

High amperage plugs & receptacles

PF and PFQ Series plugs and receptacles are engineered for use in high amperage applications where routine plug insertion and high reliability are required. They are ideal for power supply applications in mining, petroleum platform, ship to shore, power generation system, shipyard and other similar harsh environments.

Main Advantages

- ▼ Durable in harsh environments
- ▼ Safety features provide maximum protection
- Easy plug insertion and removal



PFQ300 devices are differentiated from similarly rated **PF300** devices in their smaller size, lighter weight and different pilot contacts.

Product Features

Auxiliary Pilot Contacts

Provided for use with control circuits. They close after and open before the phase contacts.

Mechanical Locking System

Ensures safety and watertightness. Mechanical lock secures the inlet to the receptacle and engages the pilot contacts.

Casing

Epoxy/powder coated aluminum material offers great resistance to harsh environments.

Silver Pressure Contacts

Silver material and self-cleaning action provides maximum conductivity and performance in dirty and corrosive conditions.

Listings

Category

Plugs and Receptacles

Safety Shutter

Protects recessed female contacts and inhibits user access to live parts.

CSA

C22.2 No. 182.1*

General Ratings

Amperage	300 to 600A
Voltage ⁺	1000 VAC*, 1000 VDC Max
Frequency	50-400 Hz
Environmental	IP66+IP67
Temperature	min -40°F/max 140°F

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600 VAC max for PFQ devices
UL listings do not apply above 600 VAC and 250 VDC

PFQ300 devices are differentiated from similarly rated **PF300** devices in their smaller size, lighter weight and different pilot contacts.

Listings only apply to 300A and 400A devices at 600V or less

UL

UL 1682*

Highlighted Feature Pilot Contacts

Ī.		PHASE	LINE
PF/PFO	PF/PFO	A	CONTACTOR
TO B INLET/PLUG	RECEPTACLE/ CONNECTOR	в	OR BREAKER WITH UNDER VOLTAGE
	FEMALE PILOT	сс	
JUMPER 2 PILOT CONTACTS TO COMPLETE CIRCUIT NOTE: ROTATE RECEPTACLE LOCKING CAM TO ENGAGE PILOTS			PILOT CIRCUIT POWER SWITCH ETC.
		PILOT CIRCUIT	

Line diagram of typical PF pilot control circuit

Category	PF	PFQ
# Contacts	4	8
Pilot Amperage	10A standard duty	2A pilot duty
Interlocking Type	Mechanical	Mechanical
Terminal Type	Screw	Solder/crimp

 Notes: The mechanical locking of the plug to the receptacle, via the rotation of a cam, closes the pilot contacts.
Failure to use a pilot/relay system can create an electrical shock hazard.

Operating Instructions



PF devices are preferred for the ease of operation relative to pin and sleeve devices.



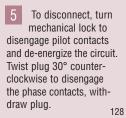
Insert the plug into the receptacle – this is done with little resistance relative to competitive devices.



Twist plug approximately 30° clockwise to engage the phase contacts and make unit watertight.



Turning the mechanical lock secures the inlet to the receptacle and engages the pilot contacts which energize the circuit.



PF/PFO



PF/PFQ - 300A - 600A High Ampacity Plugs & Receptacles

Ratings

- Voltage PF = 1000 VAC*, 250 VDC PFQ = 600 VAC, 250 VDC
- Current Interruption Capability Not for current interrupting
- Environmental Ratings IP66+IP67
- Temperature Range Min -40°F/Max 140°F See pg 210 for temps below -15°F.
- Wiring Capacity PFQ = 4/0 AWG to 350 MCMPF = 250 MCM to 600 MCM
- Pilot Contacts PFQ = 8PF = 4
- Listings UL*, CSA* Listings apply only to 300A & 400A devices at 600V or less



Voltage	Polarity	PFQ300**	PF300
		110000	11000
277V	1P+N+G	47-34045	49-34045
347V	1P+N+G	47-34145	49-34145
480V	2P+G	47-34042	49-34042
480V	2P+N+G	47-34046	49-34046
480V	3P+G	47-34043	49-34043
480V	3P+N+G	47-34047	49-34047
600V	2P+G	47-34142	49-34142
600V	2P+N+G	47-34146	49-34146
600V	3P+G	47-34143	49-34143
600V	3P+N+G	47-34147	49-34147
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Inlet/Cap (male)

Voltage	Polarity	Pa PFQ300**	rt # PF300
277V	1P+N+G	47-38045	49-38045
347V	1P+N+G	47-38145	49-38145
480V	2P+G	47-38042	49-38042
480V	2P+N+G	47-38046	49-38046
480V	3P+G	47-38043	49-38043
480V	3P+N+G	47-38047	49-38047
600V	2P+G	47-38142	49-38142
600V	2P+N+G	47-38146	49-38146
600V	3P+G	47-38143	49-38143
600V	3P+N+G	47-38147	49-38147

Other voltage configurations are available – contact customer service at 800.433.7642. ** PFQ300 devices are differentiated from similarly rated PF300 devices in their smaller size, lighter weight and different pilot contacts.

Main Options

Receptacle with no cap

Recept # - 48

With no cap



Inlet with

With no cap

no cap

Inlet # - 48

Voltage

277V

347V

480V

480V

480V

480V

600V

600V

600V

600V

Polarity

1P+N+G

1P+N+G

2P+G

2P+N+G

3P+N+G

Notes: • Metal caps are provided as standard with male and female devices.

· Heat shrink wrap is provided with each inlet and receptacle to provide insulation between terminals.

PF/PFQ devices are not intended for connection or disconnection under load. To prevent live making or breaking electrical interlocking is required.







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Inlet/Cap (male)

400A / 600A

For applications above 400A, please consult factory regarding NEC recommended conductor sizing.

600V

Voltage	Polarity	Part PF400
277V	1P+N+G	49-48045 4
347V	1P+N+G	49-48145 4
480V	2P+G	49-48042
480V	2P+N+G	49-48046
480V	3P+G	49-48043
480V	3P+N+G	49-48047

3P+N+G

3P+G	49-44043	49-64043
3P+N+G	49-44047	49-64047
2P+G	49-44142	49-64142
2P+N+G	49-44146	49-64146
3P+G	49-44143	49-64143

Part #

49-44045 49-64045

49-44145 49-64145

49-44042 49-64042

49-44046 49-64046

49-44147 49-64147

PF600

PF400

oltage	Polarity	Pa PF400	rt # PF600
277V	1P+N+G	49-48045	49-68045
347V	1P+N+G	49-48145	49-68145
480V	2P+G	49-48042	49-68042
480V	2P+N+G	49-48046	49-68046
480V	3P+G	49-48043	49-68043
480V	3P+N+G	49-48047	49-68047
600V	2P+G	49-48142	49-68142
600V	2P+N+G	49-48146	49-68146
600V	3P+G	49-48143	49-68143

49-48147 49-68147

Installation Accessories

Handles



Hub Sizes

XX (Suffix #)

-20 -25

-30

-35

-40

Fitting Size 2" NPT

2.5" NPT

3.5" NPT

NPT

NPT

3"

4"

Inlet/Receptacle Size	Cable Range	Metal Straight Handle	Metal 90° Angled Handle
DEO200	Costable	47 04010 VVV	47 04010 VVV
PFQ300	See table	47-3A013-XXX	47-3A913-XXX
PF300	See table	49-3A013-XXX	49-3A913-XXX
PF400	See table	49-4A013-XXX	49-4A913-XXX
PF600	See table	49-6A013-XXX	49-6A913-XXX

Junction Boxes



Inlet/Receptacle Size	Hub Sizes	Metal Junction Box
PFQ300	See table	MB40PFQ-XX
PF300	See table	MB40-XX
PF400	See table	MB40-XX
PF600	See table	MB40-XX

Miscellaneous Accessories



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Inlet/Receptacle Size	Inlet Replacement Metal Cap	Receptacle Replacement Metal Cap
PFQ300	47-3A126	47-3A925
PF300	49-3A126	49-3A925
PF400	49-4A126	49-4A925
PF600	49-6A126	49-6A925

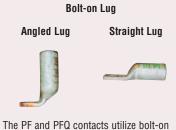
Weights

Part	PF	PFQ
Inlet	15 lbs	9 lbs
Receptacle	25 lbs	12 lbs
Angled Handle	15 lbs	12 lbs
Straight Handle	10 lbs	10 lbs
Junction Box	45 lbs	45 lbs
Сар	3 lbs	3 lbs

Cable Ranges

XXX (Suffix #)	Cable Range	XXX (Suffix #)	Cable Range
-200	2.000 - 2.125	-300	2.750 - 3.000
-225	2.125 - 2.250	-312	3.000 - 3.125
-237	2.250 - 2.375	-335	3.125 - 3.350
-250	2.375 - 2.500	-350	3.350 - 3.400
-275	2.500 - 2.750	-	-

Highlighted Feature



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The PF and PFQ contacts utilize bolt-on lug type wire terminals, which require a compression lug with a 9/16" or 5/8" hole. The angled handle requires straight lugs; the straight handle requires 90° lugs. Lugs are not included.

Ordier Example A typical order should include an inlet part number, a receptacle part number AND the matching handles, angles or other required accessories. Male Inlet with Handle (Plug) 47-38047 + 47-3A913-200 Female Receptacle with Junction Box 47-34047 + MB40-20

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