CUBEFuse™ Compact Circuit Protector Base (cat. no. CCP2B)

RoHS 2011/65/EU



Features

- Uses finger-safe, current-limiting Class CF CUBEFuse with Class J performance available in time-delay or fast-acting versions from 1 to 100 amps
- Patented amp rating rejection feature helps prevent overfusing
- High 200 kA short-circuit current rating
- Disconnect rated to provide a means for load isolation
- 2- and 3-pole versions straight voltage rated at 600 Vac
- Up to 125 Vdc ratings
- UL 98 Listed for branch circuit disconnect
- 1-, 2- and 3-pole versions are horsepower rated
- UL and cULus Listed
- Open fuse indication lamp per pole speeds troubleshooting
- Additional open fuse indication can be provided by using the time-delay indicating CUBEFuse in ratings from 6 to 100 amps
- Built-in switch/fuse interlock prevents removing or installing a fuse while energized
- Permanent lockout/tagout and lock-on provision using a 1/4" lock

Description

The revolutionary Bussmann™ series Compact Circuit Protector Base (CCP2B) with CUBEFuse™ is a UL® 98 horsepower rated fused branch circuit disconnect. Primarily used in the Bussmann series Quik-Spec™ Coordination Panelboard, the CCP2B with CUBEFuse simplifies selective coordination for code compliance and features a lockout/tagout feature for isolating individual branch circuit loads to promote safe work practices.

Powering Business Worldwide

Specifications:

Switch amp ratings and rejection breaks

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

Poles

- 1-, 2- and 3-poles

Volts

- 347 Vac (1-pole switches)
- 600 Vac (2- and 3-pole switches)
- 125 Vdc*

* Switch amp rating and installed fuse amp rating dependent, see catalog number table for details.

Agency information

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

Lineside bolt-on bus connector and torque

- Bolt-mounted design fits into Quik-Spec Coordination Panelboard bus
- #10-32 UNC hex flange Phillips screw; 2.8 N•m (25 lb-in)

Loadside box lug terminal conductor data

- See conductor table for details

Loadside fork terminal

- Max. 30 A suitable for use with:
  - 10-24 screw for switches up to 60 A
  - 1/4-28 screw for switches from 70 to 100 A

Lockout/tagout

- 1/4" lock

Local open fuse indication light

- Light illumination requires closed circuit and minimum 90 volts

Carton quantity and shipping weight

Item	Poles	lbs (kg)
up to 60 amp switches	6	1.7 (0.77)
70 to 100 amp switches	6	2.6 (1.18)

Environmental data

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

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

Available Bussmann series fuses

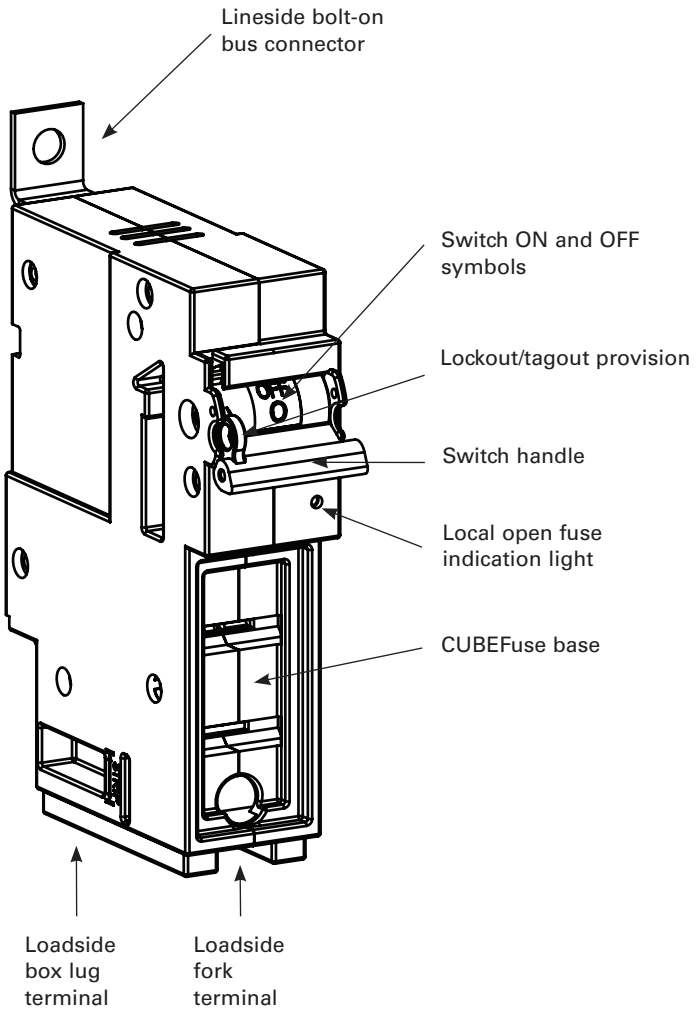
UL fuse class	Type/description	Volts	Data sheet no.
CF	Indicating time-delay, Low-Peak™ CUBEFuse (6-100 A)	600 Vac/ 300 Vdc	9000
	Non-indicating time-delay, Low-Peak CUBEFuse (1-100 A)		
	Non-indicating fast-acting CUBEFuse (1-100 A)	600 Vac/dc	2147



1-Pole
CCP2B-1-_CF

2-Pole
CCP2B-2-_CF

3-pole
CCP2B-3-_CF



Catalog numbers and ratings

Catalog numbers	Poles	Voltage ratings	Accepts CUBEFuse amp range	Typical installed fuse amp range			Max. fuse amp†††	SCCR	Hp ratings (Vac)††††
				Time-delay non-indicating	Time-delay indicating†	Fast-acting non-indicating††			
CCP2B-1-15CF	1	347 Vac, 125 Vdc	1 to 15	TCF1RN, TCF3RN, TCF6RN, TCF10RN, TCF15RN	TCF6, TCF10, TCF15	FCF1RN, FCF3RN, FCF6RN, FCF10RN, FCF15RN	15	200 kA AC 100 kA DC	0.5 Hp @ 120 V
CCP2B-2-15CF	2	600 Vac, 125 Vdc							1.5 Hp @ 240 V
CCP2B-3-15CF	3	600 Vac							3 Hp @ 240 V 5 Hp @ 480 V 7.5 Hp @ 600 V
CCP2B-1-20CF	1	347 Vac, 125 Vdc	1 to 20	TCF17-1/2RN, TCF20RN	TCF17-1/2, TCF20	FCF20RN	20		0.75 Hp @ 120 V
CCP2B-2-20CF	2	600 Vac, 125 Vdc							2 Hp @ 240 V
CCP2B-3-20CF	3	600 Vac							3 Hp @ 240 V 7.5 Hp @ 480 V 10 Hp @ 600 V
CCP2B-1-30CF	1	347 Vac, 125 Vdc	1 to 30	TCF25RN, TCF30RN	TCF25, TCF30	FCF25RN, FCF30RN	30		1.5 Hp @ 120 V
CCP2B-2-30CF	2	600 Vac, 125 Vdc							3 Hp @ 240 V
CCP2B-3-30CF	3	600 Vac							5 Hp @ 240 V 15 Hp @ 480 V 10 Hp @ 600 V
CCP2B-1-40CF	1	347 Vac, 125 Vdc	1 to 40	TCF35RN, TCF40RN	TCF35, TCF40	FCF35RN, FCF40RN	40		2.0 Hp @ 120 V
CCP2B-2-40CF	2	600 Vac, 125 Vdc							3 Hp @ 240 V
CCP2B-3-40CF	3	600 Vac							7.5 Hp @ 240 V 20 Hp @ 480 V 10 Hp @ 600 V
CCP2B-1-50CF	1	347 Vac, 125 Vdc*	1 to 50	TCF45RN, TCF50RN	TCF45, TCF50	FCF45RN, FCF50RN	50		3.0 Hp @ 120 V
CCP2B-2-50CF	2	600 Vac, 125 Vdc*							5 Hp @ 240 V
CCP2B-3-50CF	3	600 Vac							7.5 Hp @ 240 V 20 Hp @ 480 V 10 Hp @ 600 V
CCP2B-1-60CF	1	347 Vac, 125 Vdc*	1 to 60	TCF60RN	TCF60	FCF60RN	60		3.0 Hp @ 120 V
CCP2B-2-60CF	2	600 Vac, 125 Vdc*							7.5 Hp @ 240 V
CCP2B-3-60CF	3	600 Vac							7.5 Hp @ 240 V 20 Hp @ 480 V 10 Hp @ 600 V
CCP2B-1-70CF	1	347 Vac, 125 Vdc	1 to 70	TCF70RN	TCF70	FCF70RN	70		3.0 Hp @ 120 V
CCP2B-2-70CF	2	600 Vac, 125 Vdc							7.5 Hp @ 240 V
CCP2B-3-70CF	3	600 Vac							15 Hp @ 240 V 30 Hp @ 480 V 40 Hp @ 600 V
CCP2B-1-90CF	1	347 Vac, 125 Vdc**	1 to 90	TCF90RN	TCF90	FCF80RN, FCF90RN	90		5.0 Hp @ 120 V
CCP2B-2-90CF	2	600 Vac, 125 Vdc**							10 Hp @ 240 V
CCP2B-3-90CF	3	600 Vac							20 Hp @ 240 V 50 Hp @ 480 V 40 Hp @ 600 V
CCP2B-1-100CF	1	347 Vac, 125 Vdc**	1 to 100	TCF100RN	TCF100	FCF100RN	100		5.0 Hp @ 120 V
CCP2B-2-100CF	2	600 Vac, 125 Vdc**							10 Hp @ 240 V
CCP2B-3-100CF	3	600 Vac							20 Hp @ 240 V 50 Hp @ 480 V 40 Hp @ 600 V

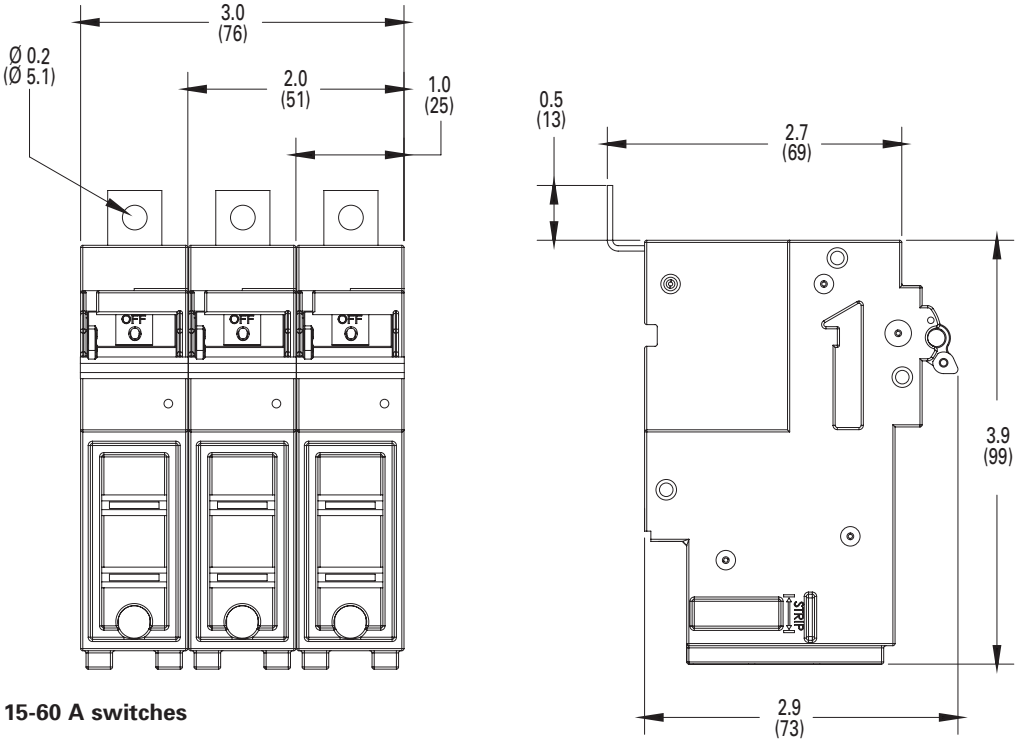
† 1 and 3 A indicating CUBEFuse not available. Correct fit with CCP2B disconnect requires indicating CUBEFuse with date code R38 or later.
†† Not for use with motors.
††† Any amp rating less than or equal to the switch max fuse rating may be installed. E.g., TCF15 can be installed in the CCP2B-1-20CF.
†††† Indicating or non-indicating time-delay CUBEFuse only.
* 125 Vdc for installed fuse amp ratings up to 40 A. 24 Vdc for installed fuse amp ratings from 45 to 60 A.
** 125 Vdc for installed fuse amp ratings up to 80 A, 24 Vdc for installed fuse amp ratings from 90 to 100 A.

Box lug conductor data

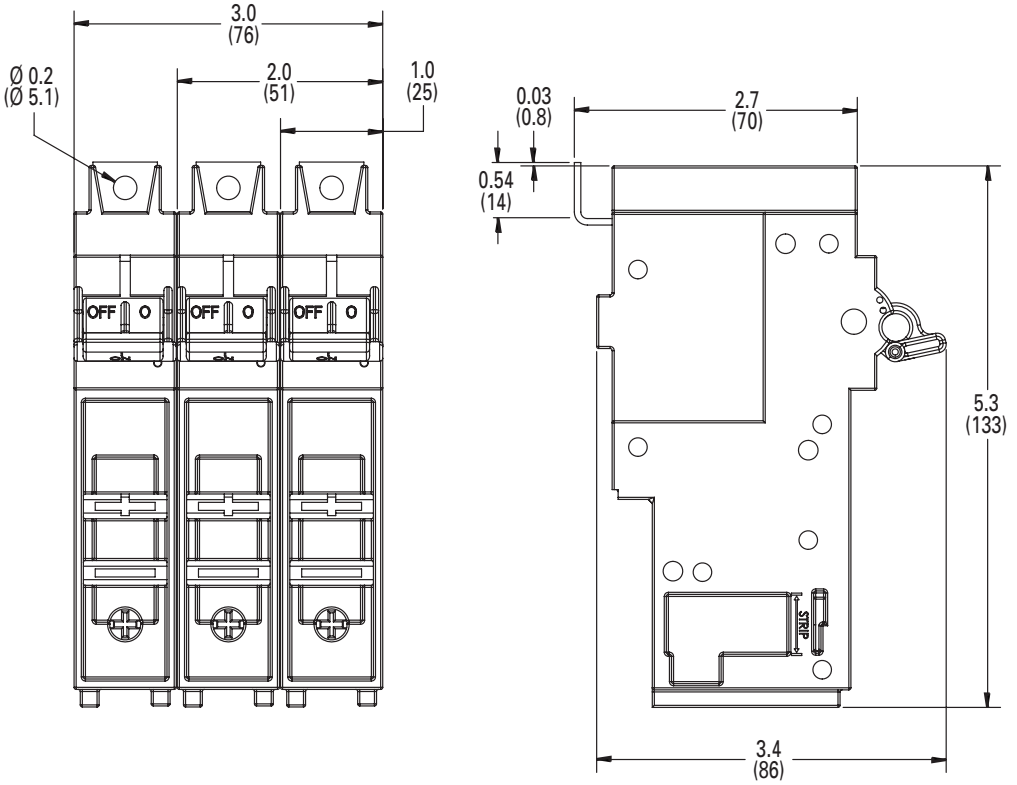
Wire type	AWG range	Class	Quantity	Torque N•m (lb-in)
15 to 60 A switches				
75°C Cu	4-6	Stranded, Class B to K	Single	3.95 (35)
	8-18			2.26 (20)
	6-8	Stranded, Class B/C	Dual	3.39 (30)
		Stranded, Class K		2.26 (20)
	10-18	Stranded, Class B to K		
	10-18	Solid	Single/dual	2.26 (20)
	4-18	Stranded, UL ferrule, Class B/C	Single	3.39 (30)
	6-18		Twin†	
	4-18	Stranded, UL ferrule, Class K	Single	2.82 (25)
	6-18		Twin†	
70 to 100 A switches				
75°C Cu	12-18	Stranded, Class B to K	Single	2.26 (20)
	10			2.82 (25)
	8			4.52 (40
	4-6			5.08 (45)
	1-3			6.21 (55)
	3-12	Stranded, Class B to K	Dual	3.95 (35)
	12-18	Stranded, UL ferrule, Class B/C	Single	2.26 (20)
	10			3.95 (35)
	1-8			4.52 (40)
	10-18		Twin†	2.26 (20)
	6-8			2.82 (25)
	10-18	Solid	Single	2.26 (20)
	10-18		Dual	2.26 (20)
	8-18	Class K	Single	2.26 (20)
	1-6			3.39 (30)
	3-10		Dual	5.08 (45)
	8-18	Class K, UL ferrule	Single	2.26 (20)
	1-6			3.39 (30)
	6-18		Twin	2.26 (20)

† Two stranded conductors placed in one UL Listed twin ferrule.

Dimensions — in (mm)



15-60 A switches



70-100 A switches

For details on the CCP2B and its use in the Quik-Spec Coordination Panelboard, see data sheet no. 1160.

Motor sizing table:

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)
115 Vac, 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
230 Vac,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
200 Vac, 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
208 Vac, 3-Phase	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
	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)
230 Vac, 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
460 Vac, 3-Phase	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
	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
575 Vac, 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.
**If equipment terminations are rated for 60°C conductors only, the 60°C conductor ampacities must be utilized and therefore larger conductor sizes or conduit sizes may be required.

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