

# Tomas y Clavijas

### Section P

Rugged construction, extensive configurations, custom capabilities and numerous interlocked designs provide safe and reliable NEC and IEC solutions for fixed or portable power applications











New Products in the Plugs & Receptacles Product Line				
• 150A Arktite®	1P			
Ark•Gard® ENR Receptacles	2P			
Ark•Gard® ENC Connectors	2P			
IEC 309 Light Industrial Devices	5P			
Custom Cable Assemblies	10P			
Posi-Max Power Distribution Panels	10P			
Portable Power Carte	10P			

### Notable changes to the Plugs & Receptacles section of this catalog

• New section 10P for Portable Power solutions

## **Arktite® Heavy Duty Circuit Breaking Plugs and Receptacles**

### Industrial Heavy Duty Non-hazardous Areas



### **Applications:**

Arktite circuit breaking plugs and receptacles are used:

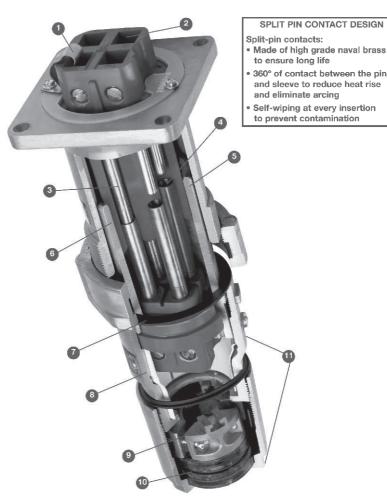
- To supply power to portable electrically operated devices such as motorgenerator sets, compressors, heating and cooling units, welders, conveyors, lighting systems and similar equipment
- Where temporary power is needed, such as at trailers, building units, heavy machinery and similar equipment
- Wherever 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 mismate, 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: 1682, 514; 1010 (APJ and NPJ plugs only)
- CSA Standard: C22.2 No. 182.1



- The additional features below are called out in the illustration on this page
- The ground contact is bonded to the receptacle housing (Style 2)
- 2 Easy access terminals make wiring simple
- Grounding contacts that make-first and break-last in the unlikely event of keyway failure
- An arc formed when the plug is being removed is instantly snuffed in the deep confined insulated arcing chamber
- 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
- The gasketing system provides unsurpassed watertight integrity (NEMA 4)
- 3 All aluminum Uni-Shell<sup>™</sup> construction provides superior strength in abusive environments
- The Tri-Lock™ cable grip has three clamps which provide even gripping and superior cord clamping
- ① The unique Sure-Seal™ cable gland provides a complete environmental seal around the cable (NEMA 4)
- Wrenching surfaces make Arktite plugs quick and easy to assemble



## **Arktite® Heavy Duty Circuit Breaking Plugs and Receptacles**

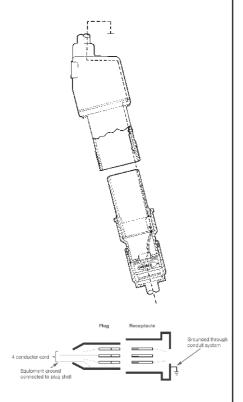
### **Industrial Heavy Duty Non-hazardous Areas**

### Grounding: Style 1 vs. Style 2

Cooper 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.

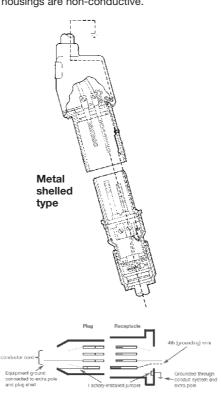




Style 1 Ground conductor attaches to shell.

#### 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, nonmetallic housing plugs and receptacles, the extra pole is used for grounding since the housings are non-conductive.

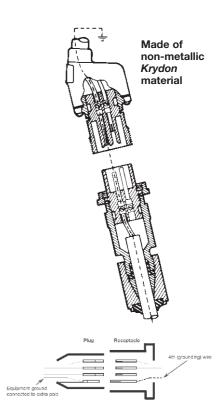




Style 2 Ground conductor attaches to contact, which is bonded to shell.

#### 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.





## **Arktite® Heavy Duty Circuit Breaking§ Plugs and Receptacles**

### **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® fiberglassreinforced 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 – telurium copper

### **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

### **Options:**

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

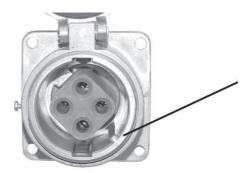
### Description

Suffi

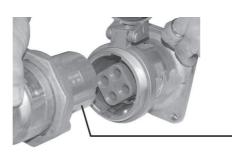
- Reversed contacts. Receptacle assembled with plug interior (exposed contacts), plug assembled with receptacle interior (recessed contacts). For applications where plug is energized to feed normally de-energized receptacle. Available on 30 through 400 ampere units... \$22
- Special polarity. For use 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..... \$752



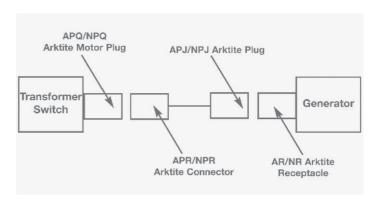
Arktite receptacles have a cast raised rib located inside the receptacle sleeve. The location of the rib is in a specific relationship to the receptacle insulator that houses the contacts.



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

### **Accessories:**

- Accessories include a variety of angle adapters, panel adapters and back boxes for Arktite receptacles. See pages 1250–1253.
- Included throughout 1P are wire mesh cable grips and protective caps for Arktite plugs.



**Typical Installation** 



### **Arktite® Heavy Duty Circuit Breaking§ Plugs and Receptacles**





### **Arktite Horsepower Ratings Locked-Rotor Interrupting**

	Motor F	lorsepow	er†		
Ampere Rating Plug and Receptacle	120 Volts	240 Volts	480 Volts	600 Volts	
Single-phase Electrical Syste	m				
30 60 100 200	2 5 10 15	3 10 20 40	7.5 25	10 20	
Three-phase Electrical System					
30 60 100 200	3 10 15 30	5 20 30 60	10 40 40 25	10 50 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.

	Motor Horsepower					
Ampere Rating Plug and Receptacle	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:

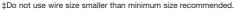
The table below lists the diameter of the wire recess in Arktite plug and receptacle contacts so that maximum size of bare conductor can be figured. Range of wire sizes shown in table is intended only as a guide. Depending on type of wire used (building wire, flexible or extra flexible cable) and its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

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

Ampere	Contact	Diameter	Wire Size‡	
Rating	Туре	of Recess	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 Cooper 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.

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





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

\*\*Cooper Crouse-Hinds does not recommend our plug and receptacle be used for disconnect under load.

## **Arktite® Heavy Duty Circuit Breaking Receptacle Assemblies and Housings**

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



### **Ordering Information:**



Receptacle Assembly



Receptacle



Mating Plug



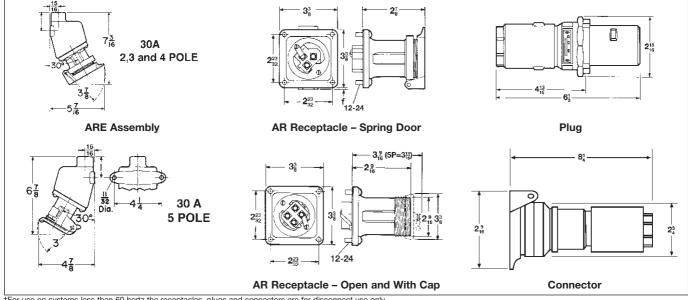
Mating Connector

_	ng APR nectors

With ARE Bad	k Boxes		Receptacle Housings Only		Mating APJ Plugs	t	Mating AP Connector	
Description	Hub Size (In.)	Spring Door Cat. #	Spring Door Cat. #	Threaded Cap Only Cat. #	Cat. #	Cable Dia.	Cat. #	Cable Dia.
Style 2								
2-wire, 3-pole	<sup>3</sup> / <sub>4</sub> 1	ARE3322 ARE3323	AR332	AR338	APJ3385	.0.39 to 1.20	APR3365	.0.39 to 1.20
3-wire, 4-pole	<sup>3</sup> / <sub>4</sub> 1	ARE3422 ARE3423	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:



†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**

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		
2W 3P	ATP278	ATP273		
3W 3P	ATP276	ATP271	QE50	QE13
3W 4P	ATP279	ATP274		
4W 4P	ATP277	ATP272		
4W 5P	ATP125	ATP109	N/A	N/A
5W 5P	ATP94	ATP73	IN/A	N/A

### **Replacement Pin & Sleeve Contacts:**

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



## **Arktite® Heavy Duty Circuit Breaking Receptacle Assemblies and Housings**

MELEXA

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

### **Ordering Information:**







Receptacle





**Receptacle Assembly** 

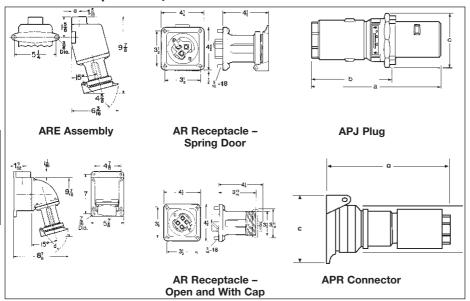
Boxes With ARE Receptac

Mating Plug

Mating Connector

		AJ Back Boxes Angle Adapters		With ARE Back Boxes	Receptacle	e Housing Only			
Description	Hub Size (In.)	Spring Door Cat. #	Threaded Cap Only Cat. #	Spring Door Cat. #	Spring Door Cat. #	Threaded Cap Only Cat. #	Cable Dia.	Cat. #	Cat. #
Style 2									
2-wire, 3-pole }	1 1½	AREA6323 AREA6324		ARE6323 ARE6324	AR632	AR638	0.50 to 1.45	APJ6385	APR6365
3-wire, 4-pole	1½ 1½	AREA6424 AREA6425		ARE6424 ARE6425	AR642	AR648	0.50 to 1.45	APJ6485	APR6465
4-wire, 5-pole	11/ <sub>4</sub> 11/ <sub>2</sub>		AREA6584 AREA6585			AR658	0.75 to 1.45	APJ6585	APR6585 APR6567

### **Dimensions** (In Inches):



	Plug			Co	nnec	tor
Config.	а	b	С	а	b	С
2P or 3P	81/2	5 <sup>3</sup> / <sub>4</sub>	35/8	61/2	35/8	215/16
4P	81/2	513/16	33/4	81/4	35/8	215/16
5P	9	63/16	47/16	81/4	35/8	31/4

†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**

60 A, 600 VAC/250 VDC, 50<sup>†</sup> - 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

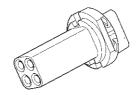
### **Standard Materials:**

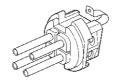
• Copper-free aluminum

### **Standard Finishes:**

Natural

### **Replacement Parts:**









Config.	Receptacle Interior	Plug Interior	Spring Door	Screw Cap	
2W 2P	ATP295	ATP290			
2W 3P	ATP298	298 ATP293 QE51		QE32	
3W 3P	ATP296	ATP291			
3W 4P	ATP299	ATP294	QE52	OF24	
4W 4P	ATP297	ATP292	QE32	QE34	
4W 5P	ATP385	ATP387	N/A	AD-11202D	
5W 5P	ATP384	ATP386	N/A	AR:11393B	

### **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.



### **Arktite® Heavy Duty Circuit Breaking Receptacle Assemblies and Housings**

100 A, 600 VAC/250 VDC, 50<sup>+</sup> - 400 hertz 150 A, 600 VAC/250 VDC, 50† - 400 hertz

### **Ordering Information:**



**Receptacle Assembly** 





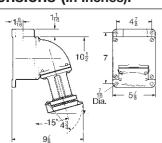
Receptacle



С

			Recepta	Receptacle Housings Only		Plug	
Description	Hub Size (In.)	Spring Door Cat. #	Spring Door Cat. #	Threaded Cap Only Cat. #	Cable Dia.	Cat. #	Cat. #
100 A - Styl	11/4	AREA10324	AR1032	AR1038	0.875 to 1.70	APJ10387	APR10367
3-pole ∫ 3-wire,  4-pole }	1½ 1½ 2	AREA10325 AREA10425 AREA10426	AR1042	AR1048	0.875 to 1.70	APJ10487	APR10467
150 A - Style	2 *						
3-wire, 4-pole	· <del>-</del>		AR1542	AR1548	0.875 to 1.70	APJ15487	

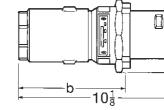
### **Dimensions** (In Inches):



**ARE Assembly** 

41/4	514
$3\frac{1}{2}$	
	7
$-3\frac{1}{2}$	½5 16-18

AR Receptacle - Spring Door

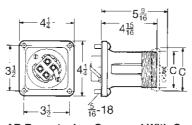


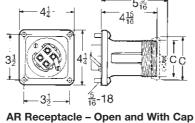
No. Poles	f
2 or 3	9/32
4	13/32

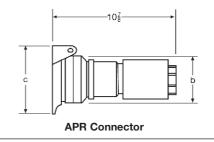


No. Poles	Housing	С
2 or 3	open	33/16
4	open	37/16
2 or 3	with cap	311/16
4	with cap	37/8

No. Poles	b	С
3	33/8	33/16
4	31/2	37/16







<sup>†</sup> 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.

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## **Arktite® Heavy Duty Circuit Breaking Receptacle Assemblies and Housings**

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

## 1P MELEXA

### **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

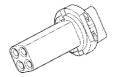
### **Standard Materials:**

• 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			
2W 3P	ATP318	ATP313	QE53	QE62	
3W 3P	ATP316	ATP311			
3W 4P	ATP319	ATP314	QE54	QE64	
4W 4P	ATP317	ATP312	QE54	QE04	
4W 5P	N/A	N/A	NI/A	NI/A	
5W 5P	N/A	N/A	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	

<sup>†</sup> 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**





### **Ordering Information - Mechanical Lug Termination:**



**Receptacle Assembly** Receptacle Assembly with AJ Back Boxes and



Receptacle w/ Mechanical Lug



**Mating Plug** 



**Mating Connector** 

Angle Adapters		Receptacle Housings only				
Description	Hub	Cot #	Cat. #	Cable	Diver Cot #	Connector Cat. #
Description	Size (In.)	Cat. #	Cat. #	Dia.	Plug Cat. #	Connector Cat. #
Style 2 – Wire W	Vell Takes 0.6	87" Maximum Cond	luctor Size		1	1
2-wire, 3-pole	1½ 2 2½	AREAL20325 AREAL20326 AREAL20327	ARL2032	0.875 to 1.375 1.375 to 1.875 1.875 to 2.500	APL20365 APL20367 APL20368	APRL20325 APRL20327 APRL20328
3-wire, 4-pole	1½ 2 2½	AREAL20425 AREAL20426 AREAL20427	ARL2042	0.875 to 1.375 1.375 to 1.875 1.875 to 2.500	APL20465 APL20467 APL20468	APRL20425 APRL20427 APRL20428

### **Ordering Information - Crimp/Solder Termination:**

Receptable Assembly with AJ Back Boxes and Angle Adapters Receptacle Housings only

Angle Adapters			neceptacie no	Jusings only				
Description	Hub Size (In.)	Cat. #	Cat. #	Cable Dia.	Plug Cat. #	Connector Cat. #		
Style 2 – Wire We	Style 2 – Wire Well Takes 0.56" Maximum Conductor Size							
2-wire, 3-pole	1½ 2 2½	AREA20325 AREA20326 AREA20327	AR2032	0.875 to 1.375 1.375 to 1.875 1.875 to 2.500	AP20365 AP20367 AP20368	APR20325 APR20327 APR20328		
3-wire, 4-pole	1½ 2 2½	AREA20425 AREA20426 AREA20427	AR2042	0.875 to 1.375 1.375 to 1.875 1.875 to 2.500	AP20465 AP20467 AP20468	APR20425 APR20427 APR20428		
Style 2 - Wire We	ell Takes 0.7	5" Maximum Condu	ıctor Size			_		
2-wire, 3-pole	1½ 2 2½	AREA203225 AREA203226 AREA203227	AR20322	0.875 to 1.375 1.375 to 1.875 1.875 to 2.500	AP203610 AP203611 AP203612	APR203210 APR203211 APR203212		
3-wire, 4-pole	1½ 2 2½	AREA204225 AREA204226 AREA204227	AR20422	1.375 to 1.875 1.875 to 2.500	AP204611 AP204612	APR204211 APR204212		

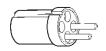


## **Arktite® Heavy Duty Circuit Breaking Receptacle Assemblies**

200 A, 600 VAC/250 VDC, 50<sup>+</sup> - 400 hertz



### **200A Replacement Parts**











	Receptacle Interior		Plug I	Plug Interior		ining Shoe
Config.	.56 wire well Cat. #	.75 wire well Cat. #	.56 wire well Cat. #	.75 wire well Cat. #	.56 wire well Cat. #	.75 wire well Cat. #
200A Stand	lard and S4					
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
200A ST22	and S4 S22					
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 3W 3P	AP:0401965
2W 3P 3W 4P	AP:0401964

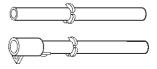


**Rec Spring Door** 

AR:0401502-2
AR:0401502-1

### **Replacement Pin & Sleeve Contacts:**

	Rece	Receptacle		lug
Туре	Cat. #	Cat. #	Cat. #	Cat. #
200A Standard & S4	.56 wire well	.75 wire well	.56 wire well	.75 wire well
Phase Contact	0490339	0490340	0490319	0490320
Ground Contact	0490343	0490344	0490323	0490324
200A S22 & S4 S22	.56 wire well	.75 wire well	.56 wire well	.75 wire well
Phase Contact	0490351	0490352	0490355T	0490356
Ground Contact	0490347	0490348	0490359	0490360
200A Mechanical Lug	.687 wire well		.687 wire well	
Phase Contact	0403688		0403678	
Ground Contact	0403687		0403677	





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



### ₽

## **Arktite® Heavy Duty Receptacle Assemblies**

### 400 A, 600 VAC/250 VDC, 50-400 hertz

## 1P ....

#### **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 1251. Illustration shows 3 blank plates and 1 hub plate.
- 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

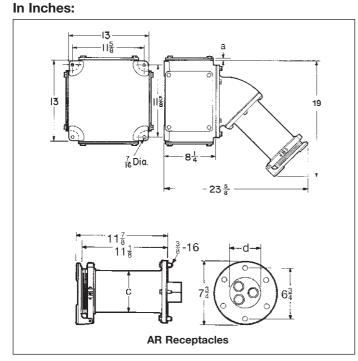
### **Standard Material and Finishes:**

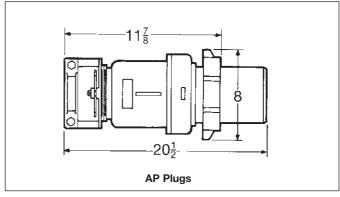
Stainless steel wire braid – Natural

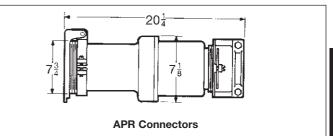
### **Ordering Information:**

Plug Cable Range	Grip Range	Nominal Grip Length–Inches	Grip Cat. #
1.375 to 1.875	1.375 to 1.625 1.625 to 1.875	-	K163 K188
1.875 to 2.500	1.875 to 2.000 2.000 to 2.250	10 11³/ <sub>4</sub>	K200 K225

### **Dimensions**







#### **AREX Assemblies**

Description	а	No. Poles	С	d
With blank hub plate	5/16	3	53/16	43/16
With hub plate max.	45/8	4	5 <sup>13</sup> / <sub>16</sub>	411/16



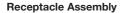
### Arktite® Heavy Duty Receptacle Assemblies

herproof

400 A, 600 VAC/250 VDC, 50-400 hertz

### **Ordering Information:**







Receptacle



Mating Plug



**Mating Connector** 

With AJ Back Boxes and Angle Adapters‡		Receptacle Housings only				
Description	Hub Size (In.)	Spring Door Cover Cat. #	Spring Door Cat. #	Cable Dia.	Plug Cat. #	Connector Cat. #
Style 2 – Wire Well Takes .84" Maximum Conductor Size						
2-wire, 3-pole	2 2¹/₂ 3	AREX40326 AREX40327 AREX40328	AR4032	1.375 to 1.875 1.875 to 2.500	AP40367 AP40368	APR40327 APR40328
3-wire, 4-pole	2 <sup>1</sup> / <sub>2</sub> 3	AREX40427 AREX40428	AR4042	1.375 to 1.875 1.875 to 2.500	AP40467 AP40468	APR40427 APR40428
Style 2 - Wir	e Well Tak	es 1.25" Maximu	m Conductor Size			
2-wire, 3-pole	3 3¹/ <sub>2</sub> 4	AREX403228 AREX403229 AREX4032210	AR40322	2.500 to 3.000 3.000 to 3.500	AP403610 AP403612	APR403210 APR403212
3-wire, 4-pole	4 5	AREX4042210 AREX4042212	AR40422	2.500 to 3.000 3.000 to 3.500	AP404610 AP404612	APR404210 APR404212

# ENR Value Series Dead Front Interlocked Circuit Breaking Receptacles

Cl. I, Div. 1 & 2, Groups B†, C, D Cl. II, Div. 1 & 2, Groups F, G Cl. III NEMA 3, 7BCD, 9FG, 12 Explosionproof Dust-Ignitionproof Raintight Wet Locations



### **ENP Plugs**

### **Applications:**

ENR receptacles and ENP plugs are used:

- With portable electrical equipment such as compressors, tools, lighting systems, and similar devices
- In areas made hazardous by the presence of flammable vapors and gases or combustible dusts
- Wherever portable electrical equipment is likely to be transferred from hazardous to non-hazardous areas
- In damp and corrosive areas
- When power requirements do not exceed 20 amperes
- Where general purpose application is required

### Features:

- Ark•Gard 2 receptacle incorporates three spring-loaded slide keys that prevent the receptacle face plate from being rotated until the ENP plug is fully inserted into the receptacle. To make the connection, the ENP plug is fully inserted, and the receptacle face moved inward by pushing the plug forward. The plug is then rotated, closing the circuit. As rotation begins, the plug becomes locked in the receptacle and cannot be accidentally disengaged. In making or breaking the circuit, any resulting electrical arc is confined in the factory-sealed chamber.
- Factory-sealed chamber encloses the potential arcing components between two explosionproof threaded joints.
   These threads are specially coated to guarantee freedom of movement, which ensures on-off action. No additional seals are required.
- One piece molded gasket seals cover plate and ENP plug when plug is inserted, providing full environmental protection at the receptacle face.
- Top-hinged cover design with 45° downward angle provides superior protection in damp, wet, and dirty locations.
- Molded-in contact design provides superior interior contact reliability.
- ENP plugs can be used in non-hazardous areas with standard U-ground NEMA/EEMAC configuration 5 and 6 receptacles, eliminating the need for two separately equipped portable units of the same type. The ENR receptacle will not accept standard NEMA/ EEMAC configuration plugs.
- ENP plug handle body is designed with an internal cord strain relief mechanism and a cable sealing grommet which will accept various cable diameters.
- Field assembly is accomplished with standard tools.
- Use standard EDS back boxes

## Certifications and Compliances:

• NEC:

Class I, Division 1 and 2, Groups B†, C, D

Class II, Division 1 and 2, Groups F, G Class III

- ANSI/UL Standard 1010
- NEMA/EEMAC 3, 7BCD, 9FG
- · CEC:

Class I, Division 1 and 2, Groups B, C, D

Class II, Division 1 and 2, Group G Class III

### **Standard Materials:**

- Receptacle housing, spring door and plug body – die cast copper-free aluminum
- Interiors: receptacle Krydon® fiberglass-reinforced polyester material; plugs – nylon 100
- Contacts: receptacle blade brass; receptacle switch – silver; plug – brass
- Receptacle cover hinge pin and spring stainless steel
- Receptacle gasket neoprene
- Plug bushing neoprene

### **Standard Finishes:**

- Copper-free aluminum aluminum acrylic paint
- Brass natural

### **Electrical Rating Ranges:**

- · Receptacles:
  - 20 amperes; 125 VAC and 250 VAC, 50-400 hertz
- Pluas:

15 amperes; 125 VAC and 250 VAC, 50–400 hertz

20 amperes; 125 VAC and 250 VAC, 50–400 hertz

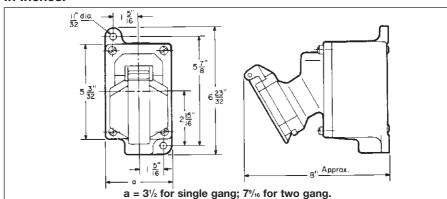
### **Grounding:**

 NEC Article 501 and CEC Section 18 requires that metal frames or exposed non-current-carrying metal parts of portable devices used in hazardous locations be grounded through an extra conductor in the portable cord. ENR Receptacles and ENP Plugs are provided with an extra grounding pole.

**CAUTION:** To reduce the risk of ignition of hazardous atmospheres, do not use plugs or receptacles in Class II, Group F locations that contain electrically conductive dusts.

### **Dimensions**

#### In Inches:







### **ENR Value Series Dead Front Interlocked Circuit Breaking Receptacles**

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

Explosionproof **Dust-Ignitionproof** Raintight Wet Locations



### **ENP Plugs**

### **Ordering Information:**









					0				
	20 A Receptacle Rating	Description	Hub Size	Single Gang* Receptacle Assembly Cat. #	Two Gang** Receptacle Assembly Cat. #	Receptacle† Unit Only Cat. #	NEMA Config.	15 A Plug‡ Cat. #	NEMA Config.
20 A	20 Amp 125 Volt	Dead End  Through Feed	3/ <sub>4</sub> "	ENR21201 ENRC21201	ENR22201 ENRC22201	ENR5201	() G	ENP5201	<b>6</b> 6
<b>(F)</b>	20 Amp	Dead End	3/4"	ENR21202	ENR22202	ENR6202	5-20R	ENP6202	5-20P
	250 Volt	Through Feed	3/4"	ENRC21202	ENRC22202	ENRO202	6-20R	ENP6202	6-20P

Note: 15A with copper-free aluminum EDS, EDSC back boxes. 20A with Feraloy® iron alloy EDS, EDSC back boxes.



<sup>†</sup>Receptacle units alone (i.e. ENR5201) are not suitable for Class I, Group B.
\*Single gang assemblies purchased with an EDS back box are suitable for Class I, Group B.
\*Dual gang assemblies purchased with an EDS back box are suitable for Class I, Group C, D only. For Class I, Group B rating, add the letter B to the Cat. No. Example: ENRB22201. Seals must be installed within 1½" of each conduit opening.

‡ENP Plugs use #12 or #14 AWG type S, SO, ST or STO cord with range of .540 to .635 inches diameter.

# FSQC Arktite® Dead Front Interlocked Receptacles and Switches

**APJ/NPJ Arktite Plugs** 

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

Explosionproof
Dust-Ignitionproof
Raintight
Wet Locations



### **Applications:**

FSQC dead front switched interlock receptacles are used:

- To supply power to portable electrical equipment such as hand lamps, lighting systems, power tools, conveyors, welders and similar equipment.
- In areas which are hazardous due to the presence of flammable vapors or gases and combustible dusts.
- In damp, wet or corrosive locations.
- Indoors or outdoors at petroleum refineries, chemical and petrochemical plants and facilities for processing and handling grain, flour and starch.

#### **Features:**

- Compatible with Arktite® APJ aluminum and NPJ Krydon® plugs
- Switch cannot be turned "ON" until plug is fully inserted and rotated
- Plug cannot be withdrawn under load
- Cover cannot be removed when switch is "ON"
- Satisfies OSHA lockout tagout requirement
- Smallest mounting footprint for interlocks

### Certifications and Compliances:

- NEMA 3, 7BCD, 9FG, 12
- NEC/CEC:
  - Class I, Division 1 & 2, Groups B, C, D Class I, Zone 1, Group IIB + Hydrogen Class II, Division 1 & 2, Groups F, G Class III
- ANSI/UL Standards: 1010 UL Listed
- CSA Standards: C22.2 No. 30 cUL Listed & C22.2 No. 159

#### **Materials:**

- Enclosure copper-free aluminum
- Cover and spring door copper-free aluminum
- Insulator Krydon®
- Contacts brass



### **Options:**

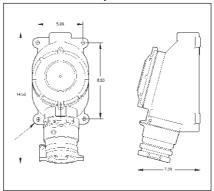
Description	Suffix
Special polarity, receptacle	
interior rotated 221/2°	S4

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

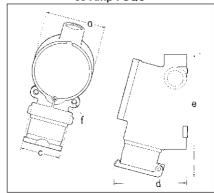
- Plugs listed for FSQC receptacles on 1043 are standard APJ/NPJ plugs. Other standard APJ/NPJ of the same rating, style and number of poles may be used with FSQC receptacles as well as with DBR, EBBR, EPC and EPCB receptacles listed in Section 2P and 4P.
- As a result, portable equipment suitable for the location and equipped with the proper plug can be used with AR series receptacles for non-hazardous areas, EBBR, EPC, EPCB, and FSQC receptacles for Class I hazardous locations; DBR receptacles for Class II hazardous locations.

### Dimensions In Inches:

#### 30 Amp FSQC







### **Dimensions**

	Maximum Dimensions					
Cat. #	а	С	d	е	f	
FSQC2320, 3320						
FSQC2430, 3430	43/4	31/8	53/4	93/4	3/8	
FSQC2390, 3390						



# FSQC Arktite® Dead Front Interlocked Receptacles and Switches

CI. I, Div. 1 and 2, Groups B, C, D CI. II, Div. 1 and 2, Groups F, G CI. III

NEMA/EEMAC 3, 7BCD, 9FG, 12

Explosionproof
Dust-Ignitionproof
Raintight
Wet Locations



**APJ/NPJ Arktite Plugs** 

### FSQC Receptacles With Spring Door Through Feed Hubs

### **Horsepower Rating:**

		Single	Phase	
Amps	120V	240V	480V	600V
30A	2	5	71/2	71/2
60A	_	10	25	30
	L	Three	Phase	
Amps	120V	Three 240V	Phase 480V	600V
Amps 30A	<b>120V</b>			<b>600V</b>



### **Ordering Information:**

Amps	Hub	Config.	Description	Cat. #	Matching Plug
	3/4"	2W3P	2-Pole Switch	FSQC2320	APJ3385
004	74	3W4P	3-Pole Switch	FSQC2430	APJ3485
30A	1"	2W3P	2-Pole Switch	FSQC3320	APJ3385
		3W4P	3-Pole Switch	FSQC3430	APJ3485
60A	11/2"	2W3P	2-Pole Switch	FSQC5630	APJ6385
OUA	1 72	3W4P	3-Pole Switch	FSQC5640	APJ6485

### **FSQC** for Use with Magnetic Motor Starters or Contactors

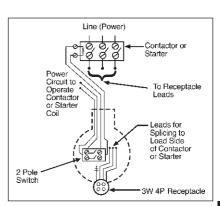
FSQC units listed below operate in the same way as standard units but are intended *only for* use with magnetic motor starters or contactors (see Wiring Diagram 1).

Receptacles have leads for splicing to conductors from the load side of contactor. The switch actuated by the plug is wired into the starter or contactor coil circuit and controls only this circuit. The starter or contactor is energized only when the plug is fully inserted and rotated to close the switch. Since the plug is inserted or withdrawn only when the switch is open, the circuit cannot be made or broken under the load.

Plugs used are standard APJ units and special polarity units listed are recommended where interchange with devices for other wiring systems is possible.

## FSQC Receptacles With Spring Door Through Feed Hubs

No. of Poles	Hub Size	Receptacle Cat. #	Cable Dia.	Mating Plug Cat. #			
Standard Configuration							
3W, 4P	3/4	FSQC2390	0.39-1.20	APJ3485			
3W, 4P	1	FSQC3390	0.55-0.70	NPJ3483			
3W, 4P	1		<b>J</b> 0.70-0.85	NPJ3484			
Special Polarity Configuration							
3W, 4P	3/4	FSQC2390 S4	0.39-1.20	APJ3485 S4			
3W, 4P	1	FSQC3390 S4	0.55-0.70	NPJ3483 S4			
			<b>J</b> 0.70-0.85	NPJ3484 S4			



Wiring Diagram 1
FSQC2390 and 3390 only



## 100 Amp FSQ Dead Front Interlocked

CI. I, Div. 1 and 2, Groups B, C, D CI. II, Div. 1 and 2, Groups F, G CI. III NEMA 3, 3R, 4, 4X\*, 7BCD, 9FG, 12 Explosionproof NEMA 4 Watertight



### **Applications:**

- To supply power to portable or fixed electrical equipment such as welders, pumps, motors, machine tools, conveyors, oil rigs, mixers, grain elevators, petroleum refineries, chemical and petrochemical plants
- In hazardous areas containing flammable vapors or gases and combustible dusts
- In damp, wet or hosedown environments
- · In highly corrosive locations

#### **Features:**

- NEMA Type 4 watertight
- · Suitable for Group B
- · Compact housing
- · Simple operation
- Compatible with Arktite® APJ aluminium and NPJ Krydon® plugs
- · H.P.-rated enclosed switch
- 4 mounting feet can be rotated for flexibility in positioning to surface
- Wiring channel provided under switch for easy wire routing to terminals
- Dual bottom-feed hubs and one top hub for convenient feed-through installation
- Bread-loose fork lugs case in place for easy removal of cover

### Certifications and Compliances:

- NEMA 3, 3R, 4, 4X\*, 7BCD, 12
   Class I, Divisions 1 and 2, Groups B, C, D
   Class I, Zone 1, Group IIB + H<sub>2</sub>
   Class II, Divisions 1 and 2, Groups F, G
   Class III
- ANSI/UL Standards: 1010 and 98 UL Listed
- cUL Listed, CSA Standard C22.2 No. 30, C22.2 No. 159

#### **Materials:**

- Body copper-free aluminum
- Cover copper-free aluminum
- Locking collar Feraloy® iron alloy
- Insulator Krydon® material
- Contacts brass

### **Options:**

## Description Suffix • Special polarity – receptacle interior rotated 22½° to right.........S4 (example: FSQC61040 S4)

 NEMA 4X – epoxy powder coated S752 (example: FSQC61040 S752)

### **Safety First:**

- Power cannot be turned "on" until plug is fully inserted and Uni-Loc collar is rotated
- When Uni-Loc collar is in "on" position, plug is locked in place to prevent disengagement under load
- Cover cannot be removed while switch is "on"
- Cover-Loc<sup>™</sup> design prevents switch from being turned "on" while cover is removed
- Uni-Loc collar aligns with lug on housing to permit OSHA lockout/tagout in the "off" position

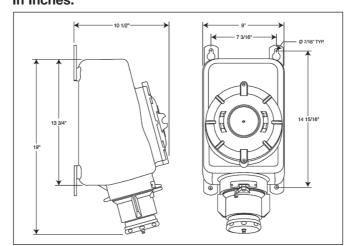
### **Electrical Rating:**

• 100A, 600VAC

### **Ordering Information:**

Rating	Config.	Hub Size	HP Rating	Cat. #
100A, 600 VAC	3W4P	2"	50 HP @ 600V, 480V	FSQC61040

### Dimensions In Inches:





<sup>\*</sup>NEMA 4X when ordered with suffix S752.