

C340

# Tier 460 Motor Contactor Restart Only

With Active Monitoring & Control P5 30 Amp Model

### **Features:**

#### **Monitoring & Control**

- Monitor Under/Over voltage, Phase Loss, Imbalance
- 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



## Tier 460 Motor Contactor Restart Only

With Active Monitoring & Control

P5 30 Amp Model

#### Why Install a contactor with an auto disconnect and reset feature?

The Tier 460 Terminal Block Motor Protection Contactor Restart Only Device will protect a motor, or an entire system, from power quality events. It runs an onboard contactor in series with the load and the system or motor. The contactor will disconnect the load at predetermined levels, and will reconnect the load at separate predetermined levels automatically.

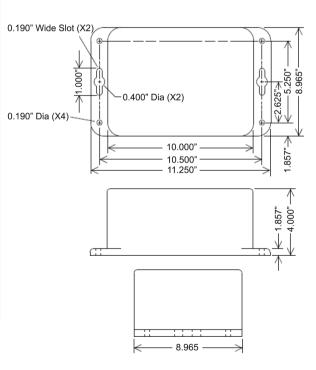
This model has a 30 Amp Contactor Current Rating. For a higher current rated contactor, contact the factory.

| General Technical Specifications                |                                                                            |  |  |  |  |
|-------------------------------------------------|----------------------------------------------------------------------------|--|--|--|--|
| Connection Type                                 | Series                                                                     |  |  |  |  |
| Surge Short Circuit Current Rating (SCCR)       | 22kAIC                                                                     |  |  |  |  |
| Contactor Current Rating                        | 30 Amp                                                                     |  |  |  |  |
| Protection Modes                                | All Lines and Neutral                                                      |  |  |  |  |
| Operating Frequency Range                       | 60 Hz                                                                      |  |  |  |  |
| Connection                                      | Terminal Block                                                             |  |  |  |  |
| Status Indication                               | Green Power LED, Blue Active System LED,<br>Audible Alarm w/disable switch |  |  |  |  |
| Monitoring                                      | Under/Over Voltage, Phase Loss, Phase<br>Imbalance                         |  |  |  |  |
| Enclosure                                       | NEMA 4X Indoor/Outdoor Rated (Polycarbonate)                               |  |  |  |  |
| Operating Temperature                           | -40°C to +75°C                                                             |  |  |  |  |
| Operating Humidity                              | 0% to 95% non-condensing                                                   |  |  |  |  |
| Weight                                          | 5lbs                                                                       |  |  |  |  |
| Contactor Only Case Size                        | 8.965" x 10.00" x 4.000"                                                   |  |  |  |  |
| Contactor Only Case Size w/ Mount               | 8.965" x 11.25" x 4.000"                                                   |  |  |  |  |
| Selectable Over/Under Voltage<br>Trigger Levels | +/- 5%, 7.5%, 10%, 15%, 20%, 25%                                           |  |  |  |  |
| Contactor Options for Auto Reset                | Selectable resets: No Delay, 5s, 10s, 30s, 1m,<br>5m, 10 m, No Restart     |  |  |  |  |
| Warranty                                        | 10 years                                                                   |  |  |  |  |

| Voltage & Source Configuration |         |                                                   |  |  |  |
|--------------------------------|---------|---------------------------------------------------|--|--|--|
| Model Code                     | Voltage | Source Configuration                              |  |  |  |
| 000(N/S/Y/D)                   | N/A     | N=Single, S=Split, Y= 3 Phs Wye,<br>D=3 Phs Delta |  |  |  |

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

| Surge Current Capacity |                         |                          |  |  |
|------------------------|-------------------------|--------------------------|--|--|
| Model<br>Code          | Surge Capacity<br>/Mode | Surge Capacity<br>/Phase |  |  |
| 000                    | N/A                     | N/A                      |  |  |



307 Chaumont Dr. | Endwell, NY 13760 | Phone 607-484-1212 | Toll-Free: 866-748-2357 | Fax: 607-953-6403

www.southerntiertechnologies.com



# Tier 460 Motor Contactor Restart Only

With Active Monitoring & Control P5 30 Amp Model

| 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)     |  |  |  |  |

|               | Table C: Enclosure Size  |                |                       |                                                           |  |  |  |  |
|---------------|--------------------------|----------------|-----------------------|-----------------------------------------------------------|--|--|--|--|
| Model<br>Code | Dimensions Capacity      |                | Enclosure<br>Material | Contactor Current or<br>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-<br>150kA | Steel                 | 30 or 60 Amp; or 24V<br>or 120V or 277V supply<br>voltage |  |  |  |  |
| 5             | 8.695" x 11.25" x 4.000" | None           | Polycarbonate         | 30 Amp Contactor only                                     |  |  |  |  |

| Table B: Surge Current Capacity |                         |                           |  |  |  |
|---------------------------------|-------------------------|---------------------------|--|--|--|
| Model<br>Code                   | Surge Capacity<br>/Mode | Surge Capacity /<br>Phase |  |  |  |
| 000                             | N/A                     | N/A                       |  |  |  |
| 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<br>Supply Voltage |                                     |                 |  |  |  |  |
|------------------------------------------------------------|-------------------------------------|-----------------|--|--|--|--|
| Model<br>Code                                              | Contactor<br>Current Supply Voltage |                 |  |  |  |  |
| 3                                                          | 30 Amp                              | 30 Amp 120 Volt |  |  |  |  |
| 6                                                          | 60 Amp                              | 120 Volt        |  |  |  |  |
| 9                                                          | 90 Amp                              | 120 Volt        |  |  |  |  |
| A                                                          | None                                | 24 Volt         |  |  |  |  |
| В                                                          | None                                | 120 Volt        |  |  |  |  |
| С                                                          | None                                | 277 Volt        |  |  |  |  |
| S                                                          | Custom                              | Custom          |  |  |  |  |

Tier460 Motor Protection Series, 460 Family Ordering Information:

Example Model Number: T46000N000NLP5NS3

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

307 Chaumont Dr. | Endwell, NY 13760 | Phone 607-484-1212 | Toll-Free: 866-748-2357 | Fax: 607-953-6403

www.southerntiertechnologies.com