

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

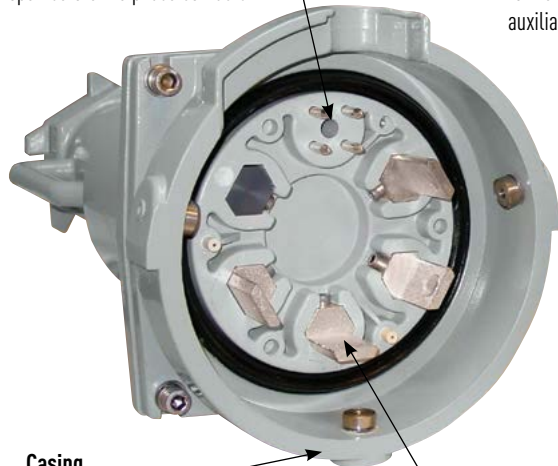
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 **PFQ300** devices are differentiated from similarly rated **PF300** devices in their smaller size, lighter weight and additional pilot contacts.

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.

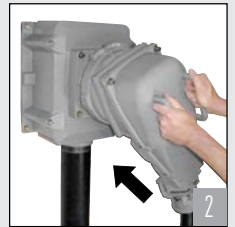
Safety Shutter

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 secures the inlet to the receptacle and engages 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.

General Ratings

Amperage	300 to 600 A
Voltage*	1000 VAC*, 1000 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

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

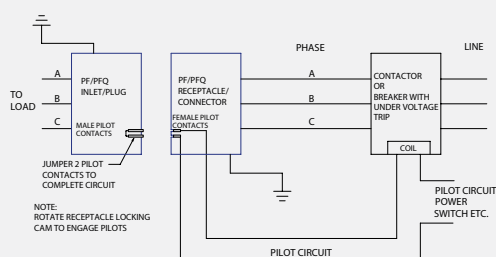
Listings

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.

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**
PF = 600 A, 1000 VAC*, 250 VDC
PFQ = 300 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 258 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 apply only to 300 A & 400 A devices at 600V or less

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

Receptacle/Cap 300 A (female)



PFQ shown

Inlet/Cap 300 A (male)



PFQ shown

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

North American UL/CSA Configurations

Voltage	Polarity	Part #		Part #	
		PFQ 300**	PF300	PFQ 300**	PF300
277V	1P+N+G	47-34045	49-34045	47-38045	49-38045
347V	1P+N+G	47-34145	49-34145	47-38145	49-38145
480V	2P+G	47-34042	49-34042	47-38042	49-38042
480V	2P+N+G	47-34046	49-34046	47-38046	49-38046
480V	3P+G	47-34043	49-34043	47-38043	49-38043
480V	3P+N+G	47-34047	49-34047	47-38047	49-38047
600V	2P+G	47-34142	49-34142	47-38142	49-38142
600V	2P+N+G	47-34146	49-34146	47-38146	49-38146
600V	3P+G	47-34143	49-34143	47-38143	49-38143
600V	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/plugs 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 235-244 for detailed information on these options

Receptacle/Cap 400 A/600 A (female)



Inlet/Cap 400 A/600 A (male)






North American UL/CSA Configurations

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

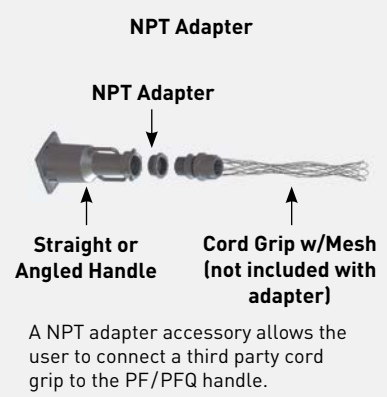
INSTALLATION ACCESSORIES – SIZE C & F

HANDLES


METAL STRAIGHT HANDLE			Part #
PF shown	PFQ300	0°	47-3A013-XXX
	PF300	0°	49-3A013-XXX
	PF400	0°	49-4A013-XXX
	PF600	0°	49-6A013-XXX
Metal Angled Handle			
PF shown	PFQ300	90°	47-3A913-XXX
	PF300	90°	49-3A913-XXX
	PF400	90°	49-4A913-XXX
	PF600	90°	49-6A913-XXX
NPT Adapter	NPT Size	XXX (Suffix #)	
	2.0"	-N20	For available cord grips, see page 167.
	2.5"	-N25	
	3.0"	-N30	

Standard Clamp w/Cable Range		
	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
	3.350 - 3.577"	-350


Accessory Spotlight




BOXES


METAL JUNCTION BOX			Part #	
	PFQ300	See table	MB40PFQ-XX	This box is a heavy-duty powder coated Aluminum back box with removable cover. Conduit entry hub up to 4" NPT 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.
	PF300	See table	MB40-XX	
	PF400	See table	MB40-XX	
	PF600	See table	MB40-XX	

Hub Sizes	Fitting Size	XX (Suffix #)
	2.0"	-20
	2.5"	-25
	3.0"	-30
	3.5"	-35
	4.0"	-40

STAINLESS STEEL JUNCTION BOX		PFQ	PF	
	2.0"	47-4A023-N020	49-6A023-N020	These enclosures offer additional interior volume for extra wiring space. Both size enclosures have two removable covers and a one piece back pan installed for customer convenience. Conduit entry up to 4" NPT is limited to the bottom of the enclosure.
	2.5"	47-4A023-N025	49-6A023-N025	
	3.0"	47-4A023-N030	49-6A023-N030	
	4.0"	47-4A023-N040	49-6A023-N040	

STAINLESS STEEL JUNCTION BOX		PFQ	PF	
	2.0"	47-4A023-N520	49-6A023-N520	These enclosures offer additional interior volume for extra wiring space. Both size enclosures have two removable covers and a one piece back pan installed for customer convenience. Conduit entry up to 4" NPT is limited to the bottom of the enclosure.
	2.5"	47-4A023-N525	49-6A023-N525	
	3.0"	47-4A023-N530	49-6A023-N530	
	4.0"	47-4A023-N540	49-6A023-N540	

WEIGHTS MISCELLANEOUS ACCESSORIES

INLET METAL CAP		
	PFQ300	47-3A126
	PF300	49-3A126
	PF400	49-4A126
PF shown	PF600	49-6A126

RECEPTACLE METAL CAP		
	PFQ300	47-3A925
	PF300	49-3A925
	PF400	49-4A925
	PF600	49-6A925

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	3 lbs	3 lbs
Stainless Steel Box	85 lbs	55 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
PFLUG4	4 AWG
PFLUG3	3 AWG
PFLUG2	2 AWG
PFLUG1	1 AWG
PFLUG10	1/0 AWG
PFLUG20	2/0 AWG
PFLUG30	3/0 AWG
PFLUG40	4/0 AWG
PFLUG250	250kcmil
PFLUG300	300kcmil
PFLUG350	350kcmil
PFLUG400	400kcmil
PFLUG500	500kcmil
PFLUG600	600kcmil
PFLUG650	650kcmil

Application Note

Installation Accessory: Angled Handle

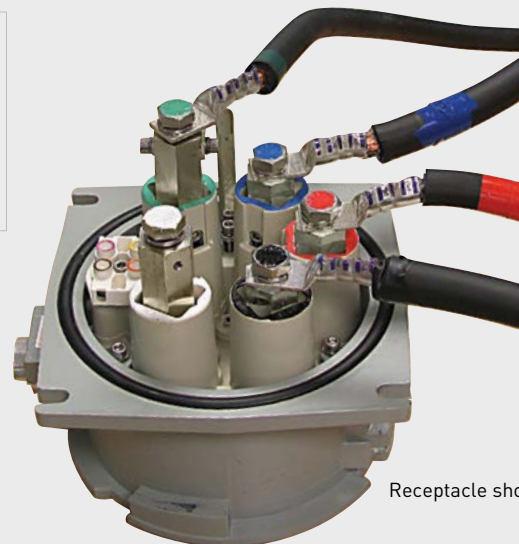


Straight Barrel Lugs are utilized on PF/PFQ devices along with angled handles.



Typical wiring of a PF male inlet for angled handle applications.

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
PFLUG4-90	4 AWG
PFLUG3-90	3 AWG
PFLUG2-90	2 AWG
PFLUG1-90	1AWG
PFLUG10-90	1/0 AWG
PFLUG20-90	2/0 AWG
PFLUG30-90	3/0 AWG
PFLUG40-90	4/0 AWG
PFLUG250-90	250kcmil
PFLUG300-90	300kcmil
PFLUG350-90	350kcmil
PFLUG400-90	400kcmil
PFLUG500-90	500kcmil
PFLUG600-90	600kcmil

Application Note

Installation Accessory: Straight Handle



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

HIGH AMPACITY



Typical wiring of a PF male inlet for straight handle applications.

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

