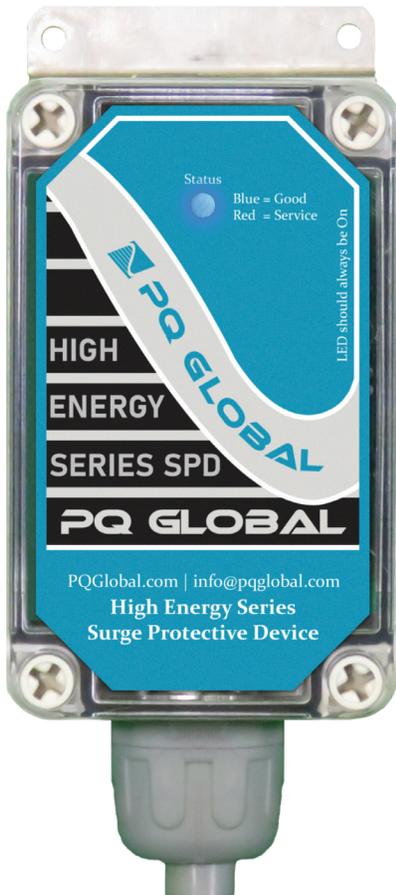


## T71 Non-Modular Surge Protective Device High Energy Series 100kA per Phase

### 100kA/phase Model



This is the T71 Non-Modular unit in the 100kA per Phase surge current capacity, a member of the Tier 700 High-Energy Surge Protection family of products. This T71 Non-Modular Surge Protective Device has a 5.2" x 3.2" x 2.8" NEMA 4X rated polycarbonate enclosure and weighs less than 1.5 pounds, making this the smallest T71 SPD.

This SPD uses Enhanced Thermally Protected Metal Oxide Varistors. These are a UL 5th Edition High-Energy version of our Tier 400 Series SPD MOVs, taking our robust MOVs to even greater protection capabilities in a similar-sized enclosure.

It has a watertight indoor/outdoor rating, a liquid-tight connector, and external mounting flanges. This unit is the perfect fit for applications in which the SPD must fit in a small space, but still needs higher energy surge current capacity protection. These qualities also make this unit especially useful in downstream applications where more demanding protection is required.

This is the smallest T71 unit; however, it is still available in a wide range of voltage and phase configurations. Each protected phase uses combined indication by a singular LED, each mode is monitored. It has Form "C" dry contact relays for remote indication capabilities. It uses a dual-color LED, so regardless of unit status, it will remain lit to let users know it is energized and functional. If the LED is off, it likely indicates an issue with the installation, facility, or power to the unit.

It is available as either a UL 1449 Type 1 or Type 2 device. Despite its small size, this SPD in a Type 2 configuration is still equipped with a UL 1283 Listed filter.

This unit has 36" of #12 AWG wire leads.

#### Features:

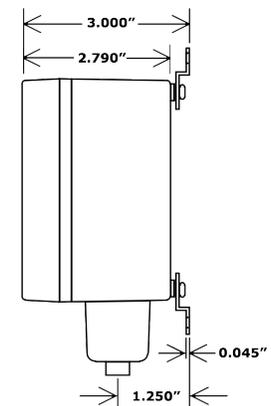
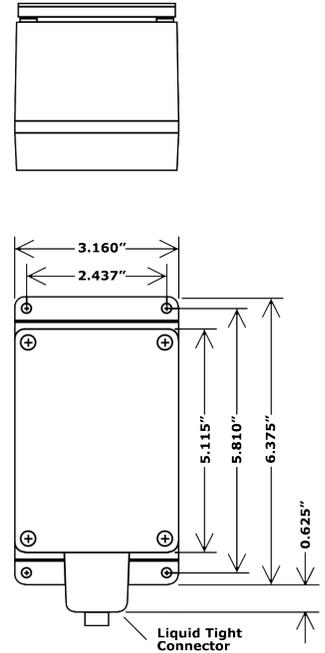
- 100kA/phase available
- Compact and easy to install
- UL 1449 Fifth Edition Listed
- Available in UL 1449 Type 1 or Type 2 Configurations
- Sine Wave Tracking: UL 1449 Type 2  
UL 1283 Listed
- 36" of #12 AWG Wire Leads
- LED Status Indication
- Form "C" Dry Contacts
- Flange style mounting brackets pre-installed

- NEMA 4X rated enclosure for indoor & outdoor use
- Liquid tight connection
- 200kA SCCR
- Lifecycle tested to 12,000 10kA Impulses
- All modes of protection
- Thermally Protected MOVs
- Multiple MOV technology featuring large and robust MOVs
- Equidistant and symmetrical surge pathways for a true surge capacity rating
- 10 Year Warranty



## T71 Non-Modular Surge Protective Device High Energy Series 100kA per Phase

General Technical Specifications	
Connection Type	Parallel, Wire Lead - #12 AWG
Voltage, Phase Configuration	120/240 Split Phase, (3W+G) 120/208V Three Phase Wye, (4W+G)* (127/220V Three Phase Wye, (4W+G))* (220/380V Three Phase Wye, (4W+G))** 277/480V Three Phase Wye (4W+G)** 240V Three Phase Delta (3W+G) 480V Three Phase Delta, (3W+G) 240/480V Three Phase Delta Hi-Leg, (4W+G)
Maximum Continuous Operating Voltage	120V, 150 VAC (125%); 127V, 150 VAC (118%); 220V, 320 VAC (145%); 240V, 320 VAC; 277V, 320 VAC; 480V, 550 VAC; All Others 115%
Surge Capacity	50kA/Mode, 100kA/Phase
Short Circuit Current Rating (SCCR)	200kAIC
Protection Modes	All Modes: L-N, L-L, L-G, N-G
Operating Frequency Range	47 - 63 Hz
UL 1449 Location Type	Type 1 (SPDs intended for Line or Load Side of Main Disconnect) or Type 2 (Intended for Load Side of Main Disconnect)
UL 1449 Nominal Discharge Current (In)	20 kA
Standards	UL 1449 5th Edition, CSA, UL 96A Lightning Protection Master Label compliant
Status Indication	Each phase is monitored, and uses combined indication by a single dual-color LED
Enclosure	NEMA 4X Polycarbonate
Dimensions	5.115" x 3.16" x 2.79" (H x W x D)
Weight	1.40 lbs
50 Ohm EMI/RFI Attenuation	-50 db max(Type 2), -45db max(Type 1); from 10 kHz to 100MHz. The system provides up to 120dB insertion loss from 100 kHz to 100 MHz when used in a coordinated facility system.
Response Time	<0.5 nanoseconds
Operating Temperature	-40°C to +75°C
Operating Humidity	0% to 95% non-condensing
Warranty	10 Years



\*This is a 120/208V unit, and can be used in 127/220V applications

\*\*This is a 277/480V unit, and can be used in 220/380V applications

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## T71 Non-Modular Surge Protective Device High Energy Series 100kA per Phase

**T71** 

### Voltage & Phase Configuration Code

- 120S** = 120/240V Split Phase (3W+G) - Fig 1
- 120N** = 120V Single Phase (L1, N, G) - Fig 5
- 120Y** = 120/208V 3 Phase Wye, (4W+G)\* - Fig 2
- 127Y** = 127/220V 3 Phase Wye, (4W+G)\* - Fig 2
- 220Y** = 220/380V 3 Phase Wye, (4W+G)\*\* - Fig 2
- 277Y** = 277/480V 3 Phase Wye (4W+G)\*\* - Fig 2
- 240L** = 240V Single Phase (L1, L2, G) - Fig 6
- 240D** = 240V 3 Phase Delta (3W+G) - Fig 3
- 240H** = 240/480V 3 Phase Delta Hi-Leg (4W+G) - Fig 4
- 480D** = 480V 3 Phase Delta, (3W+G) - Fig 3

\*This is a 120/208V unit, and can be used in 127/220V applications

\*\*This is a 277/480V unit, and can be used in 220/380V applications

You may place the order as either part number.

### Surge Current Capacity Code

**050** = 100kA/Phase

### Modes

- A** - All Connected Modes
- G** - Neutral Delete (L-L & L-G Only)

### Connection Type

**W** - Wire Lead

### Status

**L0** - LED +  
Form C Relay

### UL 1449 Location Type

- 1** - Type 1
- 2** - Type 2

### Example Product number:

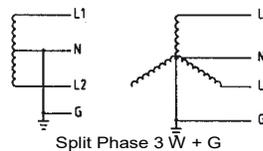
Filled in:

T71 120Y 050 A W P2 L0 1 M

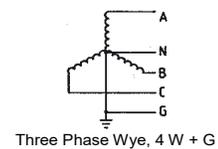
Complete:

T71120Y050AWP2L01M

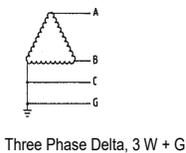
**Fig. 1**



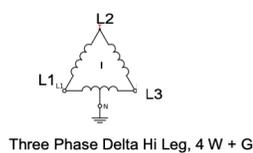
**Fig. 2**



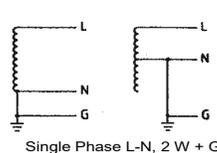
**Fig. 3**



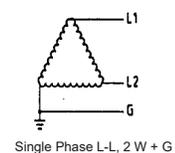
**Fig. 4**



**Fig. 5**



**Fig. 6**



### System Voltage Compatibility

Model Voltage/Phase Code	Nominal System Voltages	System Configuration	MCOV	I <sub>n</sub>	SCCR	UL 1449 Voltage Protection Rating			
						L-N	L-G	N-G	L-L
<b>120N</b>	120	Single Phs, 2W+G	150	20kA	200kA	700	700	700	
<b>120S</b>	120/240	Split Phs, 3W+G	150	20kA	200kA	700	700	700	1200
<b>120Y</b>	120/208; 127/220	3 Phs Wye, 4W+G	150	20kA	200kA	700	700	700	1200
<b>127Y</b>	120/208; 127/220	3 Phs Wye, 4W+G	150	20kA	200kA	700	700	700	1200
<b>220Y</b>	220/380; 240/415; 277/480	3 Phs Wye, 4W+G	320	20kA	200kA	1200	1200	1200	2000
<b>240L</b>	240	Single Phs, 2W+G	320	20kA	200kA		1200		1200
<b>240H</b>	240/480	3 Phs Delta Hi-leg, 4W+G	320/550	20kA	200kA	1200/1800	1200/1800	1200	2000/3000
<b>277Y</b>	220/380; 240/415; 277/480	3 Phs Wye, 4W+G	320	20kA	200kA	1200	1200	1200	2000
<b>240D</b>	220; 230; 240	3 Phs Delta, 3W+G	320	20kA	200kA		1200		1200
<b>480D</b>	380; 400; 415; 440; 460; 480	3 Phs Delta, 3W+G	550	20kA	200kA		1800		3000

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