

PF/PFQ High Amperage Plug and Receptacle



Main Advantages

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



Watch the PF video and other product videos at meltric.com/video

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- ▶ PF/PFQ 300-600 A p. 125
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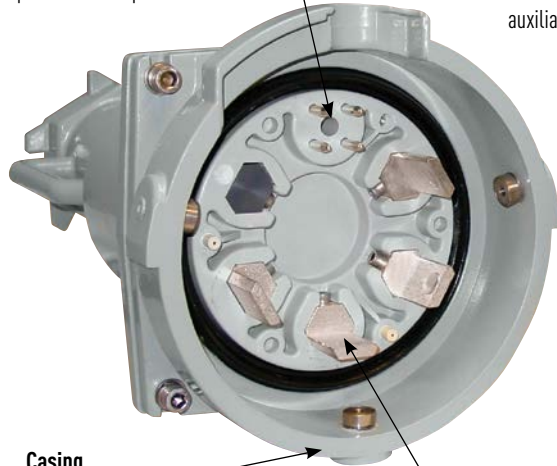


PFQ300 devices are differentiated from similarly rated **PF300** devices in their smaller size, lighter weight and additional pilot contacts.

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 auxiliary/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.

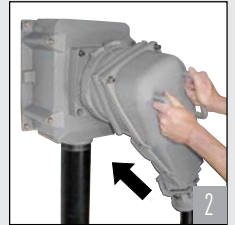
Safety Shutter

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

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 disconnects the inlet to the receptacle and de-energizes the pilot contacts which energize the circuit.

5 To disconnect, turn mechanical lock to disengage pilot contacts and de-energize the circuit. Twist plug 30° counterclockwise to disengage the phase contacts, withdraw plug.

HIGH AMPACITY

General Ratings

Amperage	300 to 600 A
Voltage*	600 VAC, 250 VDC Max
Frequency	50-60 Hz (not UL at 50 Hz)
Environmental	IP66/IP67
Temperature	min -40°F/max 140°F

* 600 VAC max for PFQ devices

* UL listings do not apply above 600 VAC and 250 VDC.

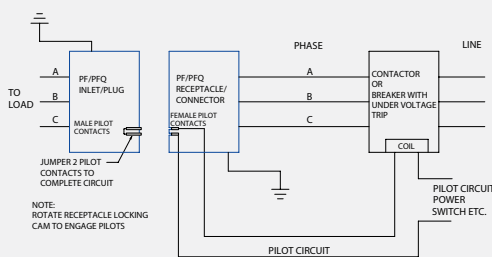
Listings

Category	UL	CSA
Plugs and Receptacles	UL 1682	C22.2 No. 182.1

* Listings only apply to 300 A and 400 A devices at 600V or less. NOM ratings available upon request.

Highlighted Feature

Pilot Contacts



Line diagram of typical PF pilot control circuit

For multiple devices in a parallel circuit, contact factory for example control circuit diagrams.

Category	PF	PFQ
# Contacts	4	8
Pilot Amperage	10 A standard duty	5 A @ 240VAC
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.

PF/PFQ High Ampacity Plugs & Receptacles

300 A - 600 A

UL/CSA Ratings

- Max Amperage & Voltage**
 PFQ300 = 300 A, 600 VAC, 250 VDC
 PF300 = 300 A, 600 VAC, 250 VDC
 PF400 = 400 A, 600 VAC, 250 VDC
 PF600 = 600 A, 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 266 for temps below -15°F.
- Wiring Capacity**
 PFQ = 2 AWG to 600 MCM
 PF = 2 AWG to 600 MCM
- Certifications**
 UL 1682, CSA 182.1
 Listings do not apply to PF600.

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

! Don't forget to add installation accessories to your order

Receptacle/Cap (female)



PFQ shown

Inlet/Cap (male)



PFQ shown

North American Configurations

Voltage	Polarity	Part #		Part #	
		PFQ 300**	PF300	PFQ 300**	PF300
277 V	1P+N+G	47-34045	49-34045	47-38045	49-38045
347 V	1P+N+G	47-34145	49-34145	47-38145	49-38145
480 V	2P+G	47-34042	49-34042	47-38042	49-38042
277 480 V	2P+N+G	47-34046	49-34046	47-38046	49-38046
480 V	3P+G	47-34043	49-34043	47-38043	49-38043
277 480 V	3P+N+G	47-34047	49-34047	47-38047	49-38047
600 V	2P+G	47-34142	49-34142	47-38142	49-38142
347 600 V	2P+N+G	47-34146	49-34146	47-38146	49-38146
600 V	3P+G	47-34143	49-34143	47-38143	49-38143
347 600 V	3P+N+G	47-34147	49-34147	47-38147	49-38147

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

Main Options Part

Receptacle with no cap	Recept # - 48
Receptacle with lockout hole	Recept # - 843
Inlet with no cap	Inlet # - 48
Inlet with lockout hole	Inlet # - 843

Notes: • Metal caps are provided as standard with inlets and receptacles.

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

• **Lugs are not included.** 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.

! See pages 243-252 for detailed information on these options

Receptacle/Cap (female)



PF shown

Inlet/Cap (male)




PF shown


North American Configurations

Voltage	Polarity	Part #		Part #	
		PF400	PF600	PF400	PF600
277 V	1P+N+G	49-44045	49-64045	49-48045	49-68045
347 V	1P+N+G	49-44145	49-64145	49-48145	49-68145
480 V	2P+G	49-44042	49-64042	49-48042	49-68042
277 480 V	2P+N+G	49-44046	49-64046	49-48046	49-68046
480 V	3P+G	49-44043	49-64043	49-48043	49-68043
277 480 V	3P+N+G	49-44047	49-64047	49-48047	49-68047
600 V	2P+G	49-44142	49-64142	49-48142	49-68142
347 600 V	2P+N+G	49-44146	49-64146	49-48146	49-68146
600 V	3P+G	49-44143	49-64143	49-48143	49-68143
347 600 V	3P+N+G	49-44147	49-64147	49-48147	49-68147


INSTALLATION ACCESSORIES – SIZE C & F

HANDLES

METAL STRAIGHT HANDLE		Angle	Part #
	PFQ300	0°	47-3A013-XXX
	PF300	0°	49-3A013-XXX
	PF400	0°	49-4A013-XXX
	PF600	0°	49-6A013-XXX

METAL ANGLE HANDLE		Angle	Part #
	PFQ300	90°	47-3A913-XXX
	THREADED CLAMP w/CABLE RANGE		XXX (Suffix #)


	2.000 - 2.125"	-200
	2.125 - 2.250"	-225
	2.250 - 2.375"	-237
	2.375 - 2.500"	-250
	2.500 - 2.750"	-275
	2.750 - 3.000"	-300
	3.000 - 3.125"	-312
	3.125 - 3.350"	-335


NPT ADAPTER		NPT	NXX (Suffix #)
	2.0"	-N20	
	2.5"	-N25	
	3.0"	-N30	

Threaded Adapter For available cord grips, see page 169

90° ANGLED METAL HANDLE W/BOLT-ON CLAMP		ANGLE	Part #
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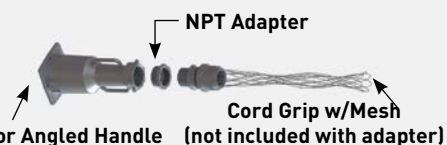
	PF300/400/600	90°	49-6A913-XX
	BOLT-ON CLAMP W/CABLE RANGE		XX (Suffix #)

	1.575 - 1.968"	-50
	1.968 - 2.362"	-60
	2.362 - 2.756"	-70
	2.756 - 3.150"	-80
	3.150 - 3.543"	-90

NPT ADAPTER		NPT	NXX (Suffix #)
	2.0"	-N20	
	2.5"	-N25	
	3.0"	-N30	


Bolt-on Adapter For available cord grips, see page 169

Accessory Spotlight - Adapter



The adapter accessory allows the user to connect a third-party cord grip to the PF/PFQ handle.

BOXES


METAL BOX		Part #
	PFQ300	MB40PFQ-XX
	PF300	MB40-XX
	PF400	MB40-XX
	PF600	MB40-XX

This box is a heavy-duty powder coated aluminum back box with removable cover. Conduit entry hub up to 4" can be ordered on one or both ends or even on the back of the enclosure. Multiple hubs and sizes can be ordered for installs with parallel entry's on one end of the box.

HUB SIZES	NPT	XX (Suffix #)
	2.0"	-20
	2.5"	-25
	3.0"	-30
	3.5"	-35
	4.0"	-40

MISC. ACCESSORIES

INLET METAL CAP		Part #
	PFQ300	47-3A126
	PF300	49-3A126
	PF400	49-4A126
	PF600	49-6A126

RECEPTACLE METAL CAP		Part #
	PFQ300	47-3A925
	PF300	49-3A925
	PF400	49-4A925
	PF600	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
Cap	12 lbs	3 lbs

PF/PFQ High Ampacity Plugs & Receptacles

300 A - 600 A

Straight Barrel Lugs

! MELTRIC recommends using lugs with tangs that do not exceed 1 3/4".



! Lugs are not included with PF/PFQ devices - order separately

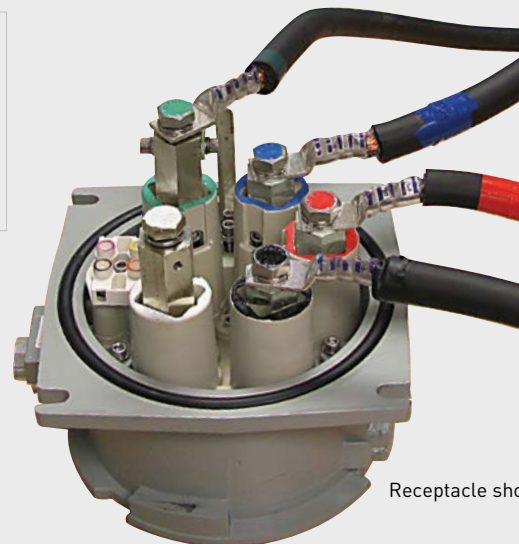
Part #	Wire Size Class B, C	Wire Size (Flex) Class G, H, I, K, M, DLO
PFLUG1	1 AWG	2 AWG
PFLUG10	1/0 AWG	1 AWG
PFLUG20	2/0 AWG	1/0 AWG
PFLUG30	3/0 AWG	2/0 AWG
PFLUG40	4/0 AWG	3/0 AWG
PFLUG250	250 kcmil	4/0 AWG
PFLUG300	300 kcmil	250 kcmil (G, H)
PFLUG350	350 kcmil	250/262 kcmil (I, K, M, DLO)
PFLUG400	400 kcmil	300/313 kcmil
PFLUG500	500 kcmil	350/373 kcmil
PFLUG600	600 kcmil	400/444 kcmil
PFLUG650	650 kcmil	500/535 kcmil

Application Note

Installation Accessory: Angled Handle



Straight Barrel Lugs are utilized on PF/PFQ devices along with angled handles.



H Apply heat shrink over lugs at terminals (supplied but not shown).

Receptacle shown

90° Bent/Angle Lugs



! Lugs are not included with PF/PFQ devices - order separately

! MELTRIC recommends using lugs with tangs that do not exceed 1 3/4".

Part #	Wire Size Class B, C	Wire Size (Flex) Class G, H, I, K, M, DLO
PFLUG1-90	1AWG	2 AWG
PFLUG10-90	1/0 AWG	1 AWG
PFLUG20-90	2/0 AWG	1/0 AWG
PFLUG30-90	3/0 AWG	2/0 AWG
PFLUG40-90	4/0 AWG	3/0 AWG
PFLUG250-90	250 kcmil	4/0 AWG
PFLUG300-90	300 kcmil	250 kcmil (G, H)
PFLUG350-90	350 kcmil	250/262 kcmil (I, K, M, DLO)
PFLUG400-90	400 kcmil	300/313 kcmil
PFLUG500-90	500 kcmil	350/373 kcmil
PFLUG600-90	600 kcmil	400/444 kcmil
PFLUG700-90	700 kcmil	500/535 kcmil

Application Note

Installation Accessory: Straight Handle



90° Bent Lugs are utilized on PF/PFQ devices along with straight handles.

HIGH AMPACITY



Inlet shown

H Apply heat shrink over lugs at terminals (supplied but not shown).

