PQ PROTECTION SURGE PROTECTION DEVICES PQC160 & PQCF160 SERIES





PQC(F)160 is a high-performance, robust, surge protective device (SPD) with advanced features, protecting your facility's electrical equipment from damaging electrical power surges due to lightning; utility power generation/distribution systems; and inductive load switching equipment within your facility. Intended for service entrances, distribution panels, MCCs, branch panels, lighting panels, and large equipment applications (e.g., HVAC).

The PQC(F)160 is automatic in operation, resetting after activation to provide continuous protection of electrical equipment. PQC(F)160 SPDs feature pre-wired remote monitoring contacts.

The PQC160 standard series is UL Type 1 listed (automatically suitable for UL Type 2) and can be installed before or after the service equipment overcurrent device, with or without a dedicated circuit breaker for the SPD.

PQCF160

The PQCF160 with EMI Filter option is UL Type 2 listed and can be installed after the service equipment overcurrent device. The PQCF160 EMI Filter series protects your facility

equipment from internally generated transients such as oscillatory ring waveforms – typically due to switchmode power supplies (most modern electronic equipment). The PQCF160's Ground Reference feature indicates if potential between neutral and ground exceeds ~20 V.

ISO 9001:2014 Quality Management System, ISO 17025:2007 Laboratory Certification (UL DAP Program), and 100% Quality Tested prior to shipping.

		PR	ODUCT SPECIFICA	TIONS			
Status Indication	Individual L	ndividual LED indicators per Line/Phase and Audible Alarm,					
	PQCF160 has additional Alarm LED and Ground Reference Indication						
Certifications	UL® 1449 Ec	.® 1449 Edition 5 Type 1 / Type 2, 20 kA In					
Certifications	UL® 1449 Ec	19 Edition 5 Type 2, 20 kA In, UL® 1283 Edition 7 (EMI Filter Models)					
Complies With		UL® 96A and NEC® Article 242 (Article 285 - prior to 2020)					
		ANSI®/IEEE® C62.41.1-2002 Cat A, Cat B, Cat C					
		ANSI®/IEEE® C62.41.2-2002 Cat A, Cat B, Cat C					
		ANSI®/IEEE® C62.45-2002 Cat A, Cat B, Cat C					
		MIL-STD-220A (EMI Filter Models)					
Short Circuit Current Rating (SCCR)		200 kA					
Maximum Discharge Current (I _{max})		160 kA per phase / 80 kA per mode - 8/20 μs					
Nominal Discharge Current (In)		20 kA					
Frequency		50 Hz, 60 Hz, 400 Hz					
Filtering (EMI Filter Models)		–36 dB @ 100 kHz					
Operating Temperature		-31° to 185°F (-35 to 85°C)					
Mounting		¾" nipple mount, optional Flush Mount kit					
Enclosure Rating		NEMA® Type 4X, UL® 50E Type 4, suitable for indoor or outdoor installation					
Enclosure Material		Polycarbonate					
Depth		PQC160	2.8 in.	PQCF160	3.1 in.		
Width		PQC160	3.25 in. w/o nipple	PQCF160	2.75 in.		
Height		PQC160	3.25 in.	PQCF160	6.25 in. w/o nipple		
Weight		PQC160	2 lb.	PQCF160	2 lb.		
Recommended Circuit Breaker		20A or 30A, multi-pole as required					
Connections - Conductor Size		12 AWG stranded, ~18" length					
Remote Monitoring - Contacts		Form C, 2 A @ 240 V, 22 AWG stranded, ~18" length, IoT, BMS, and SCADA compatible					
Warranty		Ten (10) Years					

PQC160

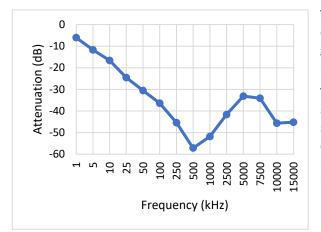
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PQ PROTECTION SURGE PROTECTION DEVICES PQC160 & PQCF160 SERIES



STANDARD MODELS PQC160		MCOV	VPR			
Model Number	Configuration	(V)	L-G (V)	L-N (V)	N-G (V)	L-L (V)
PQC160-120V-1P	120V, Single-phase, 2W+G	180	700	700	600	-
PQC160-240V-1P	240V, Single-phase, 2W+G	350	1000	1200	1000	-
PQC160-120/240V-SP	120/240V, Split-phase, 3W+G	180/360	700	700	600	1200
PQC160-120/208V-3Y	120/208V, 3-phase Wye, 4W+G	150/300	700	600	500	1000
PQC160-277/480V-3Y	277/480V, 3-phase Wye, 4W+G	350/700	1000	1200	1000	2000
PQC160-347/600V-3Y	347/600V, 3-phase Wye, 4W+G	440/880	1500	1500	1500	2500
PQC160-240V-3D	240V, 3-phase Delta, 3W+G	275	1000	-	-	1200
PQC160-480V-3D	480V, 3-phase Delta, 3W+G	550	1800	-	-	1800
PQC160-120/240V-HLD	120/240V, High-leg Delta, 4W+G	180/275	700/1000	700/900	700	1200/1500

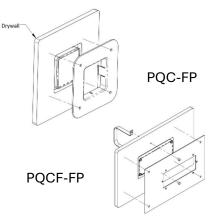
EMI FILTER MODELS PQCF160		MCOV	VPR			
Model Number	Configuration	(V)	L-G (V)	L-N (V)	N-G (V)	L-L (V)
PQCF160-120V-1P	120V, Single-phase, 2W+G	180	700	700	700	-
PQCF160-240V-1P	240V, Single-phase, 2W+G	350	1200	1200	1200	-
PQCF160-120/240V-SP	120/240V, Split-phase, 3W+G	180/360	700	700	700	1200
PQCF160-120/208V-3Y	120/208V, 3-phase Wye, 4W+G	150/300	700	700	600	1200
PQCF160-277/480V-3Y	277/480V, 3-phase Wye, 4W+G	350/700	1200	1200	1200	2500
PQCF160-347/600V-3Y	347/600V, 3-phase Wye, 4W+G	440/880	1500	1500	1500	3000
PQCF160-240V-3D	240V, 3-phase Delta, 3W+G	275	1000	-	-	1200
PQCF160-480V-3D	480V, 3-phase Delta, 3W+G	550	1800	-	-	1800
PQCF160-120/240V-HLD	120/240V, High-leg Delta, 4W+G	180/275	700/1000	800/1000	700	1500/1500

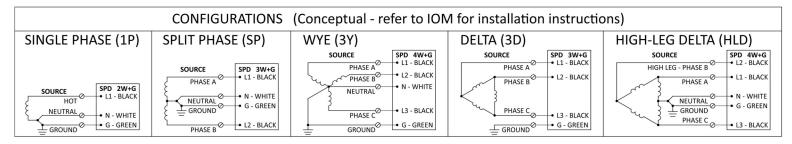


The EMI Filter option mitigates oscillatory ring waveforms – generally caused by non-linear loads inside the facility.

Typical oscillatory ring waveform sources include "transformer-less" switching power supplies for computers, IT equipment (network, monitors, printers), TVs, electronic ballasts for lighting, UPS, Inverter, Rectifier systems and Variable Frequency (speed) Drives.

Flush Mount Kit Options





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