



# 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 mm<sup>2</sup>) and (1) 3/0 - #14 (70 - 2.5 mm<sup>2</sup>)
- Load: (8) #2 - 14 AWG (35 - 2.5 mm<sup>2</sup>)

#### 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

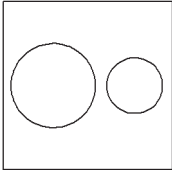
#### Material Information

- 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

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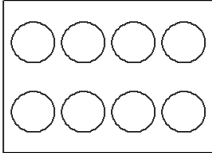
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## Termination Specifications

Line Side	Terminal	Wire Size (CU Stranded)	Torque	Wires / Terminal	Wire Class (UL) <sup>1</sup>	
	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	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	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 <sup>2</sup>	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) <sup>1</sup>
	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			
	<b>Wire Size mm<sup>2</sup></b>	<b>Torque</b>	<b>Wires / Terminal</b>	<b>Wire Class (UL)</b>
	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

<sup>1</sup> 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 <b>Fuse</b> 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):
 

	<b>5 mm</b>	<b>6 mm</b>	<b>8mm</b>
• 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**

