

CUBEFuse™ Compact Circuit Protector Base (CCPB)



Features and benefits:

- Uses finger-safe, current-limiting Class CF CUBEFuse with Class J performance available, time-delay or fast-acting versions from 1 to 100 amps*
- Patented ampacity rejection feature helps prevent overfusing
- High 200kA short-circuit current ratings
- Disconnect rated to provide means for load isolation
- All versions are full voltage rated at 600Vac
- 125Vdc rated for 80A and below
- UL 98 Listed and suitable for branch circuit disconnect
- 1-, 2- and 3-pole versions are horsepower rated
- Listed to UL and cULus
- Open fuse indication light per pole
- Additional open fuse indication can be provided by using the time-delay indicating CUBEFuse version
- Built-in switch/fuse interlock prohibits fuse removal while energized
- Permanent lockout/tagout provisions
- Lock-On provision available when used in the Bussmann series Quik-Spec Coordination Panelboard (QSCP)

* See data sheet 9000 for time-delay CUBEFuse and data sheet 2147 for fast-acting CUBEFuse specifications.

Product description:

The revolutionary Bussmann™ series Compact Circuit Protector Base (CCPB) with CUBEFuse™ is designed as a fused branch circuit disconnect switch for the Bussmann series Quik-Spec™ Coordination Panelboard. The CCPB with CUBEFuse simplifies selective coordination and lockout/tagout provisions allow for isolation of individual branch circuit loads for safe work practices.



Powering Business Worldwide

Specifications:

Switch ampacity and rejection breaks

- 15A, 20A, 30A, 40A, 50A, 60A, 70A, 90A and 100A

Poles

- 1-, 2- and 3-pole versions

Volts

- 600Vac (or less)
- 125Vdc (15, 20, 30, 40, 70 and 90 amp switches with ≤ 80A fuse)

Agency information

- UL 98 Listed, File E302370, Guide WHTY
- cULus to CSA Standard 22.2 No. 4, File E302370, Guide WHTY7
- CE compliant
- RoHS compliant

Terminals

Lineside bolt-on bus connector and torque

- Bolt-mounted design into Quik-Spec Coordination Panelboard bus
- #10-32-UNC Hex flange Phillips screw; 25 Lb-In (2.8 N•m)

Loadside box lug terminal and torque

- 15-60A:
 - 18 to 10 AWG (1 to 6mm²) single or dual rated (same size wire), solid or stranded – 75°C or higher - Cu only; 20 Lb-In (3.4 N•m)
 - 8 to 6 AWG (10 to 16mm²) single or dual rated (same size wire), solid or stranded – 75°C or higher - Cu only; 35 Lb-In (5.8 N•m)
 - 4 AWG (25mm²) single – 75°C or higher - Cu only; 35 Lb-In (5.8 N•m)
- 100A:
 - 18 to 10 AWG (1 to 6mm²) single, solid or stranded – 75°C or higher - Cu only; 25 Lb-In (2.82 N•m)
 - 8 to 1 AWG (10 to 45mm²) single stranded – 75°C or higher - Cu only; 40 Lb-In (4.52 N•m)
 - 6 AWG (16mm²) dual stranded (same size wire) – 75°C or higher Cu only; 45 Lb-In (5.08 N•m)

Loadside fork terminal

- Max. 30A suitable for use with #8-32UNC screw

Lockout/tagout

- 4mm shank lock

Local open fuse indication

- Light illumination requires closed circuit and minimum 90V operating voltage

Shipping weight

- 2.03 lbs per carton

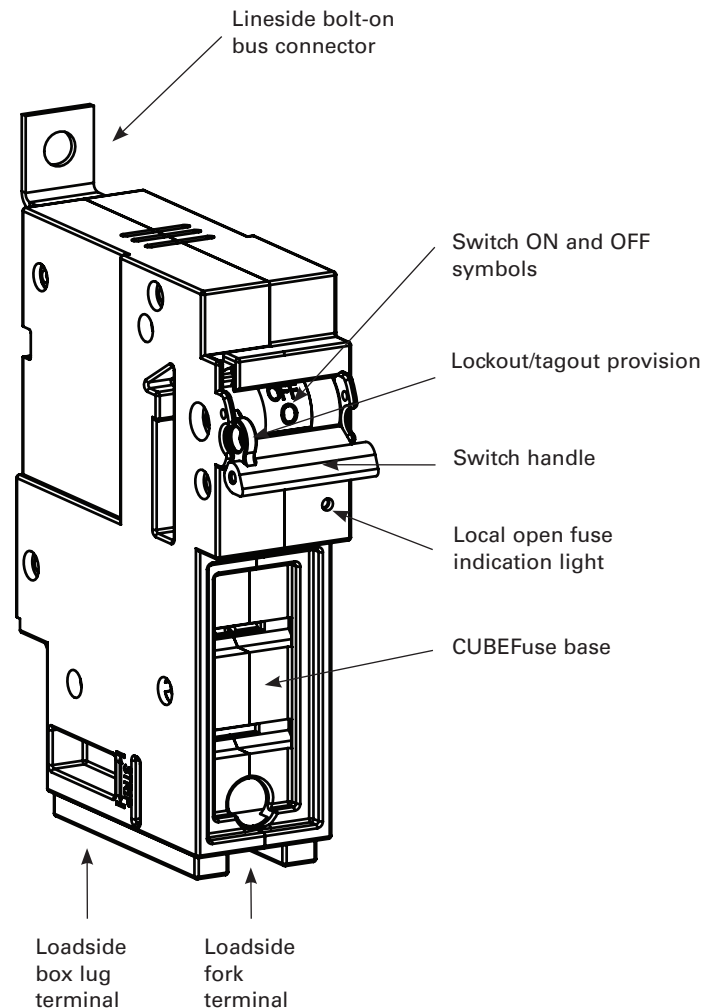
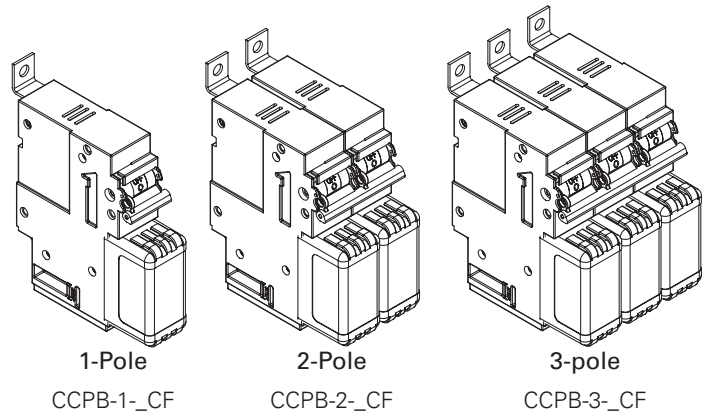
Carton quantity

- 6 poles

Environmental data

Storage and operating temperature -20°C to 75°C**

** For fuse performance under or above 25°C, consult fuse performance derating charts.



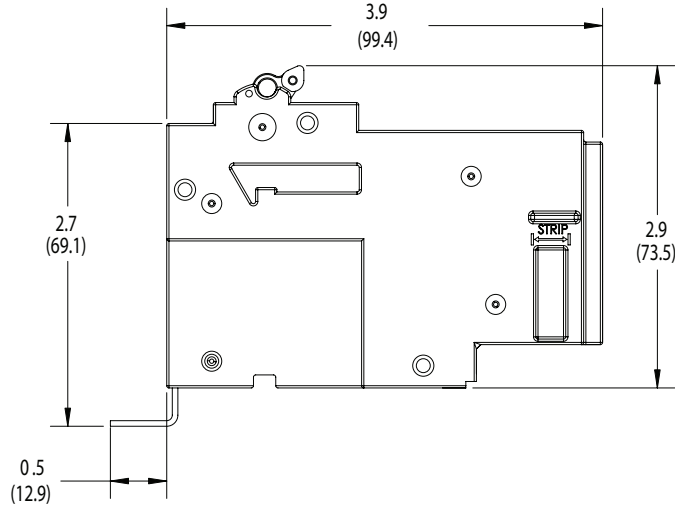
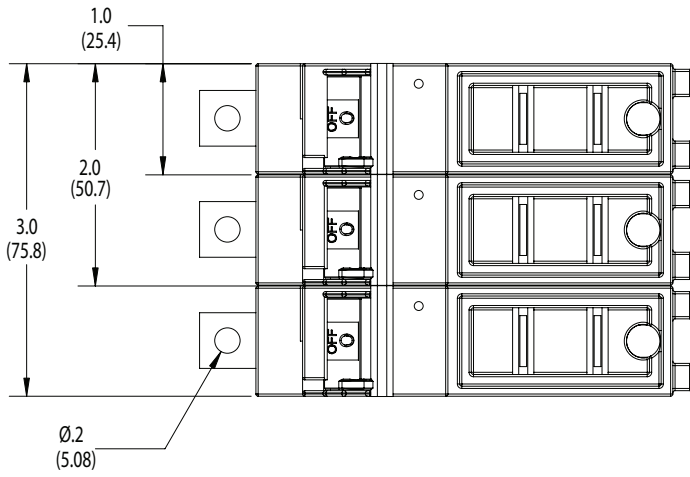
Catalog numbers:

| CCPB part numbers | Poles | Voltage rating | Accepts CUBEFuse amp range | Typical installed fuse amp range | | | Max. fuse amps [†] | SCCR | Hp ratings (Vac) ^{††} |
|-------------------|-------|----------------------------------|----------------------------|--|--------------------------|--|-----------------------------|----------------------------|--------------------------------------|
| | | | | Time-delay non-indicating | Time-delay indicating* | Fast-acting non-indicating** | | | |
| CCPB-1-15CF | 1 | 600Vac, 125Vdc | 1 to 15 | TCF1RN, TCF3RN, TCF6RN, TCF10RN, TCF15RN | TCF6, TCF10, TCF15 | FCF1RN, FCF3RN, FCF6RN, FCF10RN, FCF15RN | 15A | 200kA AC 100kA DC | 0.5Hp@120V |
| CCPB-2-15CF | 2 | | | | | | | | 1.5Hp@240V |
| CCPB-3-15CF | 3 | 600Vac | | | | | | | 3Hp@240V 5Hp@480V 7.5Hp@600V |
| CCPB-1-20CF | 1 | 600Vac, 125Vdc | 1 to 20 | TCF17-1/2RN, TCF20RN | TCF17-1/2, TCF20 | FCF20RN | 20A | 200kA AC 100kA DC | 0.75Hp@120V |
| CCPB-2-20CF | 2 | | | | | | | | 2Hp@240V |
| CCPB-3-20CF | 3 | 600Vac | | | | | | | 3Hp@240V 7.5Hp@480V 10Hp@600V |
| CCPB-1-30CF | 1 | 600Vac, 125Vdc | 1 to 30 | TCF25RN, TCF30RN | TCF25, TCF30 | FCF25RN, FCF30RN | 30A | 200kA AC 100kA DC | 1.5Hp@120V |
| CCPB-2-30CF | 2 | | | | | | | | 3Hp@240V |
| CCPB-3-30CF | 3 | 600Vac | | | | | | | 5Hp@240V 15Hp@480V 10Hp@600V |
| CCPB-1-40CF | 1 | 600Vac, 125Vdc | 1 to 40 | TCF35RN, TCF40RN | TCF35, TCF40 | FCF35RN, FCF40RN | 40A | 200kA AC 100kA DC | 2.0Hp@120V |
| CCPB-2-40CF | 2 | | | | | | | | 3Hp@240V |
| CCPB-3-40CF | 3 | 600Vac | | | | | | | 7.5Hp@240V 20Hp@480V 10Hp@600V |
| CCPB-1-50CF | 1 | 600Vac, 125Vdc | 1 to 50 | TCF45RN, TCF50RN | TCF45, TCF50 | FCF45RN, FCF50RN | 50A | 200kA AC 100kA DC | 3.0Hp@120V |
| CCPB-2-50CF | 2 | | | | | | | | 5Hp@240V |
| CCPB-3-50CF | 3 | 600Vac | | | | | | | 7.5Hp@240V 20Hp@480V 10Hp@600V |
| CCPB-1-60CF | 1 | 600Vac, 125Vdc | 1 to 60 | TCF60RN | TCF60 | FCF60RN | 60A | 200kA AC 100kA DC | 3.0Hp@120V |
| CCPB-2-60CF | 2 | | | | | | | | 7.5Hp@240V |
| CCPB-3-60CF | 3 | 600Vac | | | | | | | 7.5Hp@240V 20Hp@480V 10Hp@600V |
| CCPB-1-70CF | 1 | 600Vac, 125Vdc | 1 to 70 | TCF70RN | TCF70 | FCF70RN | 70A | 200kA AC 100kA DC | 3.0Hp@120V |
| CCPB-2-70CF | 2 | | | | | | | | 7.5Hp@240V |
| CCPB-3-70CF | 3 | 600Vac | | | | | | | 15Hp@240V 30Hp@480V 40Hp@600V |
| CCPB-1-90CF | 1 | 600Vac, 125Vdc | 1 to 90 | TCF90RN | TCF90 | FCF80RN, FCF90RN | 90A | 200kA AC 100kA DC | 5.0Hp@120V |
| CCPB-2-90CF | 2 | | | | | | | | 10Hp@240V |
| CCPB-3-90CF | 3 | 600Vac | | | | | | | 20Hp@240V 50Hp@480V 40Hp@600V |
| CCPB-1-100CF | 1 | 600Vac, 125Vdc ^{†††} | 1 to 100 | TCF100RN | TCF100 | FCF100RN | 100A | 200kA AC | 5.0Hp@120V |
| CCPB-2-100CF | 2 | | | | | | | | 10Hp@240V |
| CCPB-3-100CF | 3 | 600Vac | | | | | | | 20Hp@240V 50Hp@480V 40Hp@600V |

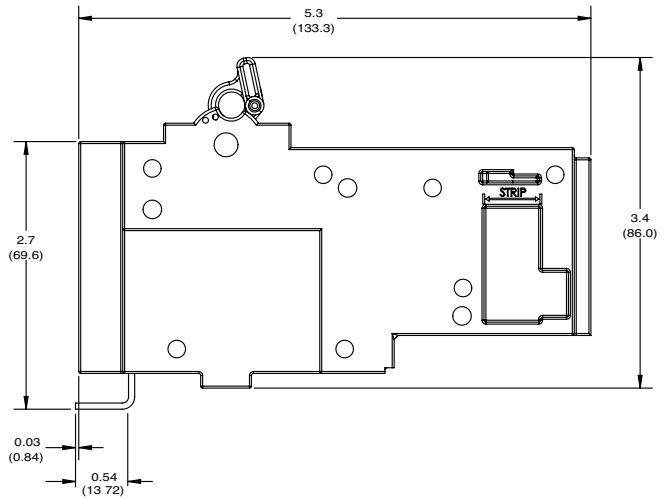
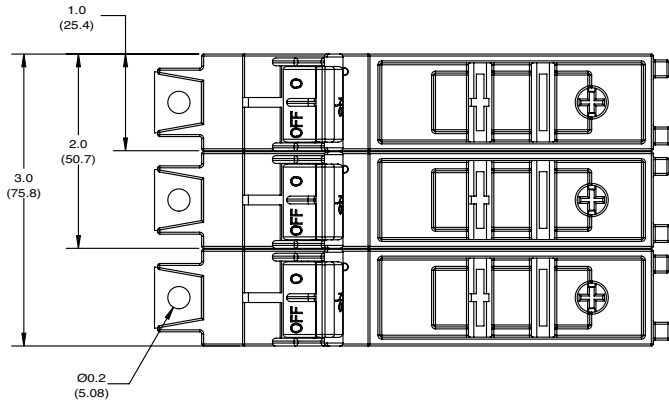
* 1A and 3A indicating CUBEFuse not available. Correct fit with CCPB disconnect requires indicating CUBEFuse with date code R38 or later.
 ** Do not use UPS/Critical Application fast-acting FCF with motors.
 † Any fuse with an amp rating less than or equal to the max fuse rating may be used. E.g., TCF15 may be used with CCPB-1-20CF.
 †† Indicating or non-indicating time-delay CUBEFuse only.
 ††† 125Vdc only applies up to 80A.

Dimensions — in (mm):

15-60A



70-100A



For details on the CCPB and its use in the Quik-Spec Coordination Panelboard, see data sheet 1160.

Motor sizing table:

Low-Peak™ TCF_ and TCT_RN time-delay Class CF fuses

| Voltage | Motor size (Hp) | Motor FLA (amps) | Optimal protection (amps) | Code max (amps) | Heavy start (amps) |
|-----------------|-----------------|------------------|---------------------------|-----------------|--------------------|
| 115Vac, 1-Phase | 0.167 | 4.4 | 10 | 10 | 10 |
| | 0.25 | 5.8 | 10 | 15 | 15 |
| | 0.333 | 7.2 | 15 | 15 | 15 |
| | 0.5 | 9.8 | 15 | 20 | 20 |
| | 0.75 | 13.8 | 25 | 25 | 30 |
| | 1 | 16 | 25 | 30 | 35 |
| | 1.5 | 20 | 30 | 35 | 45 |
| | 2 | 24 | 40 | 45 | 50 |
| | 3 | 34 | 50 | 60 | N/A |
| | 5** | 56 | 90 | 100 | N/A |
| 230Vac, 1-Phase | 0.167 | 2.2 | 6 | 6 | 6 |
| | 0.25 | 2.9 | 6 | 6 | 6 |
| | 0.333 | 3.6 | 6 | 10 | 10 |
| | 0.5 | 4.9 | 10 | 10 | 10 |
| | 0.75 | 6.9 | 15 | 15 | 15 |
| | 1 | 8 | 15 | 15 | 17.5 |
| | 1.5 | 10 | 15 | 20 | 20 |
| | 2 | 12 | 20 | 25 | 25 |
| | 3 | 17 | 25 | 30 | 35 |
| | 5 | 28 | 45 | 50 | 60 |
| | 7.5 | 40 | 60 | N/A | N/A |
| 10** | 50 | 80 | 90 | N/A | |
| 200Vac, 3-Phase | 0.5 | 2.5 | 6 | 6 | 6 |
| | 0.75 | 3.7 | 6 | 10 | 10 |
| | 1 | 4.8 | 10 | 10 | 10 |
| | 1.5 | 6.9 | 15 | 15 | 15 |
| | 2 | 7.8 | 15 | 15 | 17.5 |
| | 3 | 11 | 17.5 | 20 | 20 |
| | 5 | 17.5 | 30 | 35 | 35 |
| | 7.5 | 25.3 | 40 | 45 | 50 |
| | 20** | 62.1 | 100 | N/A | N/A |
| | 208Vac, 3-Phase | 0.5 | 2.4 | 6 | 6 |
| 0.75 | | 3.5 | 6 | 10 | 10 |
| 1 | | 4.6 | 10 | 10 | 10 |
| 1.5 | | 6.6 | 10 | 15 | 15 |
| 2 | | 7.5 | 15 | 15 | 15 |
| 3 | | 10.6 | 17.5 | 20 | 20 |
| 5 | | 16.7 | 25 | 30 | 35 |
| 7.5 | | 24.2 | 40 | 45 | 50 |
| 20** | | 59.4 | 90 | N/A | N/A |

| Voltage | Motor size (Hp) | Motor FLA (amps) | Optimal protection (amps) | Code max (amps) | Heavy start (amps) |
|-----------------|-----------------|------------------|---------------------------|-----------------|--------------------|
| 230Vac, 3-Phase | 0.5 | 2.2 | 6 | 6 | 6 |
| | 0.75 | 3.2 | 6 | 6 | 6 |
| | 1 | 4.2 | 10 | 10 | 10 |
| | 1.5 | 6 | 10 | 15 | 15 |
| | 2 | 6.8 | 15 | 15 | 15 |
| | 3 | 9.6 | 15 | 20 | 20 |
| | 5 | 15.2 | 25 | 30 | 30 |
| | 7.5 | 22 | 35 | 40 | 45 |
| | 20** | 54 | 90 | 100 | N/A |
| | 460Vac, 3-Phase | 0.5 | 1.1 | 3 | 3 |
| 0.75 | | 1.6 | 3 | 3 | 3 |
| 1 | | 2.1 | 6 | 6 | 6 |
| 1.5 | | 3 | 6 | 6 | 6 |
| 2 | | 3.4 | 6 | 6 | 6 |
| 3 | | 4.8 | 10 | 10 | 10 |
| 5 | | 7.6 | 15 | 15 | 15 |
| 7.5 | | 11 | 17.5 | 20 | 20 |
| 10 | | 14 | 25 | 25 | 30 |
| 15 | | 21 | 35 | 40 | 45 |
| 20 | | 27 | 40 | 50 | 60 |
| 50** | 65 | 100 | N/A | N/A | |
| 575Vac, 3-Phase | 0.5 | 0.9 | 3 | 3 | 3 |
| | 0.75 | 1.3 | 3 | 3 | 3 |
| | 1 | 1.7 | 3 | 3 | 3 |
| | 1.5 | 2.4 | 6 | 6 | 6 |
| | 2 | 2.7 | 6 | 6 | 6 |
| | 3 | 3.9 | 6 | 10 | 10 |
| | 5 | 6.1 | 10 | 15 | 15 |
| | 7.5 | 9 | 15 | 20 | 20 |
| | 10 | 11 | 17.5 | 20 | 20 |
| | 40** | 41 | 70 | 80 | 80 |

Note: Use Code Max column for low to moderate reverse/jog/plug applications. Heavy Start permitted only if Code Max does not allow motor start-up.

* Based on motor FLA from NEC® tables 430.248 and 430.250.

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