

# PQ PROTECTION SURGE PROTECTION DEVICES PQD SERIES - MODULAR



PQD series are high-performance, robust, surge protective devices (SPDs) with advanced features, protecting your facilities' 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 protecting individual external building circuits e.g., exterior lights, signage, receptacle outlets, charging facilities, HVAC units.

The PQD is automatic in operation, resetting after activation to provide continuous protection of electrical equipment.

The PQD series is UL Type 2 listed.

Ultra2X Technology addresses abnormal over-voltage conditions, improving durability & service life. Many competing SPDs permanently disconnect all protection during a sustained over-voltage event, resulting in SPD failure and requiring replacement.

Ultra2X technology allows the SPD to tolerate an abnormal over-voltage condition up to twice the SPD's nominal operating voltage while remaining operational during and after this event.

Ultra2X technology is recommended for sites where sustained over-voltages are known to occur and where failure of traditional SPD technologies cannot be tolerated.

The PQD can protect multiple circuits in one enclosure and ships completely assembled. Circuit identification labels included with each unit.

NEMA 4/12 indoor/outdoor weatherproof powder coated metal enclosure with viewing window to inspect module status without opening enclosure.



PQDS



PRODUCT SPECIFICATIONS	
Status Indication	Visible mechanical flag per mode
Certifications	UL® 1449 Edition 4 Type 2
Complies With	NEC® Article 242 (Article 285 - prior to 2020) UL® 96A Edition 14 Installation Requirements for Lightning Protection Systems ANSI/IEEE® C62.41.1-2002 Category A, B, and C; C62.41.2-2002; and C62.45-2002
Short Circuit Current Rating (SCCR)	200 kA
Maximum Discharge Current ( $I_{max}$ )	50 kA per phase / 50 kA per mode - 8/20 $\mu$ s
Nominal Discharge Current ( $I_n$ )	20 kA
Frequency	50 Hz, 60 Hz
Operating Temperature	-31° to 185°F (-35 to 85°C)
Mounting	Surface mount
Enclosure Rating	NEMA® Type 4/12, suitable for indoor or outdoor installation
Enclosure Material	Metal (powder coated aluminum)
Dimensions - PQDS	5.91 H x 7.87 W x 4.72 D in.
Dimensions - PQDM	7.87 H x 15.75 W x 5.91 D in.
Connection Method	Parallel, 8 AWG solid, 10 AWG stranded
Recommended Circuit Breaker	Determined by circuit load, multi-pole as required Maximum 125A OCPD if supply is greater than 100A
Remote Monitoring - Contacts	Form C, 3 A @ 125 Vac / 0.5A 250 Vac, 14 AWG, IoT, BMS, and SCADA compatible
Warranty	Five (5) Years

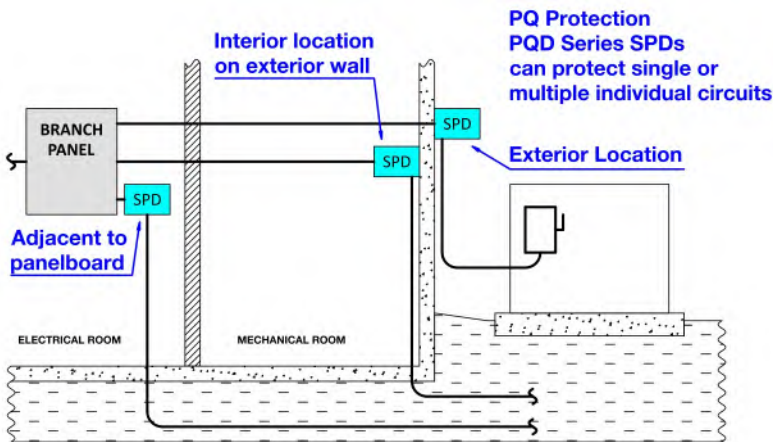
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Voltage Configuration(s)	Circuit Configuration	AWG	Quantity of Circuits	
			PQDS	PQDM
<b>120-1P</b> <b>277-1P</b>	1P	12	up to 6	up to 12
	1P	10	up to 4	up to 12
	1P	8	1 or 2	up to 9
	1P	6	1 or 2	up to 9
<b>120/240-SP</b> <b>208-2P</b> <b>480-2P</b>	SP or 2P	12	up to 3	up to 6
	SP or 2P	10	1 or 2	up to 6
	SP or 2P	8	1	up to 5
	SP or 2P	6	1	up to 5
<b>240-3D</b> <b>480-3D</b>	3D	12	1	up to 4
	3D	10	1	up to 4
	3D	8	1	up to 3
	3D	6	1	up to 3
<b>120/208-3Y</b> <b>277/480-3Y</b>	3Y	12	1	up to 3
	3Y	10	1	up to 3
	3Y	8	1	1 or 2
	3Y	6	1	1 or 2



PQDM



Addresses the requirements of:

**FBC 449.3.15.6** (Hospitals)

**FBC 450.3.27.5** (Nursing Homes)

"All low-voltage system main or branch circuits entering or exiting the structure shall have surge suppressors installed for each pair of conductors and shall have visual indication for protector failure to the maximum extent feasible."

Can be mounted horizontally or vertically

Contact PQ Protection for assistance with configuration model numbers, and spare/replacement module model numbers.

Configuration	MCOV		VPR	
	(V)	L-G (V)	L-N (V)	N-G (V)
<b>120-1P</b>	170		1000	
<b>277-1P</b>	320		1200	
<b>120/240-SP</b>	170/340		1000	1000
<b>208-2P</b>	275		1200	1200
<b>480-2P</b>	610		2400	
<b>120/208-3Y</b>	170/295		1000	1000
<b>277/480-3Y</b>	320/536		1600	1600
<b>240-3D</b>	320/536	1600		
<b>480-3D</b>	610/1055	2400		