

PQD Series Exterior Load Surge Protective Device Ideal for AHCA Applications

Intended to Comply With:

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."

PQD Photos & Dimensions



PQDS Series

(Small Enclosure)

5.91"H x 7.87"W x 4.72"D

Shown with hinges on top
Can be mounted horizontally or vertically

PQDM Series

(Medium Enclosure)

7.87"H x 15.75"W x 5.91"D

Shown with hinges on top
Can be mounted horizontally or vertically



Features & Benefits

- UL 1449 4th Edition Listed, Type 2, 20kA In
- 65kAIC SCCR - Short Circuit Current Rating
- Protects Multiple Circuits in One Enclosure
- Parallel Connected (Using Breaker/Load Circuit Conductors)
- Modular Design (Allows per Circuit Field Replacement)
- Visible Failure Indication per Circuit plus dry contacts for optional remote monitoring connection
- Surge Current Rating of 50kA per phase
- Modes of Protection: L-N/G
- Single pole, two pole or three phase circuit capability
- State-of-the-Art MOV Based Design w/ Thermal Disconnect
- NEMA 4/12 Indoor or Outdoor Weatherproof Powder Coated Metal Enclosure w/ Viewing Window for Failure Status
- Grounding Terminal Included for every 3 Circuits
- Circuit Identification Label Included w/ Each Unit
- Ships Completely Assembled
- Connection Terminals UL Listed to Accept #6 - #12AWG Conductors

Featuring **Ultra2x** Technology

Ultra2X technology has been specifically designed to meet and exceed the safety requirements for the abnormal over-voltage testing of UL 1449 Edition 4. Many SPD's permanently disconnect all protection from the circuit during a sustained over-voltage event, not a transient. **Ultra2X** technology allows the SPD to experience an abnormal sustained over-voltage up to twice its nominal operating voltage and still remain operational during and after this event. **Ultra2X** technology allows the SPD to provide reliable and continuous protection to your sensitive electronic equipment.

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

Exterior Load Circuit Surge Protective Device (SPD)

This unique type of SPD can be located anywhere on the circuit run.

For Example: The SPD can be located at the electrical feeder panel, the structure wall (indoor or outdoor), or at the exterior load location.

Customize it for the specific application:

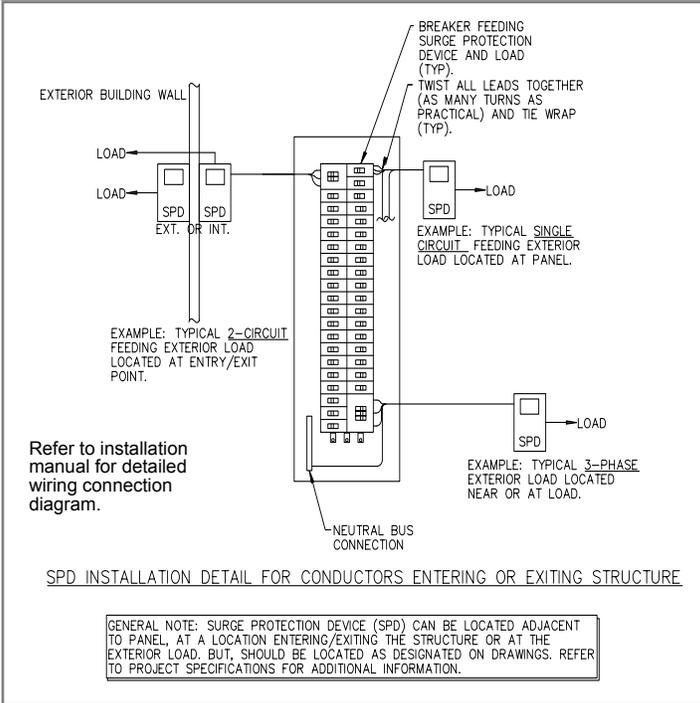
- Choose the quantity of circuits, the voltage configurations, and the circuit wire AWG from each electrical panel to configure the model number(s) necessary. Refer to charts on the reverse side.



PQD SERIES Exterior Load Surge Protection Device



Drawing Detail



Specification "Add-in" for Surge Protection Section 264313 Exterior Load Circuit Protection

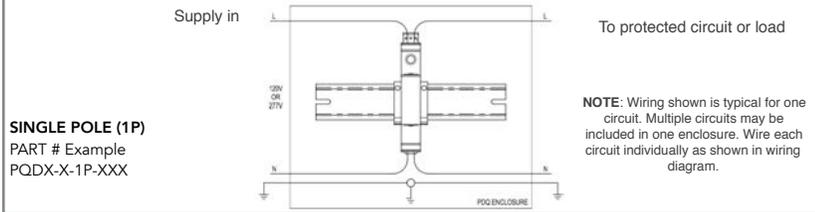
Provide individual exterior circuit Surge Protection Devices (SPD) as indicated on panel board schedule(s) and located as shown on drawings or as acceptable by inspector. Refer to drawing detail for additional information. SPD shall be listed to the current UL 1449 4th Edition, 65kAIC SCCR - Short Circuit Current Rating and listed Type 2, 20kA-"In", with visual failure indication per circuit. SPD shall be an assembled unit including circuit protection and an enclosure with an overall UL Listing.

Single pole, two pole & three phase - wye circuits shall have L-N/G protection mode. Three phase grounded delta circuits shall have L-G protection mode. SPD's shall be modular with field replaceable modules, dry contacts for remote monitoring and have a 5 year factory warranty.

Enclosure rating shall be NEMA 4/12 Indoor & Outdoor and incorporate a hinged door with a viewing window and grounding terminal(s). For PQDM Series there shall be one grounding terminal for every three circuits. SPD terminals to accept #6 - #12 AWG conductors. Basis of design is PQ Protection

PQD Series and approved equals only.

Typical Circuit Wiring Diagram



PQD Series Model PQDS (Small Enclosure)

Example Model Number Chart

Series	# of Circuits (Based on #12AWG)	# of Poles	Voltage Configuration	Generic Model Number Example	Specific Model Number Example
PQDS	1,2,3, 4, 5 or 6	1P	120V or 277V	PQDS-X-XX-XXX	PQDS-2-1P-277V
PQDS	1, 2 or 3	2P	120/240V, 208V, 480V	PQDS-X-XX-XXX	PQDS-1-2P-480V
PQDS	1 or 2	3Y	120/208V or 277/480V	PQDS-X-XX-XXX	PQDS-1-3Y-277/480
PQDS	1 or 2	3D	240V, 480V*	PQDS-X-XX-XXX	PQDS-1-3D-480V

Choose the number of circuits, number of poles & the voltage configuration.

PQD Series Model PQDM (Medium Enclosure)

Example Model Number Chart

Series	# of Circuits (Based on #12AWG)	# of Poles	Voltage Configuration	Generic Model Number Example	Specific Model Number Example
PQDM	7,8,9,10, 11, 12	1P	120V or 277V	PQDM-X-XX-XXX	PQDM-8-1P-277V
PQDM	4, 5 or 6	2P	120/240V, 208V, 480V	PQDM-X-XX-XXX	PQDM-4-2P-480V
PQDM	2 - 3	3Y	120/208V or 277/480V	PQDM-X-XX-XXX	PQDM-3-3Y-277/480V
PQDM	2 - 3	3D	240V, 480V*	PQDM-X-XX-XXX	PQDM-3-3D-480V

Choose the number of circuits, number of poles & the voltage configuration.

*UL Pending

Maximum # of SPD Circuits Based on Wire AWG

AWG	Small Enclosure	# of Circuits	Medium Enclosure	# of Circuits
# 6 - # 8AWG	1 Pole Circuits	1 - 2	1 Pole Circuits	3 - 9
	2 Pole Circuits	1	2 Pole Circuits	2 - 5
	3 Pole Circuits	1	3 Pole Circuits	2 - 3
# 10AWG	1 Pole Circuits	1 - 4	1 Pole Circuits	5 - 12
	2 Pole Circuits	1 - 2	2 Pole Circuits	3 - 6
	3 Pole Circuits	1	3 Pole Circuits	2 - 4
# 12AWG	1 Pole Circuits	1-6	1 Pole Circuits	7 -12
	2 Pole Circuits	1-3	2 Pole Circuits	4 - 6
	3 Pole Circuits	2	3 Pole Circuits	3 - 3