

Tier 460 Motor SPD: 50kA T45 Series Surge Protective Device With a Contactor, Line Reactor, and Active Monitoring & Control

The "3-in-1" Power Quality System



Features: Surge

- Thermally Protected MOVs
- Surge Levels Available:
 25 kA/Mode, 50kA/Phase
- ANSI/UL 1449 4th Edition, cUL
- Sine Wave Tracking: Type 2
- Surge Impulse Rated and Tested

Line Reactor

- Inrush Current Limitation
- Starting and Peak Current Limitation
- Circuit Feedback Protection
- Harmonic Mitigation
- Reduction in Losses

Monitoring & Control

- Monitor Under/Over voltage, Phase Loss, Imbalance
- Audible Alarm w/ disable switch, and LED indication
- Active Load Disconnect & Reset
- User Selectable Controls:
- +/- 5, 7.5, 10, 15, 20, 25% Over/Under Voltage Trip Settings
- Auto restart available with user selectable reset time. Includes: No delay, 5s, 10s, 30s, 1m, 5m, 10m, No restart

Why Install a Tier 460 Contactor Auto Disconnect and Restart Controller with a Line Reactor and SPD?

The Tier 460 Motor Surge Protection Contactor Restart Device with Line Reactor, or "3-in-1", will protect a motor, or an entire system, from power quality events. It runs a surge protection device with a series contactor, and a line reactor.

The contactor will disconnect the load at predetermined levels, and will reconnect the load at separate predetermined levels automatically. The SPD remains online while the load is disconnected. The Line reactor will limit Inrush current, along with starting and peak current; as well as reducing low frequency interference, current harmonics, distortion of reactive power, circuit feedback, and losses at the line transformer and in neutral wire loads.

This "3-in-1" Power Quality System rigorously defends your essential equipment from damaging disruptions. If you are experiencing power quality anomalies that you have not been able to identify or remediate, or are continuously replacing equipment due to damage from a known process; this unit may provide the solution you have been looking for.

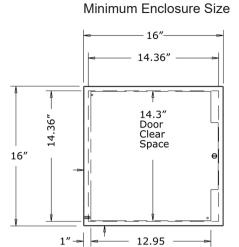


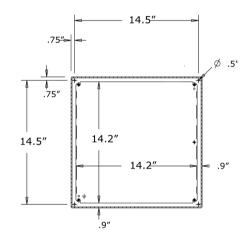


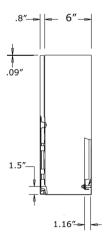


Tier 460 Motor SPD: 50kA T45 Series Surge Protective Device With a Contactor, Line Reactor, and Active Monitoring & Control

General Technical Specifications	
Connection Type	Contactor and Line Reactor are Series
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)
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%
Short Circuit Current Rating (SCCR)	200kAIC Surge; 22kAIC Contactor
Contactor Current Rating	30, 60, or 90 Amp (120V Supply Voltage)
Line Reactor Current Rating	30, 60, or 90 Amp (Typically matches Contactor)
Line Reactor Impedance	3% - 5%
Protection Modes	All Connected Modes: L-N, L-L, L-G, N-G
Operating Frequency Range	47 - 63 Hz
UL 1449 Location Type	Type 1 or Type 2
Nominal Discharge Current (In)	10 kA
Connection	Terminal Block, Rotary Disconnect, Line-Cord, or Wire Lead
Status Indication	Blue/Red LEDs, Form C, Audible Alarm w/ disable switch
Monitoring	Under Voltage/ Over Voltage + activation LED, Phase loss, Phase Imbalance
Enclosure	NEMA 4, 12, &13 Rated (16 Gauge Steel)
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
Weight	40 lbs
3-in-1 50kA/Phase Case Size	At least 16" x 16" x 8" - Larger may be required as size depends on bend needed for wire per NEC
Selectable Over/Under Voltage Trigger Levels	+/- 5%, 7.5%, 10%, 15%, 20%, 25%
Contactor Options for Auto Reset	Selectable resets: No Delay, 5s, 10s, 30s, 1m, 5m, 10m, No Restart
Warranty	SPD: 10 years Line Reactor: 5 Years



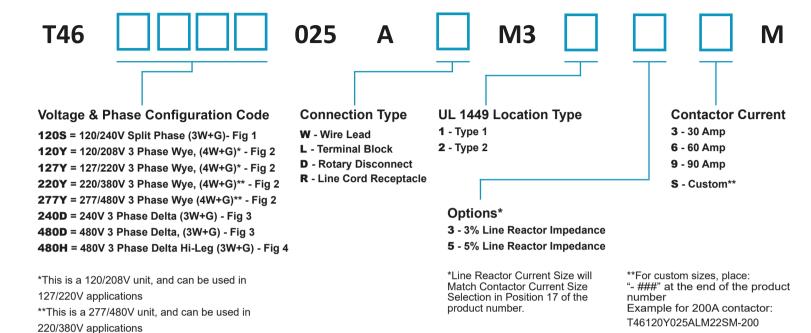








Tier 460 Motor SPD: 50kA T45 Series Surge Protective Device With a Contactor, Line Reactor, and Active Monitoring & Control



You may place the order as either part number.

Example Product number:

Filled in:

Complete:

T46 120Y 025 A L M3 2 5 3 M = T46120Y025ALM3253M

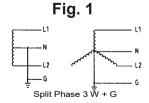


FIG. 2

A

N

B

C

G

Three Phase Wye, 4 W + G

