



marathon®

Special Products

Product Data Sheet EPBCP74

Power Distribution Block

335 Amps 600 Volts AC/DC

Wire Range

- Line: (1) 400kcmil - #6 AWG (185 - 16 mm²) and (1) 3/0 - #14 (70 - 2.5 mm²)
- Load: (8) #2 - 14 AWG (35 - 2.5 mm²)

Electrical Ratings

- 335 Amps
- 600V per UL 1059 & CSA 22.2 No.158, class B & C requirements
- 1000 V AC/DC per IEC 60947-7-1 (CE)
- Short circuit current ratings (SCCR): See SCCR section below for specifications.
- CU9 - 90°C connector terminal rating with copper wire
- Touch protection: IP-20 (IEC 60529)
- 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

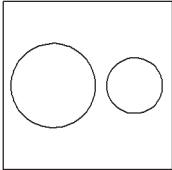
Material Information

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

A Regal Brand

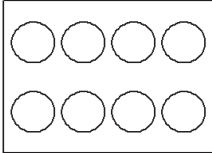
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Termination Specifications

| Line Side | Terminal | Wire Size (CU Stranded) | Torque | Wires / Terminal | Wire Class (UL) ¹ | |
|---|---------------------|-------------------------|---------------------------|-----------------------|------------------------------|------------------------|
|  | 400 - 6 | 400 - 2/0 | 42.4 N·m (375 lbf·in) | 1 | B, C, G, H, I (DLO), K | |
| | | 1/0 - 2 | 30.9 N·m (275 lbf·in) | 1 | B, C, G, H, I (DLO), K | |
| | | 4 - 6 | 30.9 N·m (275 lbf·in) | 1 | B, C | |
| | 3/0 - 14 | | 3/0 | 13.6 N·m (120 lbf·in) | 1 | B, C |
| | | | 2/0 - 2 | 13.6 N·m (120 lbf·in) | 1 | B, C, G, H, I (DLO), K |
| | | | 4 | 9.0 N·m (80 lbf·in) | 1 - 2 | B, C |
| | | | | | 1 | G, H, I (DLO), K |
| | | | 6 | 9.0 N·m (80 lbf·in) | 1 - 2 | B, C, G, H, I (DLO), K |
| | | | 8 | 4.5 N·m (40 lbf·in) | 1 - 2 | B, C, G, H, I (DLO), K |
| | | | 10 - 14 | 4.5 N·m (40 lbf·in) | 1 - 2 | B, C, I (DLO), K |
| | METRIC WIRE RATINGS | | | | | |
| | | Terminal | Wire Size mm ² | Torque | Wires / Terminal | Wire Class (UL) |
| | 185 - 16 | | 185 - 70 | 42.4 N·m (375 lbf·in) | 1 | 2, 5, 6 |
| | | | 50 | 30.9 N·m (275 lbf·in) | 1 | 2, 5, 6 |
| | | | 35 | 30.9 N·m (275 lbf·in) | 1 | 2, 5 |
| | | | 25-16 | 30.9 N·m (275 lbf·in) | 1 | 2 |
| | 95 - 2.5 | | 95 | 13.6 N·m (120 lbf·in) | 1 | 2 |
| | | | 70-50 | 13.6 N·m (120 lbf·in) | 1 | 2, 5, 6 |
| | | | 35 | 13.6 N·m (120 lbf·in) | 1 | 2, 5 |
| | | | 25 | 9.0 N·m (80 lbf·in) | 1-2 | 2 |
| | | | | | 1 | 5 |
| 16 | | | 9.0 N·m (80 lbf·in) | 1-2 | 2, 5 | |
| 10-2.5 | | | 4.5 N·m (40 lbf·in) | 1-2 | 2, 5 | |
| 6-2.5 | 4.5 N·m (40 lbf·in) | 1 | 1 | | | |

- Solid Copper Wire Range: (1) 10-14 AWG
- Wire strip length: 1 7/16 in (36mm) & 1 in. (25mm)
- IP-20 protection: 400 kcmil - 300 kcmil & 3/0 - 4 AWG
- Terminal screw drive: 8 mm & 6 mm hex

Termination Specifications

| Load Side | Wire Size (CU Stranded) | Torque | Wires / Terminal | Wire Class (UL) ¹ | |
|---|-------------------------|---------------------------|------------------------|------------------------------|-----------------|
|  | 2 - 4 | 9.0 N·m (80 lbf·in) | 1 | B, C, G, H, I (DLO), K | |
| | 6 | 9.0 N·m (80 lbf·in) | 1 - 2 | B, C | |
| | | | 1 | G, H, I (DLO), K | |
| | 8 | 4.5 N·m (40 lbf·in) | 1 - 2 | B, C, G, H, I (DLO), K | |
| | 10 - 14 | 4.5 N·m (40 lbf·in) | 1 - 4 | B, C, I (DLO) | |
| | | | 1 - 2 | I (DLO), K | |
| | METRIC WIRE RATINGS | | | | |
| | | Wire Size mm ² | Torque | Wires / Terminal | Wire Class (UL) |
| | | 35 - 25 | 9.0 N·m (80 lbf·in) | 1 | 2, 5 |
| | | 16 | 9.0 N·m (80 lbf·in) | 1-2 | 2 |
| | | | | 1 | 5 |
| | | 10 | 4.5 N·m (40 lbf·in) | 1-2 | 2, 5 |
| | | 6 - 2.5 | 4.5 N·m (40 lbf·in) | 1-2 | 5 |
| | | | | 1-4 | 2 |
| | 1 | | | 1 | |

- Solid Copper Wire Range: (1) 10-14 AWG
- Wire strip length: Top Row: 5/8 in. (16mm)
Bottom Row: 3/4 in (19mm)
- IP-20 protection: 2 - 12 AWG
- Terminal screw drive: 5 mm hex

¹ For information on copper stranded wire classes please visit:
<http://www.marathonsp.com/flexible-stranded-wire.php>

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 Fuse Required Amp Rating / Class | | | | | | SCCR RMS Sym. Amps 600V. Max |
|------------|---------------------|--------|---|-----|-----|-----|----|----|------------------------------------|
| | Line | Load | J | T | RK1 | RK5 | G | CC | |
| B, C | 400 - 3/0 | 2 - 8 | 400 | 400 | 400 | 200 | 60 | 30 | 100,000 |
| B, C | 400 - 6 | 2 - 10 | 200 | 200 | 200 | 100 | 60 | 30 | 100,000 |
| B, C | 6 | (2) 12 | 225 | 225 | 100 | 60 | 60 | 30 | 100,000 |
| G, H, I, K | 400 - 6 | 2 - 10 | 300 | 300 | 200 | 100 | 60 | 30 | 100,000 |
| (*) | 400-6 & 3/0-14 | 2 - 14 | None | | | | | | 10,000 |

* Any wire class evaluated (see terminal specification section)

Installation & Accessories

- Mounting (Panel):
 - For use with M6 fasteners.
 - Mounting torque to be determined in end use application not to exceed 40 lb-in
- Safety plugs: EPB Plug 400 Line side, EPB Plug 3/0 Line side, EPB Plug 2 Load side
- Marker cards:
 - White plastic inserts: EPB Marker Card
- Allen wrenches (6mm):

| | 5 mm | 6 mm | 8mm |
|-----------------|-------------|-------------|------------|
| • S & K tools | 45955 | 45956 | 45958 |
| • Snap-on tools | FAML5E | FAML6E | FAML8E |
| • MAC tools | XDLS5MM | XDLS6MM | XDLS8MM |
| • McMaster Carr | 8367A23 | 8367A24 | 8367A26 |
| • Armstrong | 38-709 | 38-711 | 38-713 |

Drawing

