



## **420 Amps 600 Volts AC/DC**

### **Wire Range**

- Line: (1) 600kcmil - #2 AWG
- Load: (3) 1/0 - #14 AWG and (6) #2 - 14

### **Electrical Ratings**

- 420 Amps
- 600V per UL 1059 & CSA 22.2 No.158, class B & C requirements
- Short circuit current ratings (SCCR): See SCCR section below for specifications.
- CU7AL - 75°C connector terminal rating with copper or aluminum wire
- Factory & Field Wiring

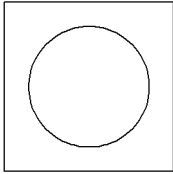
### **Agency Compliance**

- UR - UL Recognized Terminal Block, Evaluated to UL 1059, File No.XCFR2.E62806
- CSA - certified to C22.2 No. 158, File No. LR19766 (wire classes B & C only)
- CE compliant to IEC 60947-7-1

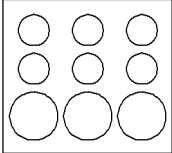
### **Material Information**

- Insulator base:
  - Thermoplastic
  - Flammability rating of insulator base UL94V0
  - Insulator base temperature rating: -40°C to 125°C (UL RTI)
- Connector - aluminum, tin plated
- Line terminal screw: aluminum, tin plated
- Load terminal screws: steel, nickel plated
- Connector mounting screws: steel, zinc plated
- RoHS compliant

## Termination Specifications

| Line Side   | Wire Size (CU Stranded) | Torque                | Wires / Terminal | Wire Class (UL) <sup>1</sup> |
|---|-------------------------|-----------------------|------------------|------------------------------|
|  | 600 - 500 kcmil         | 42.4 N·m (375 lbf·in) | 1                | B, C                         |
|   | 400 - 2                 | 42.4 N·m (375 lbf·in) | 1                | B, C, G, H                   |

- Aluminum stranded wire range: 600 kcmil - #2 AWG
- Wire strip length: 1 9/16in. (40mm)
- Terminal screw drive: 1/2in. hex

| Load Side   | Terminal | Wire Size (CU Stranded) | Torque                | Wires / Terminal  | Wire Class (UL) <sup>1</sup> |      |
|---|----------|-------------------------|-----------------------|-------------------|------------------------------|------|
|  | 1/0-#14  | 1/0 AWG                 | 13.6 N·m (120 lbf·in) | 1                 | B, C                         |      |
|   |          | 1                       | 13.6 N·m (120 lbf·in) | 1                 | B, C, G, H, I (DLO)          |      |
|   |          | 2-6                     | 6.8 N·m (60 lbf·in)   | 1                 | B, C, G, H, I (DLO)          |      |
|   |          | 8                       | 4 N·m (35 lbf·in)     | 1                 | B, C, G, H, I (DLO)          |      |
|   |          | 10 - 14                 | 4 N·m (35 lbf·in)     | 1                 | B, C, I (DLO)                |      |
|   | #2-14    | 2 AWG                   | 5.7 N·m (50 lbf·in)   | 1                 | B, C                         |      |
|   |          | 4-6                     | 5.1 N·m (45 lbf·in)   | 1                 | B, C, G, H, I (DLO)          |      |
|   |          | 8                       | 4.5 N·m (40 lbf·in)   | 1-2 <sup>2</sup>  | B, C, I (DLO)                |      |
|   |          | 10 - 14                 | 1-4                   | 4 N·m (35 lbf·in) | 1-4                          | B, C |
|   |          |                         | 1-2                   |                   | I (DLO)                      |      |

- Solid copper wire range: #10 - 14 AWG
- Aluminum stranded wire range: 1/0 - 14 & #2 - 14 AWG
- Wire strip length:
  - top row: 1/2 in. (13mm)
  - middle row: 11/16 in. (18mm)
  - bottom row tap: 15/16 in. (24mm)
- Terminal screw drive: 5/32 in. hex & 3/16 in. hex

<sup>1</sup> For information on copper stranded wire classes please reference:  
<http://www.marathonsp.com/CatalogPDFs/Flexible-Stranded-Wire.pdf>

<sup>2</sup> Multiple wire rating applies to class B, C, & I.

## Short Circuit Current Ratings (SCCR)

- The suitable conductor ranges are limited to the table values only for achieving the SCCR in excess of the default rating of 10,000A.
- Other conductor combinations within the "Terminal Specifications" noted are suitable for achieving a SCCR of 10,000A (the default rating of terminal blocks).
- Enclosure size – Investigated with a minimum 16x12x6 enclosure. Use in smaller enclosures is subject to end use evaluation.

### SCCR With Fuses

| Wire Class | Suitable Conductors |                  | Max Overcurrent Protection <b>Fuse</b> Required<br>Amp Rating / Class |     |     |     |    |    | SCCR RMS Sym. Amps<br>600V. Max |
|------------|---------------------|------------------|---|-----|-----|-----|----|----|---------------------------------|
|            | Line                | Load             | J   | T   | RK1 | RK5 | G  | CC |                                 |
| B, C       | 600 - 3/0           | 1/0 - 8          | 500   | 500 | 400 | 200 | 60 | 30 | 100,000                         |
| B, C       | 600 - 2             | 1/0 - 10         | 200   | 200 | 200 | 100 | 60 | 30 | 100,000                         |
| G, H, I    | 350 - 2             | 1 - 8            | 500   | 500 | 400 | 200 | 60 | 30 | 100,000                         |
| G, H, I    | 350 - 2             | 1 - 10           | 200   | 200 | 200 | 100 | 60 | 30 | 100,000                         |
| (*)        | 600 - 2             | 1/0 - 14, 2 - 14 | None  |     |     |     |    |    | 10,000                          |

\* Any wire class evaluated (see terminal specification section)

## Installation & Accessories

- Mounting (Panel):
  - For use with #10 fastener.
  - Torque mounting fastener to 25-30 lbf·in (2.8 - 3.4 N·m).
- Covers:
  - Snap-on hinge covers available upon request
  - Catalog Number: CH133x (replace "x" with number of poles)
  - Covers are black thermoplastic
  - Accessory covers are not intended to provide insulation for electrical spacings.
- Marker Strip: white vinyl strip with mounting screws available.
- Printing options available, consult customer service for specifications.

**Drawing**

