





### **Performance Specifications**

Surge capacities(L-N, L-G, N-G)

100kA per phase

200kA per phase

300kA per phase

UL 1449 Fourth Edition Listed Type 1, CSA 22.2 No. 269.1

Optional UL 1449 Fourth Edition type 2 SPD, cUL, UL 1283

UL 1449 Fourth Edition tested Inominal (In): 20kA

UL 1449 Fourth Edition tested SCCR: 200kA

UL 1283 Type 2 (optional) includes AC sinewave tracking filter with

EMI/RFI filtering up to -50dB from 10kHz to 100MHz

Repetitive impulse: 5,000 hits

Less than 1 nanosecond response time

### **Diagnostic Monitoring**

100% monitoring - every MOV is monitored, including N-G

Green LED status indicator per phase

Red LED service indicator

Audible alarm with silence button

Test function: toggles red service LED, audible alarm and dry contact

N-G overvoltage detection

Phase monitoring (toggles LED and dry contacts)

Form C dry contacts, 24V, 2A

# **PQM6 Series**

### Type1/Type 2 Surge Protective Device/SPD

#### Features:

- UL 1449 Fourth Edition listed
- 100kA 300kA per phase ratings
- All UL Required OCP & Safety Coordination included inside
- Type 1 SPDs intended for Line or Load Side of Main Disconnect
- Type 1 SPDs intended for Line or Load Side of Main Disconnect
- 20kA Inominal (In)
- 200kA SCCRs (most models)
- UL 96A Lightning Protection Master Label compliant
- · Voltage specific design highly configurable
- · All MOV suppression elements monitored
- · All modes of protection
- · Optional Rotary Disconnect Switch

### Design Attributes

Designed, manufactured and tested consistent with:

- ANSI/IEEE C62.41.1-2002. C62.41.2-2002. C62.45-2002. C62.62-2010, C62.72-2016, IEEE SA 1100-2005(Emerald Book)
- NEC® Article 285
- NEC® Articles 620.51(E), 645.18, 670.6, 695.15, 700.8 and 708 requiring SPDs
- UL 96A and NFPA 780 lightning protection

High energy parallel design rated for service entrance applications

For external mounting on electrical distribution equipment, switchgear, switchboards, motor control centers, panelboards, transfer switches

Individually fused and thermally protected MOVs

Large-Block, 34mm square, 50kA MOVs

Replaceable Module Construction

Solid state bidirectional operation

### Physical Specifications

Relative humidity range: 0 - 95% non-condensing

Operating frequency: 47 - 63Hz

Operating temperature: -25° C (-31° F) to +60° C (185° F)

Weight: 24 lbs (11 kg)

NEMA 1/12/3R/4 enclosure

Standard size: 12" x 12" x 7" (305mm x 305mm x 177mm)

Lug size: #2 - #10 AWG (with optional disconnect switch: #8 - #1/0)

Typical connection: #6 AWG and 60A breaker

### Quality, Standards and Validation

Type 1: UL 1449 Fourth Edition, CSA 22.2 No. 269.1

Type 2 (Opt): UL 1449 Fourth Edition, CSA C22.2 No 269.2, UL 1283

UL file: VZCA.E324279 at www.UL.com

RoHS-compliant

IEC 61643, CE

Burn-In tested prior to shipment

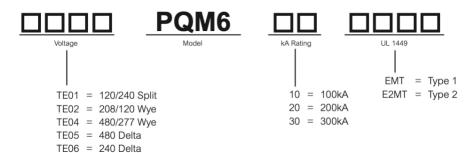
ISO 9001:2008 quality management system

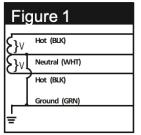
ISO 17025:2005 laboratory qualification

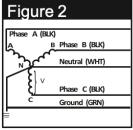


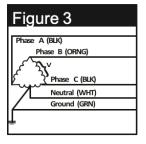
## PQ Global PQM Configurator

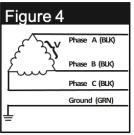












SPLIT WYE
2 Hots, 1 Neu, 1 Grnd 3 Hots, 1 Neu, 1 Grnd

HI-LEG DELTA (B High)DELTA & HRG WYE 3 Hots, (B HIGH), 3 Hots, 1 Grnd 1 Neu, 1 Grnd

Performance Data										
	Common Power Systems			UL 1449 Fourth Edition Test Data						
				Voltage Protection Ratings (VPR - 3kA)				CCCD	MCOV	
			L-N	L-G	N-G	L-L	In	SCCR	MCOV	
01	=	120/240V Split Phase	700	600	600	1000	20kA	100kA	150	
02	=	208Y/120V 3Ø Wye	700	600	600	1000	20kA	200kA	150	
04	=	480Y/277V 3Ø Wye	1200	1000	1000	1800	20kA	200kA	320	
05	=	480V 3Ø Delta	-	1800	-	2000	20kA	200kA	550	

### **Embedded Web Pages**









<b>Monitoring System Techn</b>	ical Specifications			
Voltage	Phase to Phase Neutral to Ground/PE			
	Phase to Neutra			
Accuracy	±1%			
Range Average, Unbalance, Crest Factor	80V-600\ Include			
	Include			
Frequency				
Accuracy Range	±19 45-67 H			
Voltage Total Harmonic Distortion (VTHD)	Line-to-Neutra			
Range	60-850 H			
Harmonics	Line-to-Neutra			
	Line-to-Line			
Range	Fundamental – 13t			
RMS	±19			
SPD Health Status	Percent Remaining			
I/O	Include			
Relay Outputs (	Class 2 - 24VDC / 24VAC at 2 Amp			
RJ-45 Port	Etherne			
Events	Power Quality & Syster			
Event Logging	8GB / 2000+ Event			
Date/Time Stamp with	Included - All event			
Duration/Magnitude				
Surge Counter (Category C, B, A), Sag Counter, Swell Counter,	Include			
with reset	molade			
Sample Rates				
Surge Sample Rate	250 kHz (4,166 Samples pe			
	cycle @ 60 Hz			
Other Measurable Events	10 kHz (167 Samples pe			
	cycle @ 60 Hz			
Display	LCD 128x6			
Communications	MODBUS TCI			
	Serial MODBUS			
	Ethernet			

### **Features and Benefits**

### **Power Quality**

Ability to monitor voltage at connected panel and track system anomalies such as transients, surges, swells and VTHDs, to mitigate the destructive effects of these anomalies.

#### **Real Time Measurements**

Storage of over 2000 events/reports allows for historical analysis.

### **Event Logging**

User configurable alarm thresholds, time/date stamp, duration and magnitude of events offers multiple data points for trend analysis.

### Communications

Three access channels - Ethernet, MODBUS TCP or Serial MODBUS - allow for easy access to data.

### **Embedded Web Page**

Convenient access to present and past event data from any device with internet connection.

### **System Analysis**

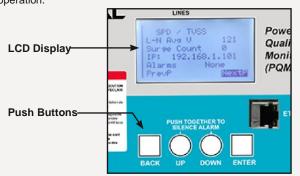
Manage power system with statistical summaries & reporting software, for proactive system analysis.

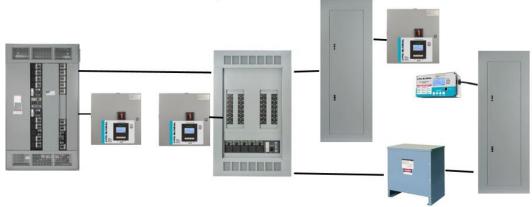
### **Email Notifications**

Set automatic email notifications to alert up to three separate users with anomalies recorded, offering real-time updates.

### **LCD Display with Push Buttons**

Offers local interface with push button navigation for user friendly operation.





Form C

