

# CUBEFuse™ Compact Circuit Protector Base (CCPB)





### 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.

## 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.



# **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

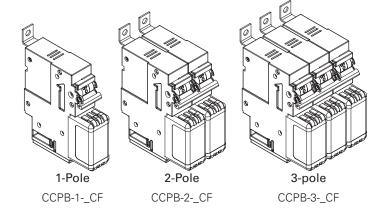
## **Carton quantity**

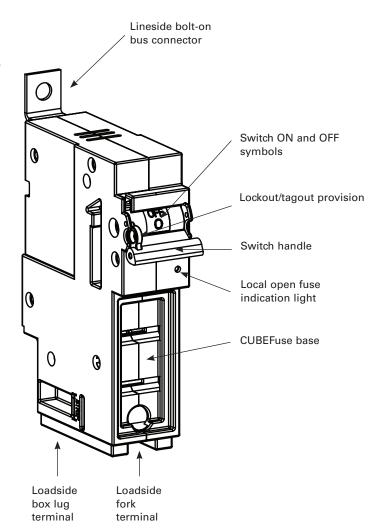
• 6 poles

#### **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:**

			Accepts	Typical installed fuse amp range			Max.		
CCPB part numbers	Poles	Voltage rating	CUBEFuse amp range	Time-delay non-indicating	Time-delay indicating*	Fast-acting non-indicating**	fuse amps <sup>†</sup>	SCCR	Hp ratings (Vac) <sup>††</sup>
CCPB-1-15CF	1	600Vac,	<sup>-</sup> 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	125Vdc							1.5Hp@240V
CCPB-3-15CF	3	600Vac							3Hp@240V 5Hp@480V 7.5Hp@600V
CCPB-1-20CF	1	600Vac,		TCF17-1/2RN, TCF20RN	TCF17-1/2, TCF20	FCF20RN	20A	200kA AC 100kA DC	0.75Hp@120V
CCPB-2-20CF	2	125Vdc							2Hp@240V
CCPB-3-20CF	3	600Vac	1 to 20						3Hp@240V 7.5Hp@480V 10Hp@600V
CCPB-1-30CF	1	600Vac,		TCF25RN, TCF30RN	TCF25, TCF30	FCF25RN, FCF30RN	30A	200kA AC 100kA DC	1.5Hp@120V
CCPB-2-30CF	2	125Vdc							3Hp@240V
CCPB-3-30CF	3	600Vac	1 to 30						5Hp@240V 15Hp@480V 10Hp@600V
CCPB-1-40CF	1	600Vac,		TCF35RN, TCF40RN	TCF35, TCF40	FCF35RN, FCF40RN	40A	200kA AC 100kA DC	2.0Hp@120V
CCPB-2-40CF	2	125Vdc	1 to 40						3Hp@240V
CCPB-3-40CF	3	600Vac							7.5Hp@240V 20Hp@480V 10Hp@600V
CCPB-1-50CF	1	600Vac,		TCF45RN, TCF50RN	TCF45, TCF50	FCF45RN, FCF50RN	50A	200kA AC 100kA DC	3.0Hp@120V
CCPB-2-50CF	2	125Vdc							5Hp@240V
CCPB-3-50CF	3	600Vac	- 1 to 50						7.5Hp@240V 20Hp@480V 10Hp@600V
CCPB-1-60CF	1	600Vac,	- 4	TCF60RN	TCF60	FCF60RN	60A	200kA AC 100kA DC	3.0Hp@120V
CCPB-2-60CF	2	125Vdc							7.5Hp@240V
CCPB-3-60CF	3	600Vac	1 to 60						7.5Hp@240V 20Hp@480V 10Hp@600V
CCPB-1-70CF	1	600Vac,	<sup>-</sup> 1 to 70	TCF70RN	TCF70	FCF70RN	70A	200kA AC 100kA DC	3.0Hp@120V
CCPB-2-70CF	2	125Vdc							7.5Hp@240V
CCPB-3-70CF	3	600Vac							15Hp@240V 30Hp@480V 40Hp@600V
CCPB-1-90CF	1	600Vac,		TCF90RN	TCF90	FCF80RN, FCF90RN	90A	200kA AC 100kA DC	5.0Hp@120V
CCPB-2-90CF	2	125Vdc							10Hp@240V
CCPB-3-90CF	3	600Vac	- 1 to 90						20Hp@240V 50Hp@480V 40Hp@600V
CCPB-1-100CF	1	600Vac,							5.0Hp@120V
CCPB-2-100CF	2	125Vdc <sup>†††</sup>	- 4 . 405	TCF100RN	TCF100	FCF100RN	100A	200kA AC	10Hp@240V
CCPB-3-100CF	3	600Vac	1 to 100						20Hp@240V 50Hp@480V 40Hp@600V

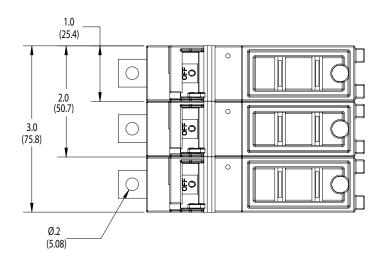
<sup>\* 1</sup>A and 3A indicating CUBEFuse not available. Correct fit with CCPB disconnect requires indicating CUBEFuse with date code R38 or later.

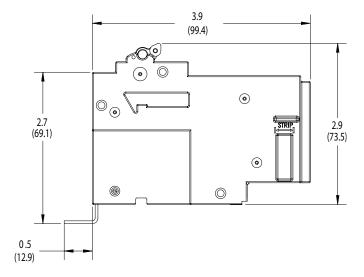
\*\* Do not use UPS/Critical Application fast-acting FCF with motors.

<sup>†</sup> 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. Indiacting or non-indicating time-delay CUBEFuse only. 125Vdc only applies up to 80A.

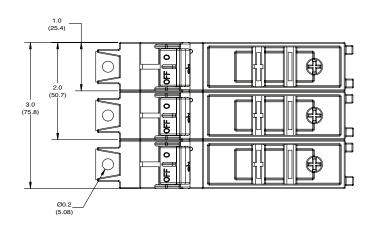
# Dimensions — in (mm):

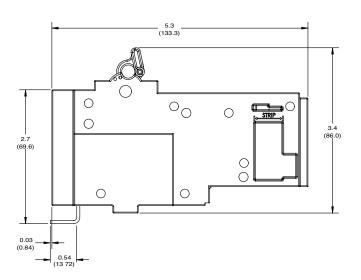
# 15-60A





# 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

			Optimal	Code	Heavy
Voltage	Motor size (Hp)	Motor FLA (amps)	protection (amps)	max (amps)	start
voitage				(amps)	(amps)
	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
115Vac, 1-Phase	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
	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
220\/aa 1 Dhaaa	1	8	15	15	17.5
230Vac,1-Phase	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
	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
200Vac, 3-Phase	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
	0.5	2.4	6	6	6
	0.75	3.5	6	10	10
	1	4.6	10	10	10
	1.5	6.6	10	15	15
208Vac, 3-Phase	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
				4	

Voltage	Motor size (Hp)	Motor FLA (amps)	Optimal protection (amps)	Code max (amps)	Heavy start (amps)
	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
230Vac, 3-Phase	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
	0.5	1.1	3	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
460\/aa 2 Dhaaa	3	4.8	10	10	10
460Vac, 3-Phase	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
	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
E7E\/oo 2 Dhccc	2	2.7	6	6	6
575Vac, 3-Phase	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.

<sup>\*</sup> Based on motor FLA from NEC® tables 430.248 and 430.250.

# **CUBEFuse Compact Circuit Protector Base (CCPB)** for Quik-Spec<sup>™</sup> Coordination Panelboards

## **Technical Data 1161**

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