

PQ PROTECTION SURGE PROTECTION DEVICES PQC50 SERIES - COMPACT



PQC50 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 service entrances, distribution panels, MCCs, branch panels, lighting panels, and large equipment applications (e.g., HVAC).

The PQC50 is automatic in operation, resetting after activation to provide continuous protection of electrical equipment.

The PQC50 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.

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 slim enclosure design of the PQC50 allows for installation between electrical panels where space is often limited. Facilitating the shortest possible connected lead lengths – improving electrical performance.

Optional side & top (of electrical panel) mounting kits.

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



PRODUCT SPECIFICATIONS

Status Indication	Individual LED per Phase / Line / Protection Mode
Certifications	UL® 1449 Edition 5 Type 1 / Type 2
Complies With	NEC® Article 242 (Article 285 - prior to 2020) 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 / 25 kA per mode - 8/20 μs
Nominal Discharge Current (I_n)	10 kA
Frequency	50 Hz, 60 Hz
Operating Temperature	32° to 104°F (0 to 40°C)
Mounting	Surface mount and/or ¾" conduit nipple Optional Side Mount kit, Flush Mount Kit
Enclosure Rating	NEMA® Type 4/12, suitable for indoor or outdoor installation
Enclosure Material	Metal (powder coated aluminum)
Dimensions	6.02 H x 3.31 W x 3.07 D in., 1.54 lb
Connection Method	Parallel, 10 AWG stranded, ~36" length, ¾" conduit nipple
Recommended Circuit Breaker	30A (20A minimum), multi-pole as required
Remote Monitoring - Contacts	Form C, 0.3 A @ 125 Vac / 1.0A 30 Vdc, IoT, BMS, and SCADA compatible
Warranty	Ten (10) Years

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MODELS PQC50		MCOV	VPR			
Model Number	Configuration	(V)	L-G (V)	L-N (V)	N-G (V)	L-L (V)
PQC50 120/208V-3Y	120/208V, 3-phase Wye, 4W+G	170/280	700	600	600	1000
PQC50 277/480V-3Y	277/480V, 3-phase Wye, 4W+G	310/550	1200	1200	1200	1800
PQC50 120/240V-SP	120/240V, Split-phase, 3W+G	170/280	700	600	600	1000

SPARES	
Replacement Fuse	PQFUSE

Side Mount Kit PQSM

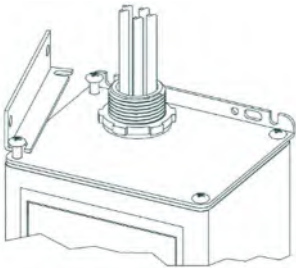


Figure 1 (PQM100 shown as example)

Flush Mount Kit PQCFP

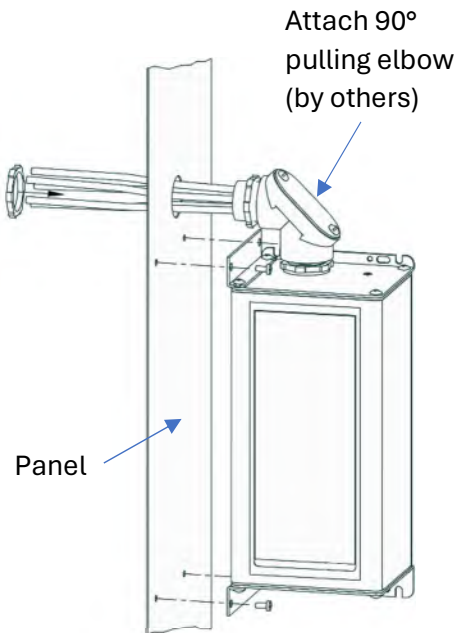
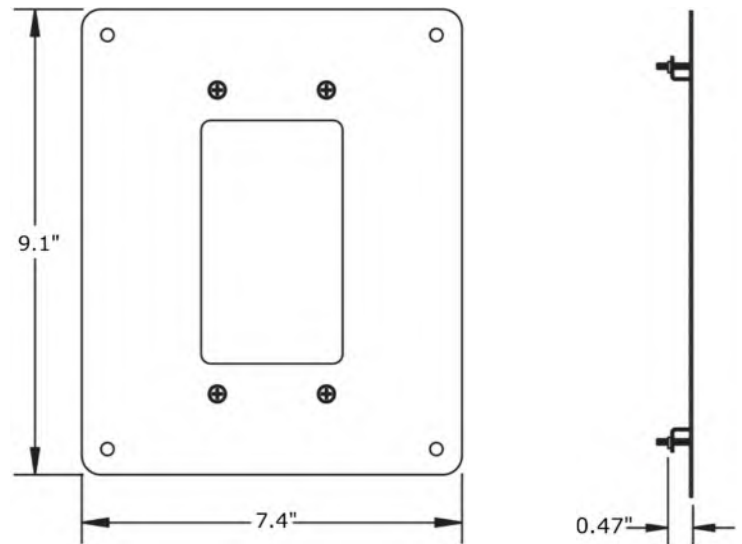
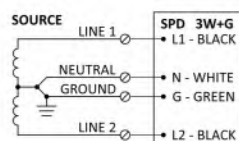


Figure 2 (PQM100 shown as example)

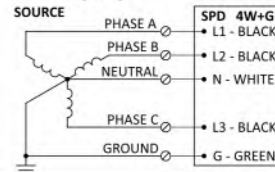


CONFIGURATIONS (Conceptual - refer to IOM for installation instructions)

SPLIT PHASE (SP)



WYE (3Y)



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