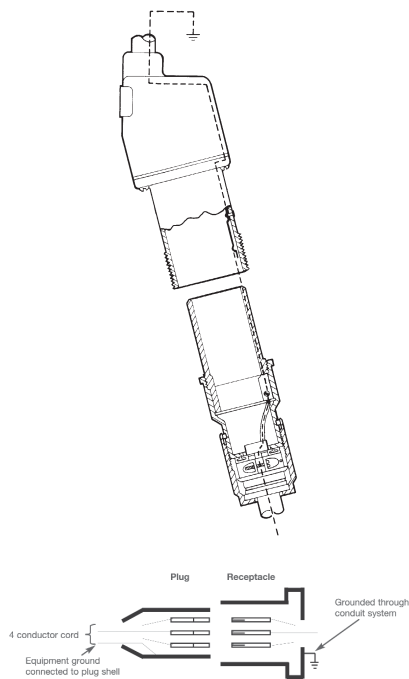
**Industrial Heavy Duty  
Non-hazardous Areas**

## Grounding: Style 1 vs. Style 2

Eaton's Crouse-Hinds Arktite devices utilize two methods, or styles, for completing the grounding circuit in plugs and receptacles. NEC reference 250.138 (A) & (B).

### Style 1 – Metallic

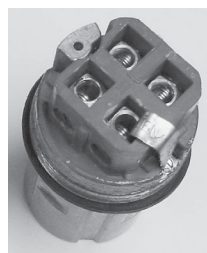
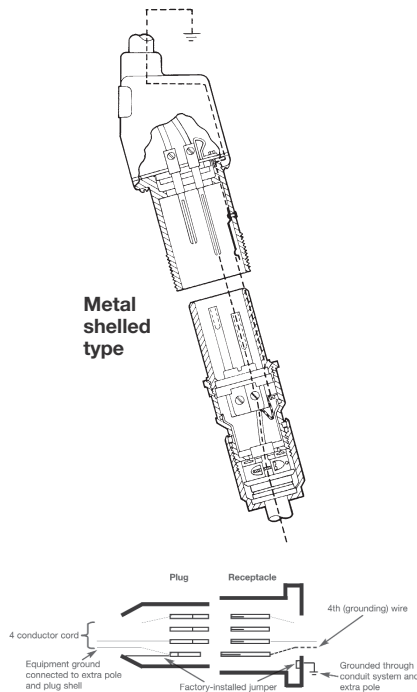
A Style 1 plug is one in which the grounding conductor in the flexible cable is bonded to the plug sleeve by a pressure connector. A Style 1 receptacle is one which is grounded by virtue of the fact that it is an integral part of a grounded conduit system. On insertion, the plug sleeve makes contact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

### Style 2 – Metallic

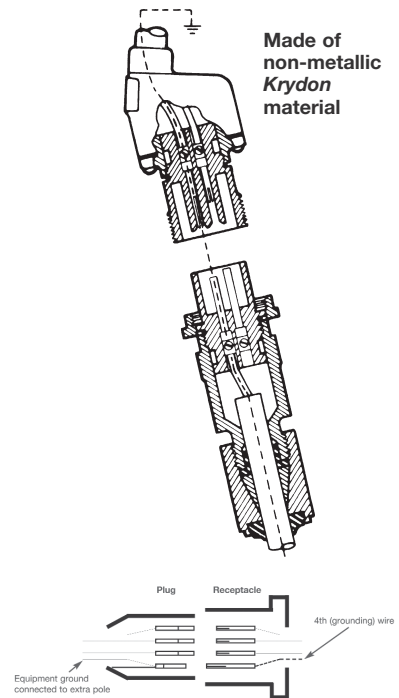
A Style 2 metallic housing plug is one in which the grounding conductor in the flexible cable is bonded to the extra (grounding) pole and metal plug sleeve by a pressure connector. A Style 2 metallic housing receptacle is one in which the extra (grounding) pole is electrically connected to the equipment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



**Style 2**  
Ground conductor  
attaches to contact,  
which is bonded to  
shell.

### Style 2 – Non-metallic

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.



1P

# Arktite® Heavy Duty Circuit Breaking Plugs and Receptacles

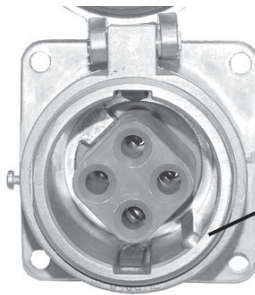
NEMA 4 Watertight

1P

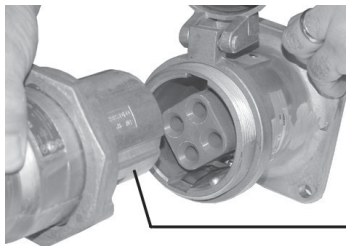
## Industrial Heavy Duty Non-hazardous Areas

### Standard Materials:

- Metallic receptacle housings, plug and cord connector bodies – high impact strength copper-free aluminum
- Non-metallic receptacles, plugs and cord connectors – *Krydon*® fiberglass-reinforced polyester material
- Back boxes: 20, 30, 60, 100, 150 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 20, 30, 60, 100 ampere – leaded red brass; crimp/solder 150, 200, 400 ampere – tellurium copper



Arktite receptacles have a cast raised rib located inside the receptacle sleeve. The location of the rib is in a specific relationship to the receptacle insulator that houses the contacts.



The mating plug has a cast groove located on the outside of the plug sleeve. This groove lines up with the raised rib.

### Standard Finishes:

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

### Accessories:

- Accessories include a variety of angle adapters, panel adapters and back boxes for *Arktite* receptacles, see pages 1332–1335.
- Included throughout 1P are wire mesh cable grips and protective caps for *Arktite* plugs.

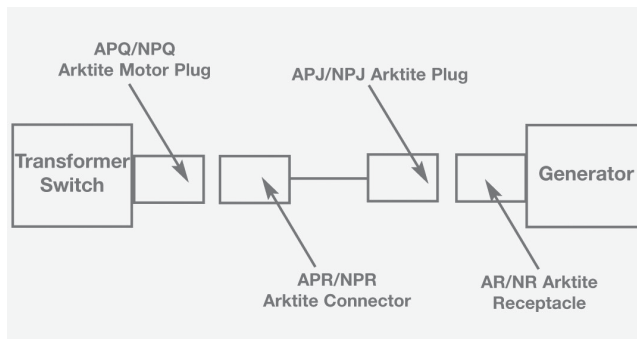
### Options:

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

- | Description   | Suffix |
|---|--------|
| • Reversed contacts. Receptacle assembled with plug interior (exposed contacts), plug assembled with receptacle interior (recessed contacts). For applications where plug is energized to feed normally de-energized receptacle. Available on 30 through 400 ampere units... <b>S22</b> |        |
| • 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 and/or frequencies. Prevents insertion of a plug in a receptacle with different electrical rating.    |        |

Available on 20 through 400 ampere units as follows:

- Receptacle interior rotated 22½° to right and plug changed to match (see photo to right).....**S4**
- Corro-free™ epoxy powder finish for added corrosion resistance.....**S752**



Typical Installation

§150A, 200A and 400A rated units are for service disconnect use only.



# 1P Arktime® Heavy Duty Circuit Breaking Plugs and Receptacles

NEMA 4 Watertight

## Industrial Heavy Duty Non-hazardous Areas

### Arktime Horsepower Ratings Locked-Rotor Interrupting

Ampere Rating Plug and Receptacle	Motor Horsepower†			
	120 Volts	240 Volts	480 Volts	600 Volts
<b>Single-phase Electrical System</b>				
30	2	3	7.5	10
60	5	10	25	20
100	10	20		
200	15	40		
<b>Three-phase Electrical System</b>				
30	3	5	10	10
60	10	20	40	50
100	15	30	40	25
200	30	60	25	15

### Maximum Horsepower for Plug and Receptacle Combinations by Input Voltage\*

Following values are typical horsepower ratings based on NEC Article 430 tables.

HP Ratings are based on the largest conductor size for each plug and receptacle combination per the Wire Size table below.

Ampere Rating Plug and Receptacle	Motor Horsepower‡		
	240 Volts	480 Volts	600 Volts
30	15	30	40
60	20	40	50
100	30	60	75
150	40	75	100
200	60	125	150

### Wire Sizes:

The table below lists the diameter of the wire recess in *Arktime* plug and receptacle contacts so that maximum size of bare conductor can be figured. Range of wire sizes shown in table is intended only as a guide. Depending on type of wire used (building wire, flexible or extra flexible cable) and its construction (number and size of strands), bare copper diameters vary widely.

### Diameter of Wire Recess in Plug and Receptacle Contacts

Ampere Rating	Contact Type	Diameter of Recess	Wire Size‡	
			Building	Extra Flex
20	Binding Screw	N/A	#14-#12	#14-#12
30 (2, 3, & 4-pole)	Pressure	.281	#10-#6	#10-#8
30 (2, 3, & 4-pole)	Crimp/Solder	.180	#10-#8**	#10-#8
30 (5-pole)	Solder	.188	#12-#6	#12-#8
60 (2, 3, 4 & 5-pole)	Pressure	.312	#6-#4	#8-#4
60 (3 & 4-pole)	Crimp/Solder	.277	#6-#4**	#8-#4
100 (2, 3 & 4-pole)	Pressure	.390	#4-#1	#4-#2
100 (3 & 4-pole)	Crimp/Solder	.390	#2-#1**	#2-#2
150 (4-pole)	Pressure	.390	#2-2/0	#2-1/0
200 (3 & 4-pole)	Pressure	.687	2/0-4/0	2/0-3/0
200 (Std. 3 & 4-pole)	Crimp/Solder	.560	#1-4/0	#1-3/0
200 (Lg. 3 & 4-pole)	Crimp/Solder	.750	4/0-250MCM	3/0-250MCM
400 (Std. 3 & 4-pole)	Crimp/Solder	.840	250-500MCM	250-400MCM
400 (Lg. 3 & 4-pole)	Crimp/Solder	1.25	500-1000MCM	400-750MCM

‡150A, 200A and 400A rated units are for service disconnect use only.

† Horsepower ratings are based on Eaton's Crouse-Hinds testing in which locked-rotor currents were interrupted by withdrawing the plug from the receptacle. It is highly recommended, however, that such use be limited to emergency conditions only, and that a horsepower rated switch be used for motor disconnect.

\* This guide is for reference only. Consult your local electrical codes before installation.

‡ Eaton's Crouse-Hinds does not recommend our plug and receptacle be used for disconnect under load.

\*\*Smaller sizes may be used with well reducers - information available upon request.

‡Do not use wire size smaller than minimum size recommended.

1P

# 1P Arktite® Heavy Duty Circuit Breaking Receptacle Assemblies and Housings

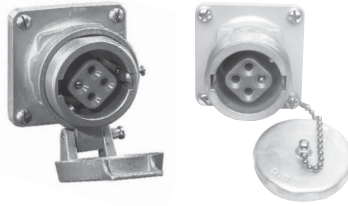
NEMA 4 Watertight

100 A, 600 VAC/250 VDC, 50† – 400 hertz  
150 A, 600 VAC/250 VDC, 50† – 400 hertz

## Ordering Information:



Receptacle Assembly



Receptacle

Receptacle Housings Only



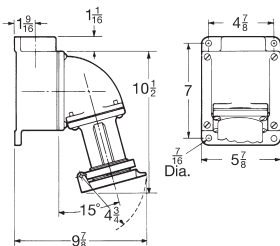
Mating Plug



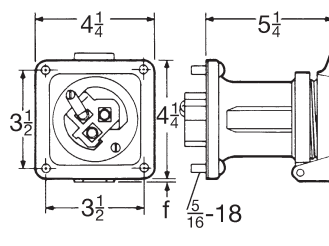
Mating Connector

Description	Hub Size (In.)	Spring Door Cat. #	Receptacle Housings Only		Cable Dia.	Cat. #	Cat. #
			Spring Door Cat. #	Threaded Cap Only Cat. #			
<b>100A - Style 1</b>							
2-wire, } 2-pole }	1¼ 1½	AREA10214 AREA10215	AR1021	AR1027	0.875 to 1.70	APJ10277	APR10257
3-wire, } 3-pole }	1¼ 1½	AREA10314 AREA10315	AR1031	AR1037	0.875 to 1.70	APJ10377	APR10357
4-wire, } 4-pole }	1½ 2	AREA10415 AREA10416	AR1041	AR1047	0.875 to 1.70	APJ10477	APR10457
<b>100 A - Style 2</b>							
2-wire, } 3-pole }	1¼ 1½	AREA10324 AREA10325	AR1032	AR1038	0.875 to 1.70	APJ10387	APR10367
3-wire, } 4-pole }	1½ 2	AREA10425 AREA10426	AR1042	AR1048	0.875 to 1.70	APJ10487	APR10467
<b>150 A - Style 2 *</b>							
3-wire, } 4-pole }			AR1542	AR1548	0.875 to 1.70	APJ15487	

## Dimensions (In Inches):

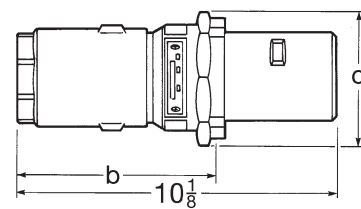


ARE Assembly



AR Receptacle - Spring Door

No. Poles	f
2 or 3	9/32
4	13/32

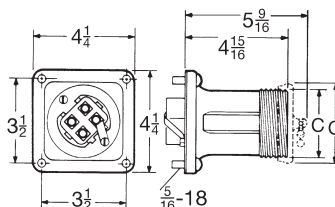


APJ Plug

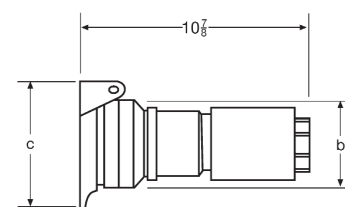
No. Poles	b	c
3	6 9/16	3 3/4
4	6 5/8	4 1/8

No. Poles	Housing	c
2 or 3	open	3 3/16
4	open	3 7/16
2 or 3	with cap	3 11/16
4	with cap	3 7/8

No. Poles	b	c
3	3 3/8	3 3/16
4	3 1/2	3 7/16



AR Receptacle - Open and With Cap



APR Connector

† For use on systems less than 60 hertz the receptacles, plugs and connectors are for disconnect use only.  
\* For 150A - Consult factory for additional options and configurations. Consult factory for certifications information.

# Arktite® Heavy Duty Circuit Breaking Receptacle Assemblies and Housings

NEMA 4 Watertight

1P

100 A, 600 VAC/250 VDC, 50† – 400 hertz  
 150 A, 600 VAC/250 VDC, 50† – 400 hertz

## Plug Closure Caps:

### Applications:

CPK caps for Arktite plugs are used:

- Where portable equipment is on a standby basis and plugs are not in use
- To effectively protect insulation and contacts from excessive moisture, dirt, dust and corrosion
- With 30, 60, 100, 150 and 200 ampere plugs with fastening ring and standard 200 ampere plugs for the clamp door housing



### Ordering Information

Config.	Cat. #
2P & 3P	CPK62
4P	CPK64

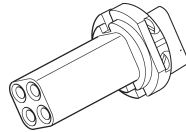
### Standard Materials:

- Copper-free aluminum

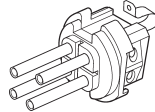
### Standard Finishes:

- Natural

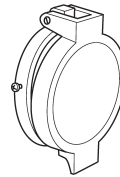
### Replacement Parts:



Receptacle Interior



Plug Interior



Spring Door



Screw Cap

Config.	Receptacle Interior	Plug Interior	Spring Door	Screw Cap
2W 2P	ATP315	ATP310	QE53	QE62
2W 3P	ATP318	ATP313		
3W 3P	ATP316	ATP311		
3W 4P	ATP319	ATP314	QE54	QE64
4W 4P	ATP317	ATP312		
4W 5P	N/A	N/A	N/A	N/A
5W 5P	N/A	N/A		

### Replacement Pin & Sleeve Contacts:

Description	Recep	Plug
Available as a kit only. 5 phase contacts & 1 ground contact included.	AR100CONKIT	AP100CONKIT

† For use on systems less than 60 hertz the receptacles, plugs and connectors are for disconnect use only.

## Industrial Heavy Duty Non-hazardous Areas

### Applications:

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 100 ampere rating may be disconnected under load; 150-400 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 de-energized receptacle from an energized plug with usual Arktite safety; no energized contacts are exposed.

### Certifications and Compliances:

- UL Standards: 1203\*; 1682, 1686
- CSA Standard: C22.2 No. 182.1
- CE (LVD) 2006/95/EEC\*\*



1P

\* APJ and NPJ plugs only

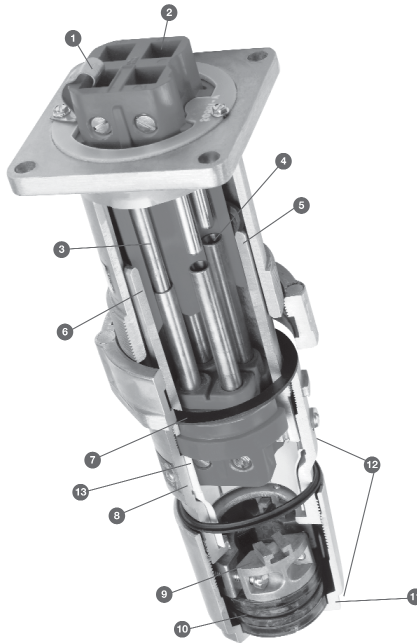
\*\* Excludes 200A and 400A APR Connectors

# Arktite® Heavy Duty Circuit Breaking Plugs and Receptacles

NEMA 4 Watertight

1P

## Industrial Heavy Duty Non-hazardous Areas



### Split Pin Contact Design:

- Provides nearly 360° of contact at every insertion, ensuring protection against heat rise and eliminating arcing on critical surfaces
- Continuous contact over length and circumference of mated pins provides superior safety and long-term performance
- Self-wiping at every insertion to prevent environmental contamination build-up



### The additional features below are called out in the illustration on this page

- 1 The ground contact is bonded to the receptacle housing (Style 2)
- 2 Unimpeded, easy-access phase and ground terminals make wire termination quick and easy
- 3 Grounding contacts that make-first and break-last in the unlikely event of keyway failure
- 4 An arc formed when the plug is being removed is instantly snuffed in the deep confined insulated arcing chamber
- 5 A detent spring forms a parallel grounding path through the metallic plug sleeve and receptacle housing and is the first contact to make and the last to break
- 6 The plug sleeve is keyed to the receptacle to prevent mispolarization
- 7 The gasketing system provides unsurpassed watertight integrity (NEMA 4)
- 8 All aluminum Uni-Shell™ construction provides superior strength in abusive environments
- 9 The Tri-Lock™ cable grip has 3-piece design that equally distributes gripping power around perimeter of cable. Cord jacket does not get pinched, eliminating potential for damage to both internal conductors and external cable jacket. Cable grip is located inside plug housing, eliminating corrosion of vital hardware and making plug maintenance easy.
- 10 The unique Sure-Seal™ cable gland has two gasket sizes which fit entire range of cable diameters, reducing risk of improper assembly. The gasket ratchets into the Tri-lock™ cable grip to prevent plug from turning or loosening in high vibration areas.
- 11 Wrenching surfaces make Arktite plugs quick and easy to assemble
- 12 Smooth and contoured design of plug housing eliminates occurrence of cable grip snagging or breaking off. Tri-Lock™ screws are captive so cable grip cannot come apart during assembly. Prevents critical screws from getting lost during installation.
- 13 Plastic sleeve between insulator body and housing minimizes possibility of electrical shock in event of ground failure. Increases creepage and clearance protection.

## Arktite® Advantage Features:

### Internal Plug Safety Insulator

- Plastic barrier between insulator body and metal housing minimizes risk of energizing handle body due to stray conductor strands
- Increases creepage and clearance protection

### CE Marked

- Offers a borderless solution with no additional inspection or documentation required for approval

### Lockout Plug

- Allows users to comply with OSHA lockout/tagout requirements
- Ensures plug cannot be inserted into receptacle when maintenance is being performed downstream of power supply

### Tri-Lock Cable Grip

- Three-piece design equally distributes grip around perimeter of cable
- Cable jacket does not get pinched, eliminating potential for damage to internal conductors
- Captive screws allow maximum extension of cord grip without risk of loose components

### Sure-Seal Cable Gland

- Two gasket sizes fit entire cable range, reducing risk of improper assembly
- Gasket ratches into Tri-Lock cable grip to provide environmental protection in high vibration areas



### Plug Housing

- Smooth design eliminates occurrence of cable grip snagging or breaking off
- Houses Tri-Lock cable grip to eliminate corrosion of vital hardware and increase ease of maintenance



### Combination Drive Stainless Steel Hardware

- Increases ease of installation by allowing for more than one option for installation tools
- Stainless steel external hardware eliminates corrosion on critical components and extends product life



### Insulator Assemblies

- Unimpeded, easy access phase and ground terminals make wire termination quick and easy
- Lug screws secured with tape to prevent them from vibrating loose and falling out during shipping



### Combination Slot and Hex Mechanical Lugs\*

- Increases ease of installation by allowing for more than one option for installation tools
- Hex head allows for easy achievement of specified torque value



### Receptacle Cover

- Automatic weatherproof seal every time plug is disengaged
- Field replaceable design allows for new cover to be threaded on quickly and easily



\*60, 100, and 150A offering.

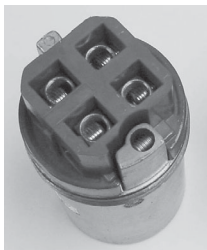
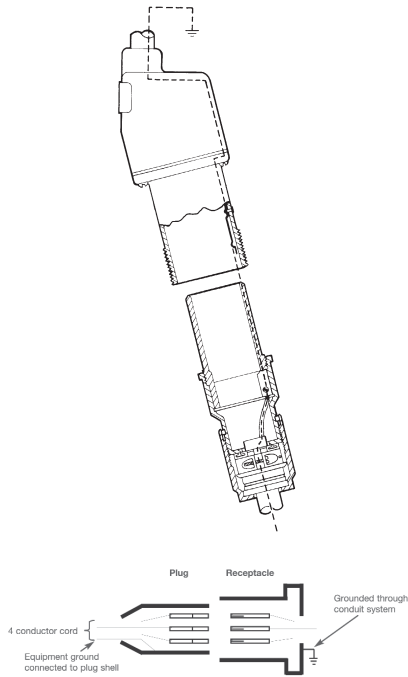
## Industrial Heavy Duty Non-hazardous Areas

### Grounding: Style 1 vs. Style 2

Eaton's Crouse-Hinds Arktite devices utilize two methods, or styles, for completing the grounding circuit in plugs and receptacles. NEC reference 250.138 (A) & (B).

#### Style 1 – Metallic

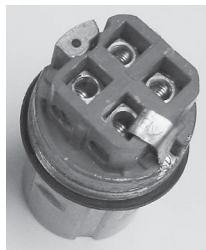
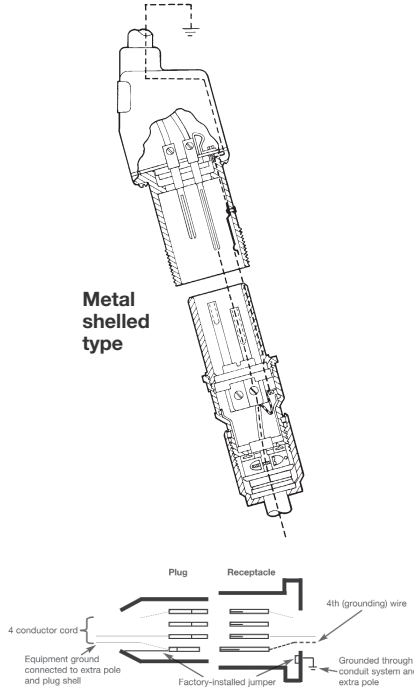
A Style 1 plug is one in which the grounding conductor in the flexible cable is bonded to the plug sleeve by a pressure connector. A Style 1 receptacle is one which is grounded by virtue of the fact that it is an integral part of a grounded conduit system. On insertion, the plug sleeve makes contact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

#### Style 2 – Metallic

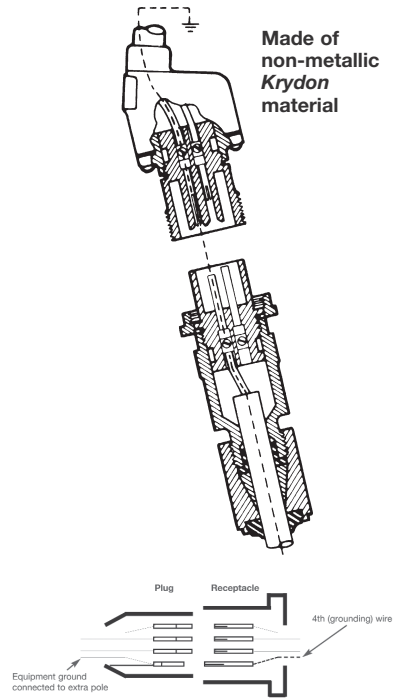
A Style 2 metallic housing plug is one in which the grounding conductor in the flexible cable is bonded to the extra (grounding) pole and metal plug sleeve by a pressure connector. A Style 2 metallic housing receptacle is one in which the extra (grounding) pole is electrically connected to the equipment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



**Style 2**  
Ground conductor attaches to contact, which is bonded to shell.

#### Style 2 – Non-metallic

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.



Made of non-metallic Krydon material

1P

# Arktite® Heavy Duty Circuit Breaking Plugs and Receptacles

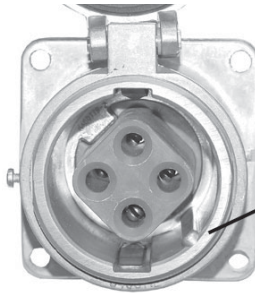
NEMA 4 Watertight

1P

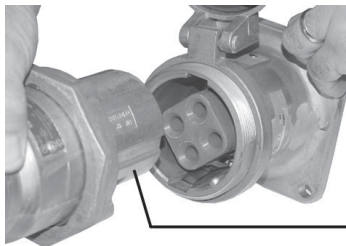
## Industrial Heavy Duty Non-hazardous Areas

### Standard Materials:

- Metallic receptacle housings, plug and cord connector bodies – high impact strength copper-free aluminum
- Non-metallic receptacles, plugs and cord connectors – *Krydon*® fiberglass-reinforced polyester material
- Back boxes: 20, 30, 60, 100, 150 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 20, 30, 60, 100 ampere – leaded red brass; crimp/solder 150, 200, 400 ampere – tellurium copper



Arktite receptacles have a cast raised rib located inside the receptacle sleeve. The location of the rib is in a specific relationship to the receptacle insulator that houses the contacts.



The mating plug has a cast groove located on the outside of the plug sleeve. This groove lines up with the raised rib.

### Standard Finishes:

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

### Accessories:

- Accessories include a variety of angle adapters, panel adapters and back boxes for *Arktite* receptacles, see pages 1332–1335.
- Included throughout 1P are wire mesh cable grips and protective caps for *Arktite* plugs.

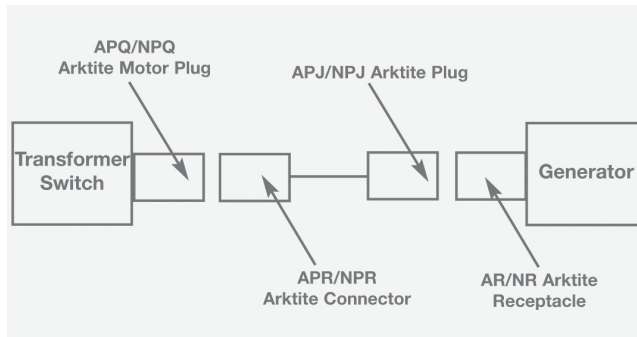
### Options:

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

- | Description   | Suffix |
|---|--------|
| • Reversed contacts. Receptacle assembled with plug interior (exposed contacts), plug assembled with receptacle interior (recessed contacts). For applications where plug is energized to feed normally de-energized receptacle. Available on 30 through 400 ampere units... <b>S22</b> |        |
| • 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 and/or frequencies. Prevents insertion of a plug in a receptacle with different electrical rating.    |        |

Available on 20 through 400 ampere units as follows:

- Receptacle interior rotated 22½° to right and plug changed to match (see photo to right).....**S4**
- Corro-free™ epoxy powder finish for added corrosion resistance.....**S752**



Typical Installation

§150A, 200A and 400A rated units are for service disconnect use only.

# 1P Arktime® Heavy Duty Circuit Breaking Plugs and Receptacles

NEMA 4 Watertight

## Industrial Heavy Duty Non-hazardous Areas

### Arktime Horsepower Ratings Locked-Rotor Interrupting

Ampere Rating Plug and Receptacle	Motor Horsepower†			
	120 Volts	240 Volts	480 Volts	600 Volts
<b>Single-phase Electrical System</b>				
30	2	3	7.5	10
60	5	10	25	20
100	10	20		
200	15	40		
<b>Three-phase Electrical System</b>				
30	3	5	10	10
60	10	20	40	50
100	15	30	40	25
200	30	60	25	15

### Maximum Horsepower for Plug and Receptacle Combinations by Input Voltage\*

Following values are typical horsepower ratings based on NEC Article 430 tables.

HP Ratings are based on the largest conductor size for each plug and receptacle combination per the Wire Size table below.

Ampere Rating Plug and Receptacle	Motor Horsepower‡		
	240 Volts	480 Volts	600 Volts
30	15	30	40
60	20	40	50
100	30	60	75
150	40	75	100
200	60	125	150

### Wire Sizes:

The table below lists the diameter of the wire recess in *Arktime* plug and receptacle contacts so that maximum size of bare conductor can be figured. Range of wire sizes shown in table is intended only as a guide. Depending on type of wire used (building wire, flexible or extra flexible cable) and its construction (number and size of strands), bare copper diameters vary widely.

### Diameter of Wire Recess in Plug and Receptacle Contacts

Ampere Rating	Contact Type	Diameter of Recess	Wire Size‡	
			Building	Extra Flex
20	Binding Screw	N/A	#14-#12	#14-#12
30 (2, 3, & 4-pole)	Pressure	.281	#10-#6	#10-#8
30 (2, 3, & 4-pole)	Crimp/Solder	.180	#10-#8**	#10-#8
30 (5-pole)	Solder	.188	#12-#6	#12-#8
60 (2, 3, 4 & 5-pole)	Pressure	.312	#6-#4	#8-#4
60 (3 & 4-pole)	Crimp/Solder	.277	#6-#4**	#8-#4
100 (2, 3 & 4-pole)	Pressure	.390	#4-#1	#4-#2
100 (3 & 4-pole)	Crimp/Solder	.390	#2-#1**	#2-#2
150 (4-pole)	Pressure	.390	#2-2/0	#2-1/0
200 (3 & 4-pole)	Pressure	.687	2/0-4/0	2/0-3/0
200 (Std. 3 & 4-pole)	Crimp/Solder	.560	#1-4/0	#1-3/0
200 (Lg. 3 & 4-pole)	Crimp/Solder	.750	4/0-250MCM	3/0-250MCM
400 (Std. 3 & 4-pole)	Crimp/Solder	.840	250-500MCM	250-400MCM
400 (Lg. 3 & 4-pole)	Crimp/Solder	1.25	500-1000MCM	400-750MCM

‡150A, 200A and 400A rated units are for service disconnect use only.

† Horsepower ratings are based on Eaton's Crouse-Hinds testing in which locked-rotor currents were interrupted by withdrawing the plug from the receptacle. It is highly recommended, however, that such use be limited to emergency conditions only, and that a horsepower rated switch be used for motor disconnect.

\* This guide is for reference only. Consult your local electrical codes before installation.

‡ Eaton's Crouse-Hinds does not recommend our plug and receptacle be used for disconnect under load.

\*\*Smaller sizes may be used with well reducers - information available upon request.

‡Do not use wire size smaller than minimum size recommended.

1P



# 1P Arktite® Heavy Duty Circuit Breaking Receptacle Assemblies and Housings

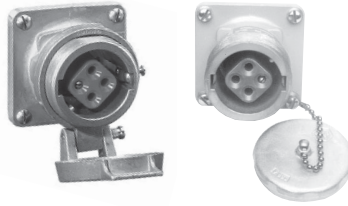
NEMA 4 Watertight

100 A, 600 VAC/250 VDC, 50† – 400 hertz  
150 A, 600 VAC/250 VDC, 50† – 400 hertz

## Ordering Information:



Receptacle Assembly



Receptacle

Receptacle Housings Only



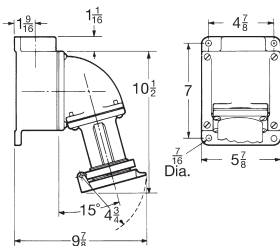
Mating Plug



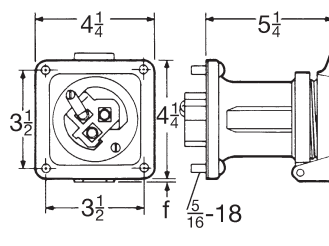
Mating Connector

Description	Hub Size (In.)	Spring Door Cat. #	Receptacle Housings Only		Cable Dia.	Cat. #	Cat. #
			Spring Door Cat. #	Threaded Cap Only Cat. #			
<b>100A - Style 1</b>							
2-wire, } 2-pole }	1¼	AREA10214	AR1021	AR1027	0.875 to 1.70	APJ10277	APR10257
	1½	AREA10215					
3-wire, } 3-pole }	1¼	AREA10314	AR1031	AR1037	0.875 to 1.70	APJ10377	APR10357
	1½	AREA10315					
4-wire, } 4-pole }	1½	AREA10415	AR1041	AR1047	0.875 to 1.70	APJ10477	APR10457
	2	AREA10416					
<b>100 A - Style 2</b>							
2-wire, } 3-pole }	1¼	AREA10324	AR1032	AR1038	0.875 to 1.70	APJ10387	APR10367
	1½	AREA10325					
3-wire, } 4-pole }	1½	AREA10425	AR1042	AR1048	0.875 to 1.70	APJ10487	APR10467
	2	AREA10426					
<b>150 A - Style 2 *</b>							
3-wire, } 4-pole }			AR1542	AR1548	0.875 to 1.70	APJ15487	

## Dimensions (In Inches):

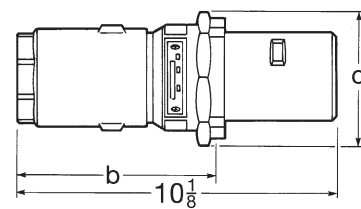


ARE Assembly



AR Receptacle - Spring Door

No. Poles	f
2 or 3	9/32
4	13/32

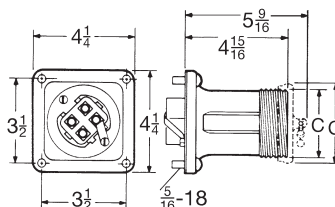


APJ Plug

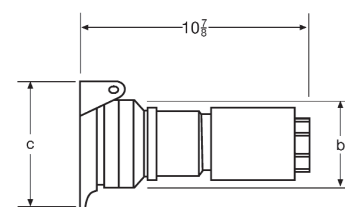
No. Poles	b	c
3	6 9/16	3 3/4
4	6 5/8	4 1/8

No. Poles	Housing	c
2 or 3	open	3 3/16
4	open	3 7/16
2 or 3	with cap	3 11/16
4	with cap	3 7/8

No. Poles	b	c
3	3 3/8	3 3/16
4	3 1/2	3 7/16



AR Receptacle - Open and With Cap



APR Connector

† For use on systems less than 60 hertz the receptacles, plugs and connectors are for disconnect use only.

\* For 150A - Consult factory for additional options and configurations. Consult factory for certifications information.

**Crouse-Hinds**  
by **E.T.M.**

# Arktite® Heavy Duty Circuit Breaking Receptacle Assemblies and Housings

NEMA 4 Watertight

1P

100 A, 600 VAC/250 VDC, 50† – 400 hertz  
 150 A, 600 VAC/250 VDC, 50† – 400 hertz

## Plug Closure Caps:

### Applications:

CPK caps for Arktite plugs are used:

- Where portable equipment is on a standby basis and plugs are not in use
- To effectively protect insulation and contacts from excessive moisture, dirt, dust and corrosion
- With 30, 60, 100, 150 and 200 ampere plugs with fastening ring and standard 200 ampere plugs for the clamp door housing



### Ordering Information

Config.	Cat. #
2P & 3P	CPK62
4P	CPK64

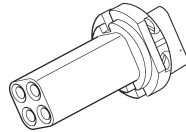
### Standard Materials:

- Copper-free aluminum

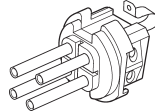
### Standard Finishes:

- Natural

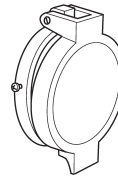
### Replacement Parts:



Receptacle Interior



Plug Interior



Spring Door



Screw Cap

Config.	Receptacle Interior	Plug Interior	Spring Door	Screw Cap
2W 2P	ATP315	ATP310	QE53	QE62
2W 3P	ATP318	ATP313		
3W 3P	ATP316	ATP311		
3W 4P	ATP319	ATP314	QE54	QE64
4W 4P	ATP317	ATP312		
4W 5P	N/A	N/A	N/A	N/A
5W 5P	N/A	N/A		

### Replacement Pin & Sleeve Contacts:

Description	Recep	Plug
Available as a kit only. 5 phase contacts & 1 ground contact included.	AR100CONKIT	AP100CONKIT

† For use on systems less than 60 hertz the receptacles, plugs and connectors are for disconnect use only.

## Industrial Heavy Duty Non-hazardous Areas

### Applications:

*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 100 ampere rating may be disconnected under load; 150-400 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 de-energized receptacle from an energized plug with usual *Arktite* safety; no energized contacts are exposed.

### Certifications and Compliances:

- UL Standards: 1203\*; 1682, 1686
- CSA Standard: C22.2 No. 182.1
- CE (LVD) 2006/95/EEC\*\*



1P

\* APJ and NPJ plugs only

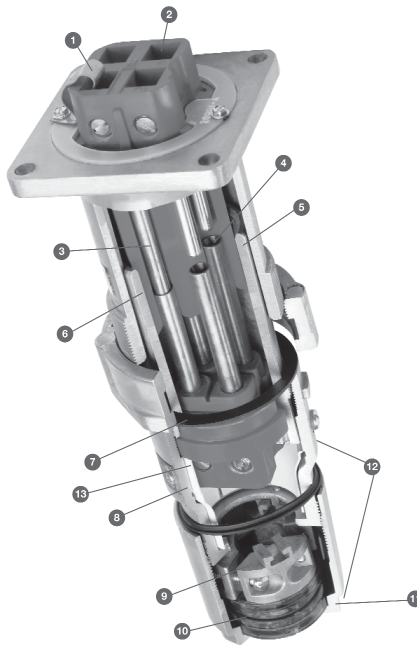
\*\* Excludes 200A and 400A APR Connectors

# Arktite® Heavy Duty Circuit Breaking Plugs and Receptacles

NEMA 4 Watertight

1P

## Industrial Heavy Duty Non-hazardous Areas



### Split Pin Contact Design:

- Provides nearly 360° of contact at every insertion, ensuring protection against heat rise and eliminating arcing on critical surfaces
- Continuous contact over length and circumference of mated pins provides superior safety and long-term performance
- Self-wiping at every insertion to prevent environmental contamination build-up



### The additional features below are called out in the illustration on this page

- 1 The ground contact is bonded to the receptacle housing (Style 2)
- 2 Unimpeded, easy-access phase and ground terminals make wire termination quick and easy
- 3 Grounding contacts that make-first and break-last in the unlikely event of keyway failure
- 4 An arc formed when the plug is being removed is instantly snuffed in the deep confined insulated arcing chamber
- 5 A detent spring forms a parallel grounding path through the metallic plug sleeve and receptacle housing and is the first contact to make and the last to break
- 6 The plug sleeve is keyed to the receptacle to prevent mispolarization
- 7 The gasketing system provides unsurpassed watertight integrity (NEMA 4)
- 8 All aluminum Uni-Shell™ construction provides superior strength in abusive environments
- 9 The Tri-Lock™ cable grip has 3-piece design that equally distributes gripping power around perimeter of cable. Cord jacket does not get pinched, eliminating potential for damage to both internal conductors and external cable jacket. Cable grip is located inside plug housing, eliminating corrosion of vital hardware and making plug maintenance easy.
- 10 The unique Sure-Seal™ cable gland has two gasket sizes which fit entire range of cable diameters, reducing risk of improper assembly. The gasket ratchets into the Tri-lock™ cable grip to prevent plug from turning or loosening in high vibration areas.
- 11 Wrenching surfaces make Arktite plugs quick and easy to assemble
- 12 Smooth and contoured design of plug housing eliminates occurrence of cable grip snagging or breaking off. Tri-Lock™ screws are captive so cable grip cannot come apart during assembly. Prevents critical screws from getting lost during installation.
- 13 Plastic sleeve between insulator body and housing minimizes possibility of electrical shock in event of ground failure. Increases creepage and clearance protection.

## Arktite® Advantage Features:

### Internal Plug Safety Insulator

- Plastic barrier between insulator body and metal housing minimizes risk of energizing handle body due to stray conductor strands
- Increases creepage and clearance protection

### CE Marked

- Offers a borderless solution with no additional inspection or documentation required for approval

### Lockout Plug

- Allows users to comply with OSHA lockout/tagout requirements
- Ensures plug cannot be inserted into receptacle when maintenance is being performed downstream of power supply

### Tri-Lock Cable Grip

- Three-piece design equally distributes grip around perimeter of cable
- Cable jacket does not get pinched, eliminating potential for damage to internal conductors
- Captive screws allow maximum extension of cord grip without risk of loose components

### Sure-Seal Cable Gland

- Two gasket sizes fit entire cable range, reducing risk of improper assembly
- Gasket ratchets into Tri-Lock cable grip to provide environmental protection in high vibration areas



### Plug Housing

- Smooth design eliminates occurrence of cable grip snagging or breaking off
- Houses Tri-Lock cable grip to eliminate corrosion of vital hardware and increase ease of maintenance



### Combination Drive Stainless Steel Hardware

- Increases ease of installation by allowing for more than one option for installation tools
- Stainless steel external hardware eliminates corrosion on critical components and extends product life



### Insulator Assemblies

- Unimpeded, easy access phase and ground terminals make wire termination quick and easy
- Lug screws secured with tape to prevent them from vibrating loose and falling out during shipping



### Combination Slot and Hex Mechanical Lugs\*

- Increases ease of installation by allowing for more than one option for installation tools
- Hex head allows for easy achievement of specified torque value



### Receptacle Cover

- Automatic weatherproof seal every time plug is disengaged
- Field replaceable design allows for new cover to be threaded on quickly and easily



\*60, 100, and 150A offering.

# 1P Arktite® Heavy Duty Circuit Breaking Plugs and Receptacles

NEMA 4 Watertight

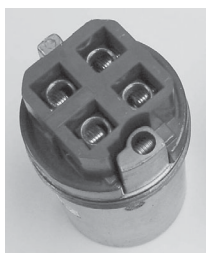
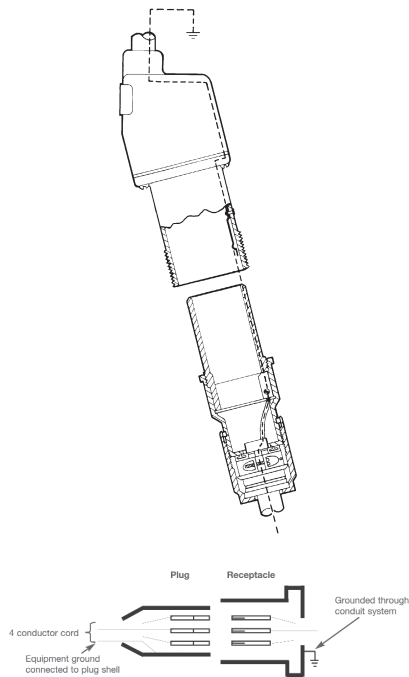
**Industrial Heavy Duty  
Non-hazardous Areas**

## Grounding: Style 1 vs. Style 2

Eaton's Crouse-Hinds Arktite devices utilize two methods, or styles, for completing the grounding circuit in plugs and receptacles. NEC reference 250.138 (A) & (B).

### Style 1 – Metallic

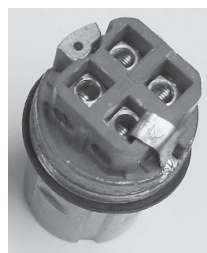
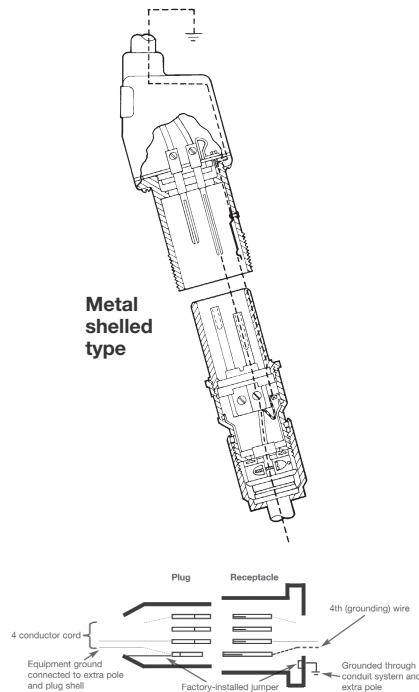
A Style 1 plug is one in which the grounding conductor in the flexible cable is bonded to the plug sleeve by a pressure connector. A Style 1 receptacle is one which is grounded by virtue of the fact that it is an integral part of a grounded conduit system. On insertion, the plug sleeve makes contact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

### Style 2 – Metallic

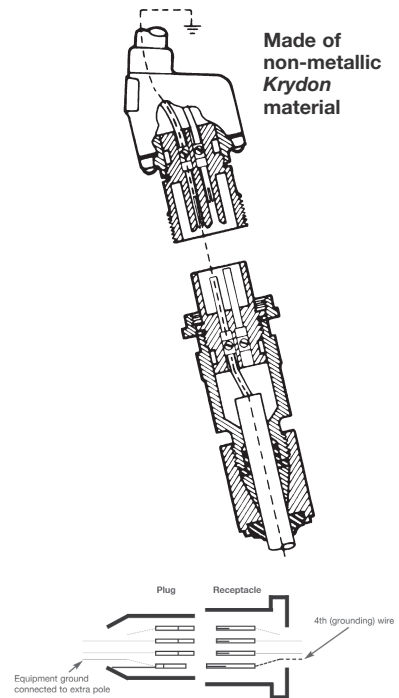
A Style 2 metallic housing plug is one in which the grounding conductor in the flexible cable is bonded to the extra (grounding) pole and metal plug sleeve by a pressure connector. A Style 2 metallic housing receptacle is one in which the extra (grounding) pole is electrically connected to the equipment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



**Style 2**  
Ground conductor attaches to contact, which is bonded to shell.

### Style 2 – Non-metallic

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.



1P

# Arktite® Heavy Duty Circuit Breaking Plugs and Receptacles

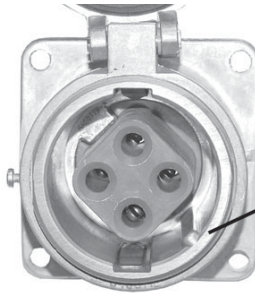
NEMA 4 Watertight

1P

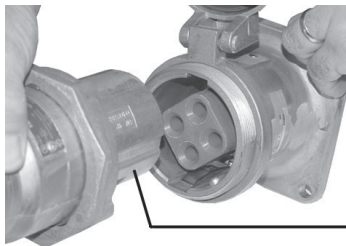
## Industrial Heavy Duty Non-hazardous Areas

### Standard Materials:

- Metallic receptacle housings, plug and cord connector bodies – high impact strength copper-free aluminum
- Non-metallic receptacles, plugs and cord connectors – *Krydon*® fiberglass-reinforced polyester material
- Back boxes: 20, 30, 60, 100, 150 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 20, 30, 60, 100 ampere – leaded red brass; crimp/solder 150, 200, 400 ampere – tellurium copper



Arktite receptacles have a cast raised rib located inside the receptacle sleeve. The location of the rib is in a specific relationship to the receptacle insulator that houses the contacts.



The mating plug has a cast groove located on the outside of the plug sleeve. This groove lines up with the raised rib.

### Standard Finishes:

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

### Accessories:

- Accessories include a variety of angle adapters, panel adapters and back boxes for *Arktite* receptacles, see pages 1332–1335.
- Included throughout 1P are wire mesh cable grips and protective caps for *Arktite* plugs.

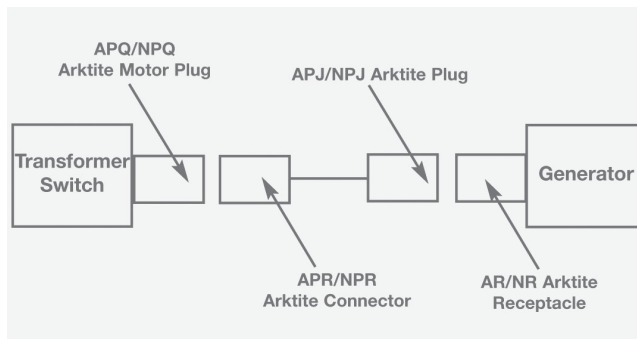
### Options:

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

- | Description   | Suffix |
|---|--------|
| • Reversed contacts. Receptacle assembled with plug interior (exposed contacts), plug assembled with receptacle interior (recessed contacts). For applications where plug is energized to feed normally de-energized receptacle. Available on 30 through 400 ampere units... <b>S22</b> |        |
| • 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 and/or frequencies. Prevents insertion of a plug in a receptacle with different electrical rating.    |        |

Available on 20 through 400 ampere units as follows:

- Receptacle interior rotated 22½° to right and plug changed to match (see photo to right).....**S4**
- Corro-free™ epoxy powder finish for added corrosion resistance.....**S752**



Typical Installation

§150A, 200A and 400A rated units are for service disconnect use only.

# 1P Arktime® Heavy Duty Circuit Breaking Plugs and Receptacles

NEMA 4 Watertight

## Industrial Heavy Duty Non-hazardous Areas

### Arktime Horsepower Ratings Locked-Rotor Interrupting

Ampere Rating Plug and Receptacle	Motor Horsepower†			
	120 Volts	240 Volts	480 Volts	600 Volts
<b>Single-phase Electrical System</b>				
30	2	3	7.5	10
60	5	10	25	20
100	10	20		
200	15	40		
<b>Three-phase Electrical System</b>				
30	3	5	10	10
60	10	20	40	50
100	15	30	40	25
200	30	60	25	15

### Maximum Horsepower for Plug and Receptacle Combinations by Input Voltage\*

Following values are typical horsepower ratings based on NEC Article 430 tables.

HP Ratings are based on the largest conductor size for each plug and receptacle combination per the Wire Size table below.

Ampere Rating Plug and Receptacle	Motor Horsepower‡		
	240 Volts	480 Volts	600 Volts
30	15	30	40
60	20	40	50
100	30	60	75
150	40	75	100
200	60	125	150

### Wire Sizes:

The table below lists the diameter of the wire recess in *Arktime* plug and receptacle contacts so that maximum size of bare conductor can be figured. Range of wire sizes shown in table is intended only as a guide. Depending on type of wire used (building wire, flexible or extra flexible cable) and its construction (number and size of strands), bare copper diameters vary widely.

### Diameter of Wire Recess in Plug and Receptacle Contacts

Ampere Rating	Contact Type	Diameter of Recess	Wire Size‡	
			Building	Extra Flex
20	Binding Screw	N/A	#14-#12	#14-#12
30 (2, 3, & 4-pole)	Pressure	.281	#10-#6	#10-#8
30 (2, 3, & 4-pole)	Crimp/Solder	.180	#10-#8**	#10-#8
30 (5-pole)	Solder	.188	#12-#6	#12-#8
60 (2, 3, 4 & 5-pole)	Pressure	.312	#6-#4	#8-#4
60 (3 & 4-pole)	Crimp/Solder	.277	#6-#4**	#8-#4
100 (2, 3 & 4-pole)	Pressure	.390	#4-#1	#4-#2
100 (3 & 4-pole)	Crimp/Solder	.390	#2-#1**	#2-#2
150 (4-pole)	Pressure	.390	#2-2/0	#2-1/0
200 (3 & 4-pole)	Pressure	.687	2/0-4/0	2/0-3/0
200 (Std. 3 & 4-pole)	Crimp/Solder	.560	#1-4/0	#1-3/0
200 (Lg. 3 & 4-pole)	Crimp/Solder	.750	4/0-250MCM	3/0-250MCM
400 (Std. 3 & 4-pole)	Crimp/Solder	.840	250-500MCM	250-400MCM
400 (Lg. 3 & 4-pole)	Crimp/Solder	1.25	500-1000MCM	400-750MCM

‡150A, 200A and 400A rated units are for service disconnect use only.

† Horsepower ratings are based on Eaton's Crouse-Hinds testing in which locked-rotor currents were interrupted by withdrawing the plug from the receptacle. It is highly recommended, however, that such use be limited to emergency conditions only, and that a horsepower rated switch be used for motor disconnect.

\* This guide is for reference only. Consult your local electrical codes before installation.

‡ Eaton's Crouse-Hinds does not recommend our plug and receptacle be used for disconnect under load.

\*\*Smaller sizes may be used with well reducers - information available upon request.

‡Do not use wire size smaller than minimum size recommended.

1P

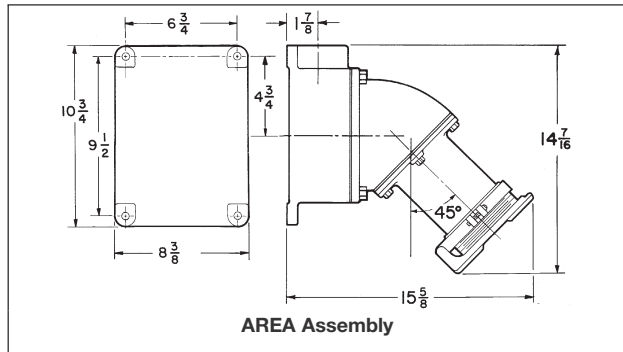
See pages 1312–1316 for general Application, Features, Grounding, Standard Materials, Standard Finishes, Options, Accessories, Compliances, Electrical Rating Ranges, and Wire Sizes.

**Features:**

- Grounding contact wire terminators will accommodate ground wire of same size as phase wire
- Spring band contact design provides multiple points of electrical contact. Improves electrical reliability and significantly reduces effort required for insertion and withdrawal
- Crimp/solder and mechanical lug type contacts are available
- Large wire wells are available for "extra flexible" wire
- Larger wire well size connectors will interchange with connectors of other wire well size of same amperage and contact configuration
- Mechanical lug connectors will interchange with crimp/solder connectors of the same amperage and contact configuration
- Self-closing spring doors on receptacles and cord connectors provide environmental sealing
- Threaded nuts provide positive plug retention
- Two piece plug and cord connector design provide easy installation

1. For listing of additional back boxes, see page 1333.
2. S22 suffix for reverse interiors is available from factory only. Field conversion cannot be done.
3. Replacement interiors for standard units vs. S22 units vary in length. Specify the unit type when ordering parts.

**Dimensions In Inches:**



**Plug Closure Caps:**

**Applications:**

- CPK caps for Arktite plugs are used:
  - Where portable equipment is on a standby basis and plugs are not in use
  - To effectively protect insulation and contacts from excessive moisture, dirt, dust and corrosion
  - With 30, 60, 100, 150 and 200 ampere plugs with fastening ring and standard 200 ampere plugs for the clamp door housing



**Ordering Information:**

Config.	Cat. #
4P	CPK104

**Standard Materials:**

- Copper-free aluminum

**Standard Finishes:**

- Natural

**Wire Mesh Grips:**

**Applications:**

- Wire mesh grips are used:
  - To provide secure cable termination
  - To extend cable life
  - With 20, 200 and 400 ampere plugs



**Features:**

- Eliminate sharp radius of cable bend at the point where cable enters plug, thereby reducing cable failure
- Absorb longitudinal stresses placed on the point of termination caused by pulling the cable
- Gripping action increases in direct proportion to amount of tension applied to cable

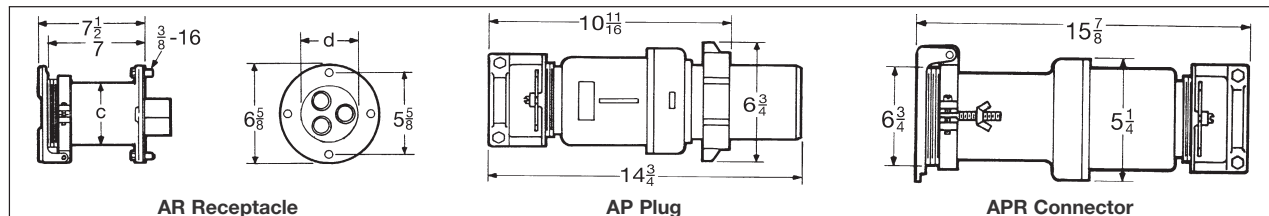
**Standard Material and Finishes:**

- Stainless steel wire braid – Natural

**Ordering Information:**

Plug Cable Range	Grip Range	Nominal Grip Length-Inches	Grip Cat. #
1.375 to 1.875	1.375 to 1.625	8	K163
	1.625 to 1.875	11	K188
1.875 to 2.500	1.875 to 2.000	10	K200
	2.000 to 2.250	11 1/4	K225

1P



No. Poles	c	d
3	4 1/16	3 1/4
4	4 1/16	3 5/8

†For use on system less than 60 hertz the receptacles, plugs and connectors are for disconnect use only.



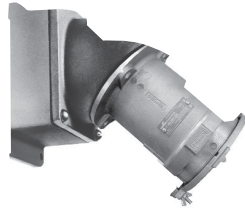
# Arktite® Heavy Duty Circuit Breaking Receptacle Assemblies

NEMA 3R

1P

200 A, 600 VAC/250 VDC, 50† – 400 hertz

## Ordering Information - Mechanical Lug Termination:



Receptacle Assembly

Receptacle Assembly with AJ Back Boxes and Angle Adapters



Receptacle w/ Mechanical Lug

Receptacle Housings only



Mating Plug



Mating Connector

Description	Hub Size (In.)	Cat. #	Cat. #	Cable Dia.	Plug Cat. #	Connector Cat. #
<b>Style 1 – Wire Well Takes 0.687" Maximum Conductor Size</b>						
3-wire, 3-pole	1½	AREAL20315	ARL2031	0.875 to 1.375 1.375 to 1.875 1.875 to 2.500	APL20355 APL20357 APL20358	APRL20315 APRL20317 APRL20318
	2	AREAL20316				
	2½	AREAL20317				
4-wire, 4-pole	2	AREAL20416	ARL2041	0.875 to 1.375 1.375 to 1.875 1.875 to 2.500 2.500 to 3.000	APL20455 APL20457 APL20458 APL20451	APRL20415 APRL20417 APRL20418 APRL204113
	2½	AREAL20417				
<b>Style 2 – Wire Well Takes 0.687" Maximum Conductor Size</b>						
2-wire, 3-pole	1½	AREAL20325	ARL2032	0.875 to 1.375 1.375 to 1.875 1.875 to 2.500	APL20365 APL20367 APL20368	APRL20325 APRL20327 APRL20328
	2	AREAL20326				
	2½	AREAL20327				
3-wire, 4-pole	1½	AREAL20425	ARL2042	0.875 to 1.375 1.375 to 1.875 1.875 to 2.500	APL20465 APL20467 APL20468	APRL20425 APRL20427 APRL20428
	2	AREAL20426				
	2½	AREAL20427				

## Ordering Information - Crimp/Solder Termination:

Receptable Assembly with AJ Back Boxes and Angle Adapters

Receptacle Housings only

Description	Hub Size (In.)	Cat. #	Cat. #	Cable Dia.	Plug Cat. #	Connector Cat. #
<b>Style 1 – Wire Well Takes 0.56" Maximum Conductor Size</b>						
3-wire, 3-pole	1½	AREA20315	AR2031	0.875 to 1.375 1.375 to 1.875 1.875 to 2.500	AP20355 AP20357 AP20358	APR20315 APR20317 APR20318
	2	AREA20316				
	2½	AREA20317				
4-wire, 4-pole	2	AREA20416	AR2041	0.875 to 1.375 1.375 to 1.875 1.875 to 2.500	AP20455 AP20457 AP20458	APR20415 APR20417 APR20418
	2½	AREA20417				
<b>Style 1 – Wire Well Takes 0.75" Maximum Conductor Size</b>						
3-wire, 3-pole	1½	AREA203125	AR20312	1.375 to 1.875 1.875 to 2.500	AP203511 AP203512	APR203111 APR203112
	2	AREA203126				
	2½	AREA203127				
4-wire, 4-pole	2	AREA204126	AR20412	1.375 to 1.875 1.875 to 2.500 2.500 to 3.000	AP204511 AP204512 AP204513	APR204111 APR204112 APR204113
	2½	AREA204127				
<b>Style 2 – Wire Well Takes 0.56" Maximum Conductor Size</b>						
2-wire, 3-pole	1½	AREA20325	AR2032	0.875 to 1.375 1.375 to 1.875 1.875 to 2.500	AP20365 AP20367 AP20368	APR20325 APR20327 APR20328
	2	AREA20326				
	2½	AREA20327				
3-wire, 4-pole	1½	AREA20425	AR2042	0.875 to 1.375 1.375 to 1.875 1.875 to 2.500	AP20465 AP20467 AP20468	APR20425 APR20427 APR20428
	2	AREA20426				
	2½	AREA20427				
<b>Style 2 – Wire Well Takes 0.75" Maximum Conductor Size</b>						
2-wire, 3-pole	1½	AREA203225	AR20322	0.875 to 1.375 1.375 to 1.875 1.875 to 2.500	AP203610 AP203611 AP203612	APR203210 APR203211 APR203212
	2	AREA203226				
	2½	AREA203227				
3-wire, 4-pole	1½	AREA204225	AR20422	1.375 to 1.875 1.875 to 2.500	AP204611 AP204612	APR204211 APR204212
	2	AREA204226				
	2½	AREA204227				

†For use on system less than 60 hertz the receptacles, plugs and connectors are for disconnect use only.

1P

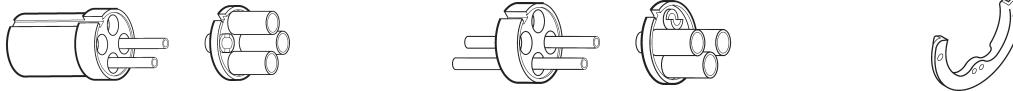
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# Arktite® Heavy Duty Circuit Breaking Receptacle Assemblies

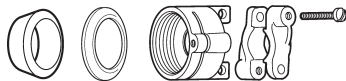
Weatherproof

200 A, 600 VAC/250 VDC, 50† – 400 hertz

## 200A Replacement Parts



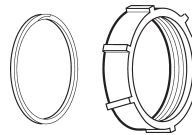
Config.	Receptacle Interior		Plug Interior		Brass Retaining Shoe	
	.56 wire well Cat. #	.75 wire well Cat. #	.56 wire well Cat. #	.75 wire well Cat. #	.56 wire well Cat. #	.75 wire well Cat. #
<b>200A Standard and S4</b>						
2W 3P	ATP401	ATP402	ATP433	ATP434	0490335	0490335
3W 3P	ATP397	ATP398	ATP429	ATP430	0490327	0490328
3W 4P	ATP403	ATP404	ATP435	ATP436	0490337	0490337
4W 4P	ATP399	ATP400	ATP431	ATP432	0490331	0490332
<b>200A S22 and S4 S22</b>						
2W 3P	ATP417	ATP418	ATP449	ATP450	0490335	0490335
3W 3P	ATP413	ATP414	ATP445	ATP446	0490327	0490328
3W 4P	ATP419	ATP420	ATP451	ATP452	0490337	0490337
4W 4P	ATP415	ATP416	ATP447	ATP448	0490331	0490332



**Cord Grip Assembly**

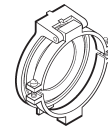
Cord Diameter Range

.875 – 1.375	AP2 KIT1 M80
1.375 – 1.875	AP2 KIT2 M80
1.875 – 2.500	AP2 KIT3 M80



**Plug Clamp Nut**

2W 3P	AP:0401965
3W 3P	
2W 3P	AP:0401964
3W 4P	

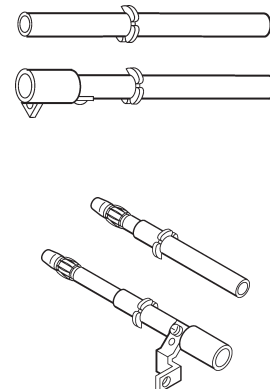


**Rec Spring Door**

AR:0401502-2
AR:0401502-1

## Replacement Pin & Sleeve Contacts:

Type	Receptacle		Plug	
	Cat. #	Cat. #	Cat. #	Cat. #
<b>200A Standard &amp; S4</b>	.56 wire well	.75 wire well	.56 wire well	.75 wire well
Phase Contact	0490339	0490340	0490319	0490320
Ground Contact	0490343	0490344	0490323	0490324
<b>200A S22 &amp; S4 S22</b>	.56 wire well	.75 wire well	.56 wire well	.75 wire well
Phase Contact	0490351	0490352	0490355T	0490356
Ground Contact	0490347	0490348	0490359	0490360
<b>200A Mechanical Lug</b>	.687 wire well		.687 wire well	
Phase Contact	ARL:0403688 1		APL:0403678 1	
Ground Contact	ARL:0403687 1		APL:0403677 1	



1P

†For use on system less than 60 hertz the receptacles, plugs and connectors are for disconnect use only.

## Industrial Heavy Duty Non-hazardous Areas

### Applications:

*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 100 ampere rating may be disconnected under load; 150-400 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 de-energized receptacle from an energized plug with usual *Arktite* safety; no energized contacts are exposed.

### Certifications and Compliances:

- UL Standards: 1203\*; 1682, 1686
- CSA Standard: C22.2 No. 182.1
- CE (LVD) 2006/95/EEC\*\*



1P

\* APJ and NPJ plugs only

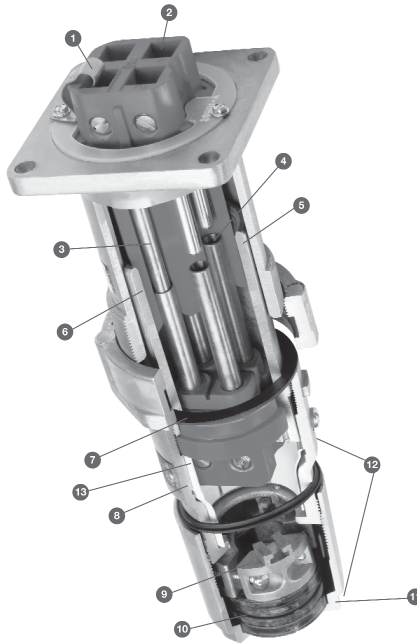
\*\* Excludes 200A and 400A APR Connectors

# Arktite® Heavy Duty Circuit Breaking Plugs and Receptacles

NEMA 4 Watertight

1P

## Industrial Heavy Duty Non-hazardous Areas



### Split Pin Contact Design:

- Provides nearly 360° of contact at every insertion, ensuring protection against heat rise and eliminating arcing on critical surfaces
- Continuous contact over length and circumference of mated pins provides superior safety and long-term performance
- Self-wiping at every insertion to prevent environmental contamination build-up



### The additional features below are called out in the illustration on this page

- 1 The ground contact is bonded to the receptacle housing (Style 2)
- 2 Unimpeded, easy-access phase and ground terminals make wire termination quick and easy
- 3 Grounding contacts that make-first and break-last in the unlikely event of keyway failure
- 4 An arc formed when the plug is being removed is instantly snuffed in the deep confined insulated arcing chamber
- 5 A detent spring forms a parallel grounding path through the metallic plug sleeve and receptacle housing and is the first contact to make and the last to break
- 6 The plug sleeve is keyed to the receptacle to prevent mispolarization
- 7 The gasketing system provides unsurpassed watertight integrity (NEMA 4)
- 8 All aluminum Uni-Shell™ construction provides superior strength in abusive environments
- 9 The Tri-Lock™ cable grip has 3-piece design that equally distributes gripping power around perimeter of cable. Cord jacket does not get pinched, eliminating potential for damage to both internal conductors and external cable jacket. Cable grip is located inside plug housing, eliminating corrosion of vital hardware and making plug maintenance easy.
- 10 The unique Sure-Seal™ cable gland has two gasket sizes which fit entire range of cable diameters, reducing risk of improper assembly. The gasket ratchets into the Tri-lock™ cable grip to prevent plug from turning or loosening in high vibration areas.
- 11 Wrenching surfaces make Arktite plugs quick and easy to assemble
- 12 Smooth and contoured design of plug housing eliminates occurrence of cable grip snagging or breaking off. Tri-Lock™ screws are captive so cable grip cannot come apart during assembly. Prevents critical screws from getting lost during installation.
- 13 Plastic sleeve between insulator body and housing minimizes possibility of electrical shock in event of ground failure. Increases creepage and clearance protection.

## Arktite® Advantage Features:

### Internal Plug Safety Insulator

- Plastic barrier between insulator body and metal housing minimizes risk of energizing handle body due to stray conductor strands
- Increases creepage and clearance protection

### CE Marked

- Offers a borderless solution with no additional inspection or documentation required for approval

### Lockout Plug

- Allows users to comply with OSHA lockout/tagout requirements
- Ensures plug cannot be inserted into receptacle when maintenance is being performed downstream of power supply

### Tri-Lock Cable Grip

- Three-piece design equally distributes grip around perimeter of cable
- Cable jacket does not get pinched, eliminating potential for damage to internal conductors
- Captive screws allow maximum extension of cord grip without risk of loose components

### Sure-Seal Cable Gland

- Two gasket sizes fit entire cable range, reducing risk of improper assembly
- Gasket ratchets into Tri-Lock cable grip to provide environmental protection in high vibration areas



### Plug Housing

- Smooth design eliminates occurrence of cable grip snagging or breaking off
- Houses Tri-Lock cable grip to eliminate corrosion of vital hardware and increase ease of maintenance



### Combination Drive Stainless Steel Hardware

- Increases ease of installation by allowing for more than one option for installation tools
- Stainless steel external hardware eliminates corrosion on critical components and extends product life



### Insulator Assemblies

- Unimpeded, easy access phase and ground terminals make wire termination quick and easy
- Lug screws secured with tape to prevent them from vibrating loose and falling out during shipping



### Combination Slot and Hex Mechanical Lugs\*

- Increases ease of installation by allowing for more than one option for installation tools
- Hex head allows for easy achievement of specified torque value



### Receptacle Cover

- Automatic weatherproof seal every time plug is disengaged
- Field replaceable design allows for new cover to be threaded on quickly and easily



\*60, 100, and 150A offering.

# 1P Arktite® Heavy Duty Circuit Breaking Plugs and Receptacles

NEMA 4 Watertight

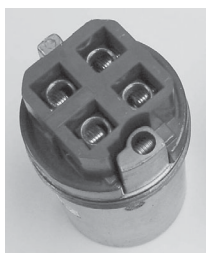
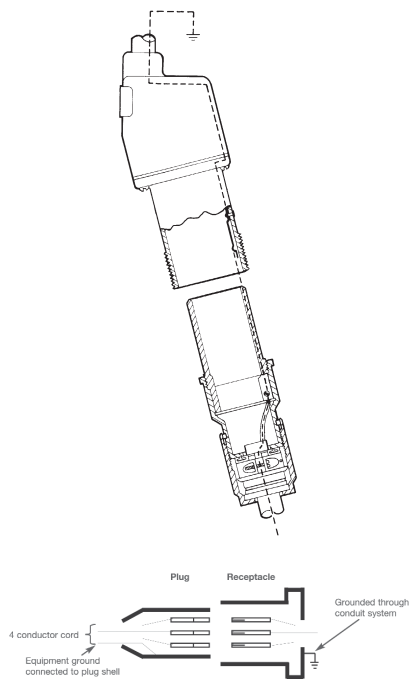
**Industrial Heavy Duty  
Non-hazardous Areas**

## Grounding: Style 1 vs. Style 2

Eaton's Crouse-Hinds Arktite devices utilize two methods, or styles, for completing the grounding circuit in plugs and receptacles. NEC reference 250.138 (A) & (B).

### Style 1 – Metallic

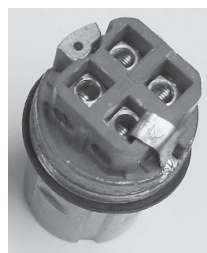
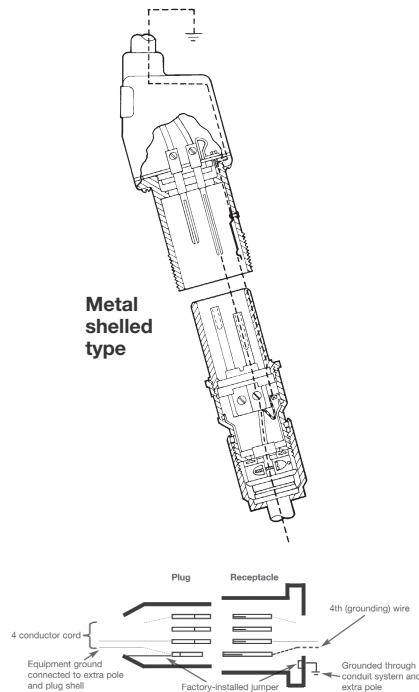
A Style 1 plug is one in which the grounding conductor in the flexible cable is bonded to the plug sleeve by a pressure connector. A Style 1 receptacle is one which is grounded by virtue of the fact that it is an integral part of a grounded conduit system. On insertion, the plug sleeve makes contact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

### Style 2 – Metallic

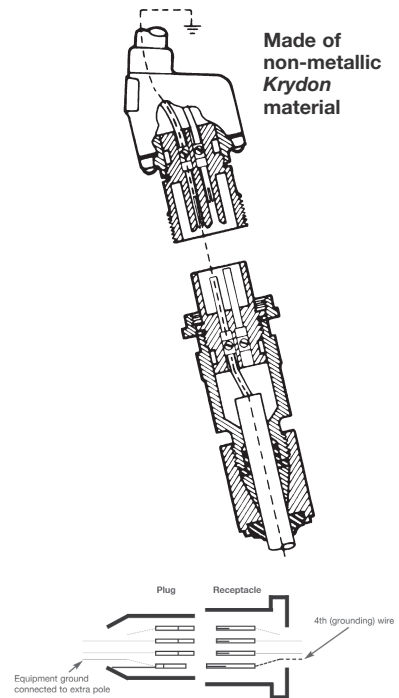
A Style 2 metallic housing plug is one in which the grounding conductor in the flexible cable is bonded to the extra (grounding) pole and metal plug sleeve by a pressure connector. A Style 2 metallic housing receptacle is one in which the extra (grounding) pole is electrically connected to the equipment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



**Style 2**  
Ground conductor attaches to contact, which is bonded to shell.

### Style 2 – Non-metallic

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.



1P

# Arktite® Heavy Duty Circuit Breaking Plugs and Receptacles

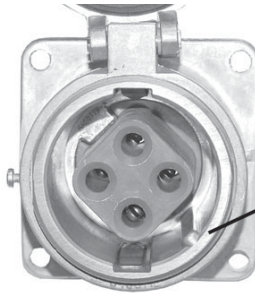
NEMA 4 Watertight

1P

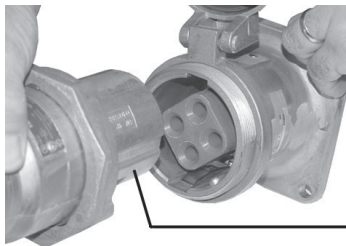
## Industrial Heavy Duty Non-hazardous Areas

### Standard Materials:

- Metallic receptacle housings, plug and cord connector bodies – high impact strength copper-free aluminum
- Non-metallic receptacles, plugs and cord connectors – *Krydon*® fiberglass-reinforced polyester material
- Back boxes: 20, 30, 60, 100, 150 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 20, 30, 60, 100 ampere – leaded red brass; crimp/solder 150, 200, 400 ampere – tellurium copper



Arktite receptacles have a cast raised rib located inside the receptacle sleeve. The location of the rib is in a specific relationship to the receptacle insulator that houses the contacts.



The mating plug has a cast groove located on the outside of the plug sleeve. This groove lines up with the raised rib.

### Standard Finishes:

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

### Accessories:

- Accessories include a variety of angle adapters, panel adapters and back boxes for *Arktite* receptacles, see pages 1332–1335.
- Included throughout 1P are wire mesh cable grips and protective caps for *Arktite* plugs.

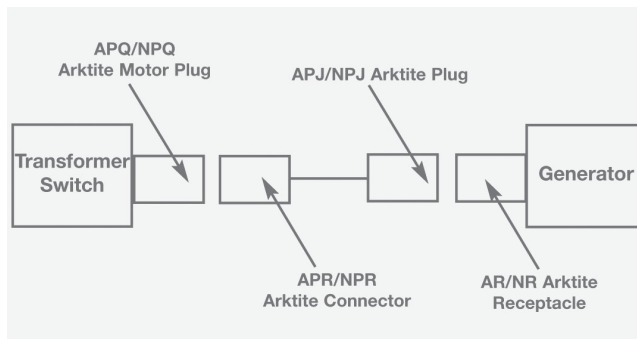
### Options:

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

- | Description   | Suffix |
|---|--------|
| • Reversed contacts. Receptacle assembled with plug interior (exposed contacts), plug assembled with receptacle interior (recessed contacts). For applications where plug is energized to feed normally de-energized receptacle. Available on 30 through 400 ampere units... <b>S22</b> |        |
| • 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 and/or frequencies. Prevents insertion of a plug in a receptacle with different electrical rating.    |        |

Available on 20 through 400 ampere units as follows:

- Receptacle interior rotated 22½° to right and plug changed to match (see photo to right).....**S4**
- Corro-free™ epoxy powder finish for added corrosion resistance.....**S752**



Typical Installation

§150A, 200A and 400A rated units are for service disconnect use only.

# 1P Arktime® Heavy Duty Circuit Breaking Plugs and Receptacles

NEMA 4 Watertight

## Industrial Heavy Duty Non-hazardous Areas

### Arktime Horsepower Ratings Locked-Rotor Interrupting

Ampere Rating Plug and Receptacle	Motor Horsepower†			
	120 Volts	240 Volts	480 Volts	600 Volts
<b>Single-phase Electrical System</b>				
30	2	3	7.5	10
60	5	10	25	20
100	10	20		
200	15	40		
<b>Three-phase Electrical System</b>				
30	3	5	10	10
60	10	20	40	50
100	15	30	40	25
200	30	60	25	15

### Maximum Horsepower for Plug and Receptacle Combinations by Input Voltage\*

Following values are typical horsepower ratings based on NEC Article 430 tables.

HP Ratings are based on the largest conductor size for each plug and receptacle combination per the Wire Size table below.

Ampere Rating Plug and Receptacle	Motor Horsepower‡		
	240 Volts	480 Volts	600 Volts
30	15	30	40
60	20	40	50
100	30	60	75
150	40	75	100
200	60	125	150

### Wire Sizes:

The table below lists the diameter of the wire recess in *Arktime* plug and receptacle contacts so that maximum size of bare conductor can be figured. Range of wire sizes shown in table is intended only as a guide. Depending on type of wire used (building wire, flexible or extra flexible cable) and its construction (number and size of strands), bare copper diameters vary widely.

### Diameter of Wire Recess in Plug and Receptacle Contacts

Ampere Rating	Contact Type	Diameter of Recess	Wire Size‡	
			Building	Extra Flex
20	Binding Screw	N/A	#14-#12	#14-#12
30 (2, 3, & 4-pole)	Pressure	.281	#10-#6	#10-#8
30 (2, 3, & 4-pole)	Crimp/Solder	.180	#10-#8**	#10-#8
30 (5-pole)	Solder	.188	#12-#6	#12-#8
60 (2, 3, 4 & 5-pole)	Pressure	.312	#6-#4	#8-#4
60 (3 & 4-pole)	Crimp/Solder	.277	#6-#4**	#8-#4
100 (2, 3 & 4-pole)	Pressure	.390	#4-#1	#4-#2
100 (3 & 4-pole)	Crimp/Solder	.390	#2-#1**	#2-#2
150 (4-pole)	Pressure	.390	#2-2/0	#2-1/0
200 (3 & 4-pole)	Pressure	.687	2/0-4/0	2/0-3/0
200 (Std. 3 & 4-pole)	Crimp/Solder	.560	#1-4/0	#1-3/0
200 (Lg. 3 & 4-pole)	Crimp/Solder	.750	4/0-250MCM	3/0-250MCM
400 (Std. 3 & 4-pole)	Crimp/Solder	.840	250-500MCM	250-400MCM
400 (Lg. 3 & 4-pole)	Crimp/Solder	1.25	500-1000MCM	400-750MCM

‡150A, 200A and 400A rated units are for service disconnect use only.

† Horsepower ratings are based on Eaton's Crouse-Hinds testing in which locked-rotor currents were interrupted by withdrawing the plug from the receptacle. It is highly recommended, however, that such use be limited to emergency conditions only, and that a horsepower rated switch be used for motor disconnect.

\* This guide is for reference only. Consult your local electrical codes before installation.

‡ Eaton's Crouse-Hinds does not recommend our plug and receptacle be used for disconnect under load.

\*\*Smaller sizes may be used with well reducers - information available upon request.

‡Do not use wire size smaller than minimum size recommended.

1P

# Arktite® Heavy Duty Receptacle Assemblies

Weatherproof

1P

400 A, 600 VAC/250 VDC, 50–400 hertz

## Features:

- Grounding contact wire terminators will accommodate ground wire of same size as phase wire
  - Spring band contact design provides multiple points of electrical contact. Improves electrical reliability and significantly reduces effort required for insertion and withdrawal
  - Crimp/solder type contacts are standard
  - Large wire wells are available for "extra flexible" wire
  - Larger wire well size connectors will interchange with connectors of other wire well size of same amperage and contact configuration
  - Self-closing spring doors on receptacles and cord connectors provide environmental sealing
  - Threaded nuts provide positive plug retention
  - Two piece plug and cord connector design provide easy installation
  - For disconnect use only – not for current interrupting
1. For listing of additional back boxes, see page 1333. Illustration shows 3 blank plates and 1 hub plate.
  2. S22 suffix for reverse interiors is available from factory only. Field conversion cannot be done.
  3. Replacement interiors for standard units vs. S22 units vary in length. Specify the unit type when ordering parts.

## Wire Mesh Grips:



## Applications:

Wire mesh grips are used:

- To provide secure cable termination
- To extend cable life
- With 20, 200 and 400 ampere plugs

## Features:

- Eliminate sharp radius of cable bend at the point where cable enters plug, thereby reducing cable failure
- Absorb longitudinal stresses placed on the point of termination caused by pulling the cable
- Gripping action increases in direct proportion to amount of tension applied to cable

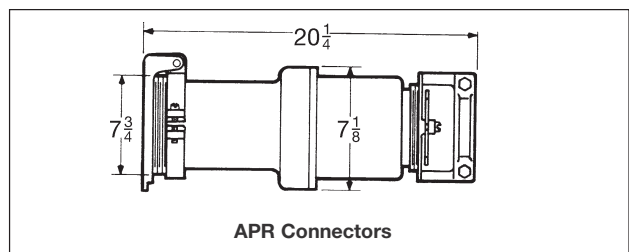
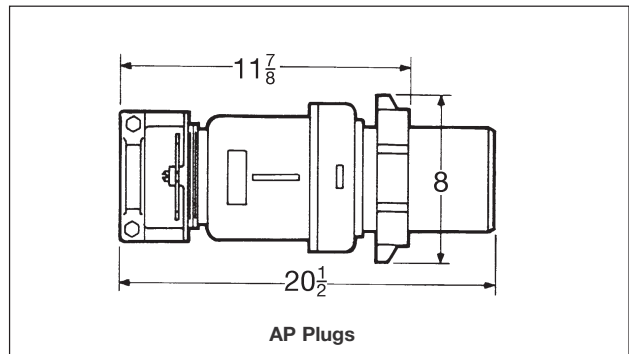
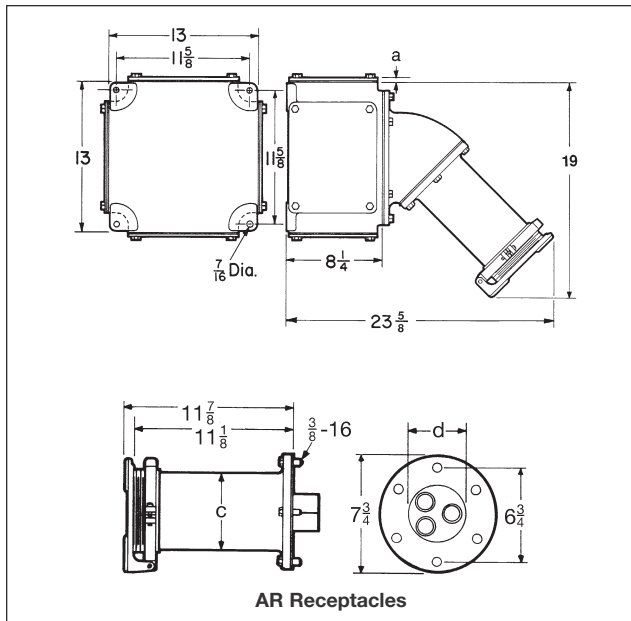
## Standard Material and Finishes:

- Stainless steel wire braid – Natural

## Ordering Information:

Plug Cable Range	Grip Range	Nominal Grip Length—Inches	Grip Cat. #
1.375 to 1.875	1.375 to 1.625	8	K163
	1.625 to 1.875	11	K188
1.875 to 2.500	1.875 to 2.000	10	K200
	2.000 to 2.250	11¾	K225

## Dimensions In Inches:



## AREX Assemblies

Description	a	No. Poles	c	d
With blank hub plate	5/16	3	5 3/16	4 3/16
With hub plate max.	4 5/8	4	5 13/16	4 11/16

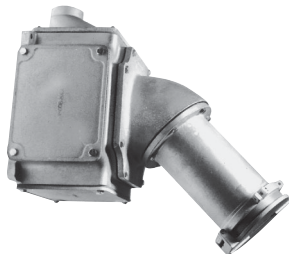


# 1P Arktite® Heavy Duty Receptacle Assemblies

Weatherproof

400 A, 600 VAC/250 VDC, 50–400 hertz

## Ordering Information:



Receptacle Assembly



Receptacle



Mating Plug



Mating Connector

With AJ Back Boxes and Angle Adapters‡			Receptacle Housings only		Cable Dia.	Plug Cat. #	Connector Cat. #
Description	Hub Size (In.)	Spring Door Cover Cat. #	Spring Door Cat. #				
<b>Style 1 – Wire Well Takes .84" Maximum Conductor Size</b>							
3-wire, 3-pole	2½	AREX40317	AR4031	1.375 to 1.875	AP40357	APR40317	
	3	AREX40318		1.875 to 2.500	AP40358	APR40318	
4-wire, 4-pole	2½	AREX40417	AR4041	1.375 to 1.875	AP40457	APR40417	
	3	AREX40418		1.875 to 2.500	AP40458	APR40418	
<b>Style 1 – Wire Well Takes 1.25" Maximum Conductor Size</b>							
3-wire, 3-pole	3	AREX403128	AR40312	2.500 to 3.000	AP403510	APR403110	
	3½	AREX403129		3.000 to 3.800	AP403512	APR403112	
	4	AREX4031210					
4-wire, 4-pole	4	AREX4041210	AR40412	2.500 to 3.000	AP404510	APR404110	
	5	AREX4041212		3.000 to 3.800	AP404512	APR404112	
<b>Style 2 – Wire Well Takes .84" Maximum Conductor Size</b>							
2-wire, 3-pole	2	AREX40326	AR4032	1.375 to 1.875	AP40367	APR40327	
	2½	AREX40327		1.875 to 2.500	AP40368	APR40328	
	3	AREX40328					
3-wire, 4-pole	2½	AREX40427	AR4042	1.375 to 1.875	AP40467	APR40427	
	3	AREX40428		1.875 to 2.500	AP40468	APR40428	
<b>Style 2 – Wire Well Takes 1.25" Maximum Conductor Size</b>							
2-wire, 3-pole	3	AREX403228	AR40322	2.500 to 3.000	AP403610	APR403210	
	3½	AREX403229		3.000 to 3.500	AP403612	APR403212	
	4	AREX4032210					
3-wire, 4-pole	4	AREX4042210	AR40422	2.500 to 3.000	AP404610	APR404210	
	5	AREX4042212		3.000 to 3.500	AP404612	APR404212	

‡Hub plates and blank plates may be interchanged to permit conduit feed from bottom or sides.