

CUBEFuse™ Compact Circuit Protector Base (CCPB)



Product description:

The revolutionary Bussmann® series Compact Circuit Protector Base (CCPB) with Bussmann series 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.

Features and benefits:

- Uses finger-safe, current-limiting Bussmann series UL® 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 600 Vac
- 125Vdc rated for 80 A 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 (6-100 A only)
- 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 No. 9000 for time-delay CUBEFuse and data sheet No. 2147 for fast-acting CUBEFuse specifications.

Specifications:

Switch ampacity and rejection breaks

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

Poles

- 1-, 2- and 3-pole versions

Volts

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

Agency information

- UL 98 Listed, File E302370, Guide WHTY
- cULus to CSA Standard 22.2 No. 4, File E302370, Guide WHTY7
- CE
- 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 10AWG (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 6AWG (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)
 - 4AWG (25mm²) single – 75°C or higher - Cu only; 35 Lb-In (5.8 N•m)
- 100A:
 - 18 to 10AWG (1 to 6mm²) single, solid or stranded – 75°C or higher - Cu only; 25 Lb-In (2.82 N•m)
 - 8 to 1AWG (10 to 45mm²) single stranded – 75°C or higher - Cu only; 40 Lb-In (4.52 N•m)
 - 6AWG (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

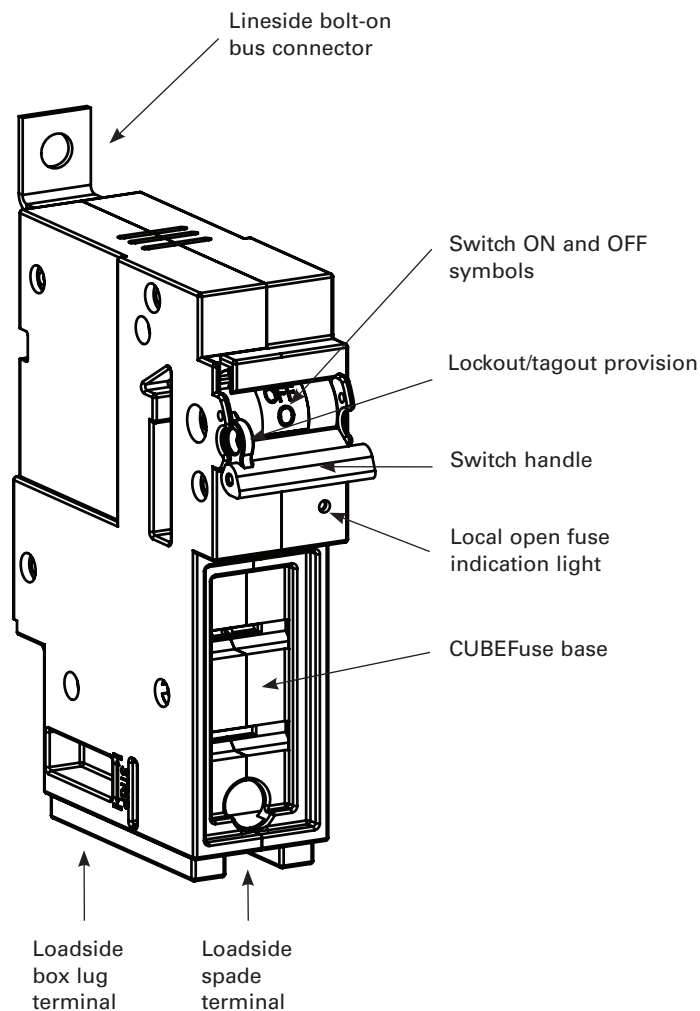
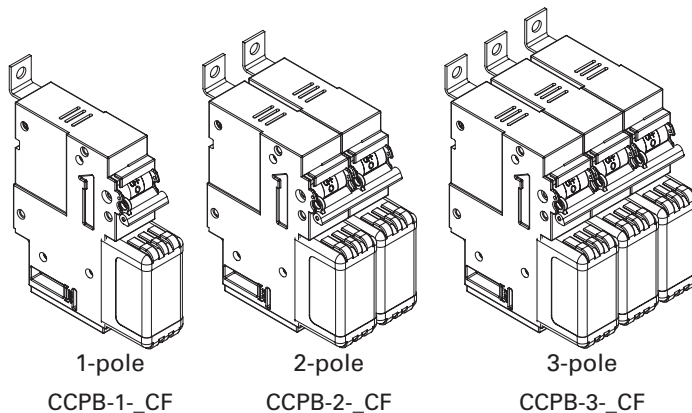
Carton quantity

- 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	600 Vac, 125 Vdc	1 to 15	TCF1RN, TCF3RN, TCF6RN, TCF10RN, TCF15RN	TCF6, TCF10, TCF15	FCF1RN, FCF3RN, FCF6RN, FCF10RN, FCF15RN	15 A	200kA AC 100kA DC	0.5Hp@120V
CCPB-2-15CF	2								1.5Hp@240V
CCPB-3-15CF	3	600 Vac							3Hp@240V 5Hp@480V 7.5Hp@600V
CCPB-1-20CF	1	600 Vac, 125 Vdc	1 to 20	TCF17-1/2RN, TCF20RN	TCF17-1/2, TCF20	FCF20RN	20 A	200kA AC 100kA DC	0.75Hp@120V
CCPB-2-20CF	2								2Hp@240V
CCPB-3-20CF	3	600 Vac							3Hp@240V 7.5Hp@480V 10Hp@600V
CCPB-1-30CF	1	600 Vac, 125 Vdc	1 to 30	TCF25RN, TCF30RN	TCF25, TCF30	FCF25RN, FCF30RN	30 A	200kA AC 100kA DC	1.5Hp@120V
CCPB-2-30CF	2								3Hp@240V
CCPB-3-30CF	3	600 Vac							5Hp@240V 15Hp@480V 10Hp@600V
CCPB-1-40CF	1	600 Vac, 125 Vdc	1 to 40	TCF35RN, TCF40RN	TCF35, TCF40	FCF35RN, FCF40RN	40 A	200kA AC 100kA DC	2.0Hp@120V
CCPB-2-40CF	2								3Hp@240V
CCPB-3-40CF	3	600 Vac							7.5Hp@240V 20Hp@480V 10Hp@600V
CCPB-1-50CF	1	600 Vac	1 to 50	TCF45RN, TCF50RN	TCF45, TCF50	FCF45RN, FCF50RN	50 A	200kA AC 100kA DC	3.0Hp@120V
CCPB-2-50CF	2								5Hp@240V
CCPB-3-50CF	3	600 Vac							7.5Hp@240V 20Hp@480V 10Hp@600V
CCPB-1-60CF	1	600 Vac	1 to 60	TCF60RN	TCF60	FCF60RN	60 A	200kA AC 100kA DC	3.0Hp@120V
CCPB-2-60CF	2								7.5Hp@240V
CCPB-3-60CF	3	600 Vac							7.5Hp@240V 20Hp@480V 10Hp@600V
CCPB-1-70CF	1	600 Vac, 125 Vdc	1 to 70	TCF70RN	TCF70	FCF70RN	70 A	200kA AC 100kA DC	3.0Hp@120V
CCPB-2-70CF	2								7.5Hp@240V
CCPB-3-70CF	3	600 Vac							15Hp@240V 30Hp@480V 40Hp@600V
CCPB-1-90CF	1	600 Vac, 125 Vdc ^{†††}	1 to 90	TCF90RN	TCF90	FCF80RN, FCF90RN	90 A	200kA AC 100kA DC	5.0Hp@120V
CCPB-2-90CF	2								10Hp@240V
CCPB-3-90CF	3	600 Vac							20Hp@240V 50Hp@480V 40Hp@600V
CCPB-1-100CF	1	600 Vac	1 to 100	TCF100RN	TCF100	FCF100RN	100 A	200kA AC	5.0Hp@120V
CCPB-2-100CF	2								10Hp@240V
CCPB-3-100CF	3								20Hp@240V 50Hp@480V 40Hp@600V

* 1 A and 3 A indicating Bussmann series CUBEFuse not available. Correct fit with CCPB disconnect requires indicating Bussmann series CUBEFuse with date code R38 or later.

** Do not use UPS/Critical Application fast-acting FCF with motors.

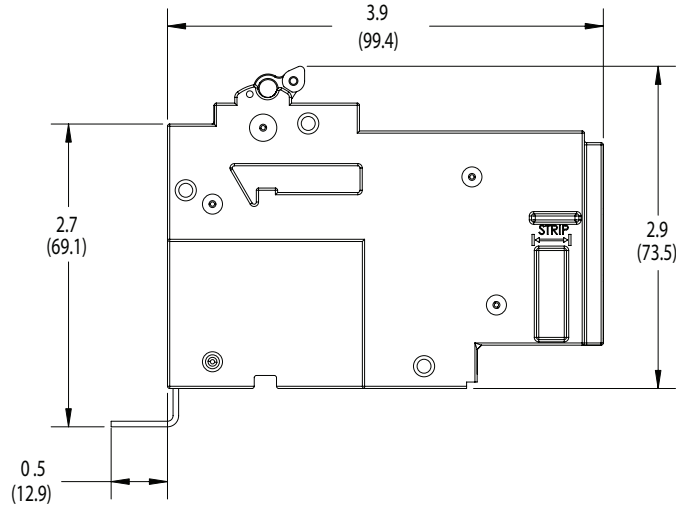
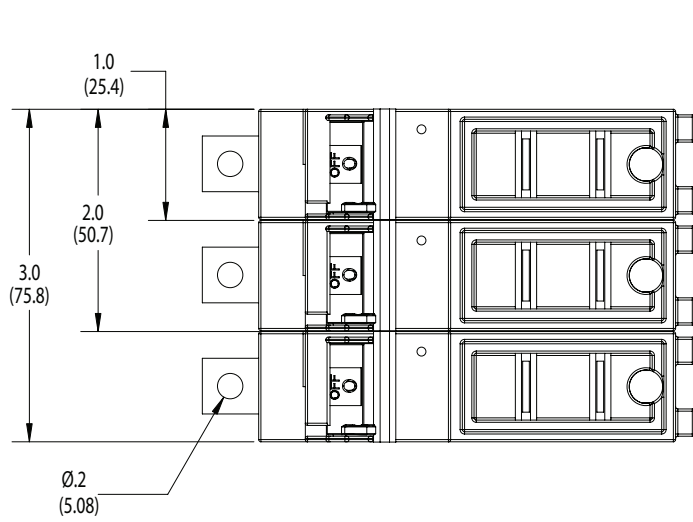
† Any fuse with an amp rating less than or equal to the max fuse rating may be used. E.g., TCF15 may be used with CCPB-1-20CF.

†† Indicating or non-indicating time-delay Bussmann series CUBEFuse only.

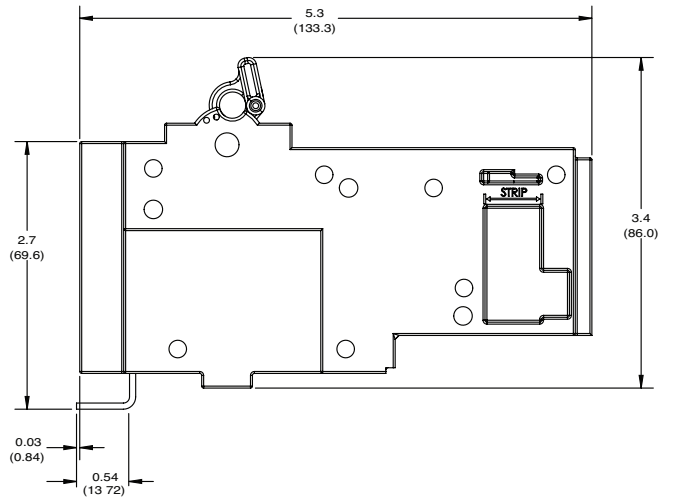
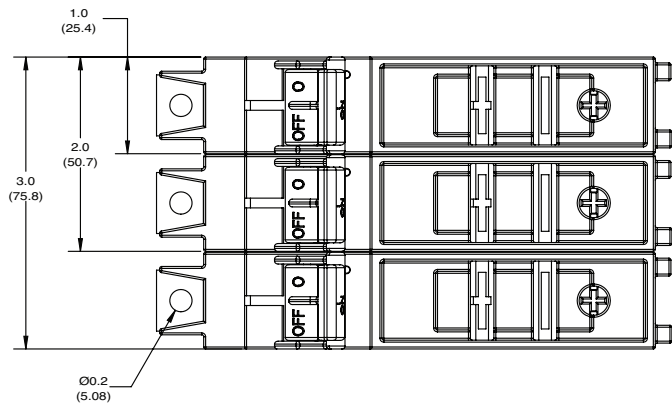
††† 125Vdc only applies up to 80 A.

Dimensions — in (mm):

15-60 A



70-100A



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

Motor sizing table:

**Bussmann series Low-Peak™ TCF_ and TCF_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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