



# Tier 460 Motor SPD Contactor Restart

M2 30 Amp or 60 Amp Model  
No Surge, Contactor Only Model



## Features:

### 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 Contactor Auto Disconnect and Reconnect?

Transient impulses can significantly impact your facility's power quality, easily disrupting or damaging your process or equipment. While it's important to protect against high-energy events with surge protection, a more frequent, yet often overlooked power quality concern is the damage caused by a phase loss, a temporary voltage sag, or a voltage swell condition. Disconnecting your sensitive loads during these longer duration PQ events, is the easiest way to safeguard important equipment.

If you already have a surge protection solution in place, this contactor only unit will help you provide more comprehensive protection for your systems.

*Innovative Solutions for Clean, Reliable Power*



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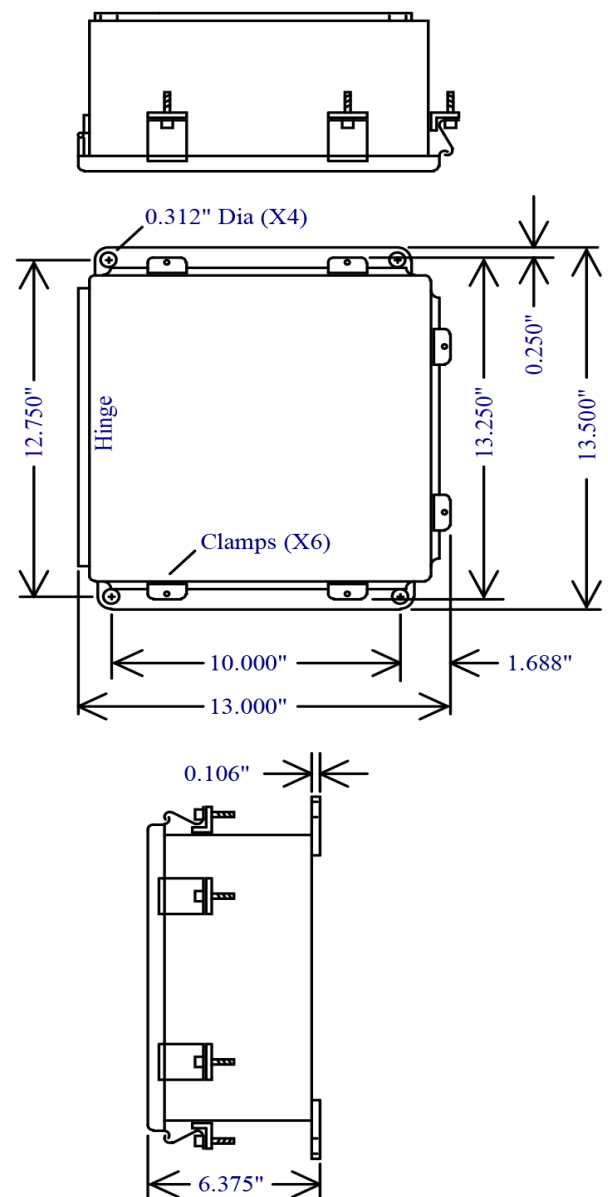
## Why Install surge protection with an auto disconnect feature?

The Tier 460 M2 Terminal Block Motor Protection Contactor Restart Device with No Surge will protect a motor, or an entire system, from power quality events. It runs a series onboard contactor and advanced controller.

The 460 M2 No Surge comes with either a 30 or 60 Amp contactor. It has a smaller enclosure than our M3 460 units, and but large enough to house our advanced control board, and contactors with a current rating over 30 Amps. When you need a higher contactor current rating, and already have a surge protection solution, this no surge contactor only unit will suit your needs.

The contactor needs a separate 120V supply.

General Technical Specifications	
Connection Type	Series
Surge Short Circuit Current Rating (SCCR)	22kAIC
Contactor Current Rating	30 or 60Amp (120V Supply Voltage)
Protection Modes	All Lines and Neutral
Operating Frequency Range	60 Hz
Connection	Terminal Block
Status Indication	Green Power LED, Blue Active System LED, Audible Alarm w/disable switch
Monitoring	Under/Over Voltage, Phase Loss, Phase Imbalance
Enclosure	NEMA 4,12, &13 Indoor/Outdoor Rated (Steel)
Operating Temperature	-40°C to +75°C
Operating Humidity	0% to 95% non-condensing
Weight	20.6 lbs
Contactor Only Case Size	12.00" x 12.00" x 6.269"
Contactor Only Case Size w/ Mount	13.500" x 13.000" x 6.375"
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, 10 m, No Restart
Warranty	10 years





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**Table A: Voltage & Source Configuration**

Model Code	Voltage	Source Configuration
000(N/S/Y/D)	N/A	N=Single, S=Split, Y= 3 Phs Wye, D=3 Phs Delta
120S	120/240	Split Phase, 3W+G (L1, L2, N G)
120N	120	Single Phase , 2W+G (L1, N, G)
120Y	120/208	Three Phase Wye, 4W+G (L1, L2, L3, N, G)
208N	208	Single Phase, 2W+G (L1, L2, G)
240N	240	Single Phase, 2W+G (L1, L2, G)
240D	240	Three Phase Delta, 3W+G (L1, L2, L3, G)
277Y	277/480	Three Phase Wye, 4W+G (L1, L2, L3, N, G)
480D	480	Three Phase Delta, 4W+G (L1, L2, L3, N, G)

*For Contactor Only Select 000 and one letter for your contactor phase*

**Table C: Enclosure Size**

Model Code	Dimensions	Capacity	Enclosure Material	Contactor Current or Shunt Trip Supply Volt
2	13.50" x 13.00" x 6.375"	25kA	Steel	30 or 60 Amp
5	8.695" x 11.25" x 4.000"	25kA	Polycarbonate	30 Amp; or 24V or 120V or 277V supply voltage
3	16.00" x 16.00" x 8.00"	50kA-150kA	Steel	30 or 60 Amp; or 24V or 120V or 277V supply voltage
5	8.695" x 11.25" x 4.000"	None	Polycarbonate	30 Amp Contactor only

**Table B: Surge Current Capacity**

Model Code	Surge Capacity /Mode	Surge Capacity / Phase
000	None	None
025	25 kA	50kA
050	50 kA	100 kA
075	75 kA	150 kA
100	100 kA	200 kA
125	125 kA	250 kA
150	150 kA	300 kA

**Table D: Contactor Current or Shunt Trip Supply Voltage**

Model Code	Contactor Current	Supply Voltage
3	30 Amp	120 Volt
6	60 Amp	120 Volt
9	90 Amp	120 Volt
A	None	24 Volt
B	None	120 Volt
C	None	277 Volt
S	Custom	Custom

**Tier460 Motor Protection Series, 460 Family Ordering Information:**

**Example Model Number: T46000Y000NLM2NS6**

Positions: 1-3	Positions: 4-7	Positions: 8-10	Position: 11	Position: 12	Position: 13	Position: 14	Position: 15	Position: 16	Position: 17
Product Family	Voltage/ Phase Configuration	Surge Capacity	Surge Protected Modes	Connection Type	Enclosure Type	Enclosure Size	UL Type	Options	Contactor Current or Shunt Trip Supply Voltage
T46 = 460 Family	See Table A	See Table B	A = All connected modes N=No Surge	W = Wire Lead L = Terminal Block D = Disconnect R = Line Cord Receptacle	P=NEMA 4X; Polycarbonate M=NEMA 4; Steel	See Table C	1=UL Type 1 2=UL Type 2 N= No Surge	S = Standard /No Options C = Surge Center	See Table D