# BUSSMANN SERIES

# **UL Class CF CUBEFuse holders**







#### Catalog symbols

- TCFH(amps)N (600 V UL Listed)
- TCFH(amps)NW (690 V UL Recognized)

#### **Description**

The Bussmann™ series CUBEFuse™ holder is a finger-safe modular system of single-pole 30, 60, 100, 200, 225 and 400 amp holders. All holders dovetailed together to create the desired number of poles for the application, including mixed amp ratings between the 30, 60 and 100 amp holders.

The 200, 225 and 400 amp holders require installing lugs to make conductor connections. These are listed on page 3.

The CUBEFuse holder is available as the 600 V UL® Listed version utilizing the time-delay Low-Peak™ CUBEFuse (TCF up to 400 A) or fast-acting CUBEFuse (FCF up to 100 A), or the 690 V UL Recognized version utilizing the fast-acting wind CUBEFuse (WCF up to 100 A).

#### **Ratings**

- Volts
  - 600 Vac / 300 Vdc (UL Listed)
  - 690 Vac (UL Recognized up to 100 A)
- Amps
  - 30, 60, 100, 200, 225, 400 A
- SCCF
  - 300 kA RMS Sym. (30, 60, 100 A UL Listed)
  - 200 kA RMS Sym. (200, 225, 400 A UL Listed)
  - 200 kA RMS Sym. (CSA® Certified 100 A and below)
  - 100 kA DC (UL Listed and CSA Certified 100 A and below)
  - 50 kA RMS Sym. (UL Recognized)

#### **Agency information**

- 600 V UL Listed, Guide IZLT, File E14853
- 690 V UL Recognized, Guide IZLT2, File E14853
- CSA Certified, Class 6225-01, File 47235, cURus component Certified (30, 60 and 100 A holders)
- CE (100 A and below)
- · RoHS compliant

#### Mounting

- 35 mm DIN-Rail/panel (Up to 100 A)
- Panel mount (200 to 400 A)

#### Operating and storage temperature range

• -40°C to 80°C (-40°F to 176°F)

Catalog no.	Max holder amps	Fuse amp range
600 V UL Listed		
TCFH30N	30	1-30
TCFH60N	60	1-60
TCFH100N	100	1-100
TCFH200N	200	110-200
TCFH225N	225	110-225
TCFH400N	400	110-400
690 V UL Recog	nized	
TCFH30NW	30	1-30
TCFH60NW	60	1-60
TCFH100NW	100	1-100

#### **Features**

- · Finger-safe construction for enhanced safety\*
- Amp rating rejection helps prevent overfusing by rejecting higher fuse amp ratings
- Smallest installed fuse and holder footprint of any Class J or R installation
- All holders dovetail together to create the required number of poles, mixed 30, 60 and 100 A holders dovetail together
- 30, 60 and 100 A holders have dual wire rated box lug terminals for wiring ease
- 200, 225 and 400 A holders available with a variety of lugs and terminal shrouds for application flexibility
- Up to 300 kA SCCR withstands high fault currents
- \* 200, 225 and 400 A holders require installed shrouds.



### 30, 60 and 100 A CUBEFuse holder fuse applications

Holder		CUBEFuse type and amp range					
catalog no.	Volts	TCF and TCF_RN	FCF_RN	WCF_RN			
TCFH30N		1-30	1-30				
TCFH60N	600	1-60	1-60	_			
TCFH100N		1-100	1-100				
TCFH30NW				1-30			
TCFH60NW	690	_	_	1-60			
TCFH100NW				1-100			

### Conductor ratings and torque for 30, 60 and 100 A holders

Ratings are for 75°C Cu AWG solid/stranded conductors. Torque is in N•m (lb-in).

Terminal		Holder catalog no	
wire	TCFH30N /	TCFH60N /	TCFH100N /
rating	TCFH30NW	TCFH60NW	TCFH100NW
Single	8-10; 2.8 (25),	10-14; 2.6 (20),	10-18; 2.6 (20)**,
	12-18; 2.6 (20)	4-8; 3.9 (35)	1-8; 4.5 (40)†
Dual	10-18; 2.8 (25)*	10-18; 2.6 (20), 6-8; 3.9 (35)	6; 5.1 (45) <sup>†</sup>

- \* 10-18 AWG stranded, 14-18 AWG solid
- \*\*Solid and stranded
- † Stranded

### Carton quantity and weight

Amp rating	Qty.	Weight per carton lb (kg)
30	12	2.42 (1.10)
60	12	2.57 (1.17)
100	6	1.38 (0.63)



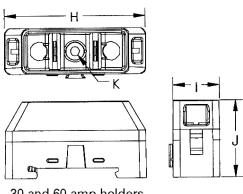
All 30, 60 and 100 A CUBEFuse holders dovetail together to create the desired number of poles. Each holder accepts CUBEFuse amp ratings up to its rating. E.g., the 60 amp holder will accept a CUBEFuse from 1 to 60 A.

### **Recommended Bussmann series fuses**

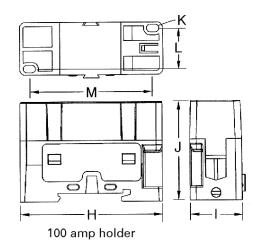
Туре	Amp range	Data sheet
600 volt UL Listed		
Time-delay indicating Low-Peak™	6-100 A	9000
Time-delay non-indicating Low-Peak	1-100 A	9000
Fast-acting non-indicating	1-100 A	2147
690 volt UL Recognized		
Fast-acting wind power	1-100 A	9009



### Dimensions — in (mm)



30 and 60 amp holders



Amps	н	1	J	K	L	M	Max height with fuse
30	2.3 (58)	0.76 (19)	1.36 (34)	0.15 (4)	_	_	2.36 (60)
60	2.6 (66)	1.03 (26)	1.60 (41)	0.17 (4)	_	_	2.73 (69)
100	2.91 (74)	1.05 (27)	2.01 (51)	0.15 (4)	0.80 (20)	2.51 (64)	3.27 (83)

### 200, 225 and 400 A CUBEFuse holder fuse applications

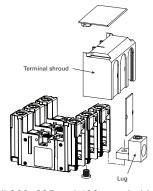
Holder catalog no.	Volts	CUBEFuse amp range
TCFH200N		110-200
TCFH225N	600 Vac/300 Vdc	110-225
TCFH400N		110-400*

Achieving 400 A continuous current requires three ganged holders and installed lug catalog number CCP2-L4B-3 to permit the necessary copper conductor size.

#### Available lug kits

For complete installation, the 200, 225 and 400 A CUBEFuse holders require lugs. The table below contains the information necessary for ordering the desired lug kit for the application.





All 200, 225 and 400 amp holders require installing lugs. Only three ganged holders can accept terminal shrouds. See table below.

# Available lugs, conductor ratings and terminal torques

Catalog no. 200/225 A hole	Description ders	Lugs per cat. no.	Wire range AWG (mm²)	Wire type/ temp.	Conductor torque N•m (lb-in)	Lug mounting screw torque N•m (lb-in)
CCP2-L2-1	Stainless steel lug	1	350-4 (185-25)	Cu 75°C	20.3 (180)	0.9 (8)
CCP2-L2-1A	Aluminum lug*	1	350-4 (185-25)	Cu/Al 75°C	28.2 (250)	13.5 (120)
CCP2-MW2-3	3-port multi-wire terminal with shroud*†	3	2-14 (35-2.5)	Cu/Al 75°C	7.9 (70)	10.8 (95)
CCP2-MW2-6	6-port multi-wire terminal with shroud*†	3	6-14 (16-2.5)	Cu/Al 75°C	2.8 (25)	10.8 (95)

<sup>\*</sup>These lugs also accept 1/4" quick connect control wire terminals. Order catalog number CCP2-CWK2 (package of 12 terminals).

400 A holders						
CCP2-L4-1	Stainless steel lug	1	500-3 (240-35)	Cu 75°C	42.0 (375)	
CCP2-L4-1A	Aluminum lug	1	500-3 (240-35)	Cu/Al 75°C	42.0 (375)	
CCP2-L4B-3	Stainless steel lug kit with shroud†	3	750-500 (400-240)	Cu 75°C	57.0 (500)	
CCP2-L4B-3A	Aluminum lug kit with shroud†	3	750-500 (400-240)	Cu/Al 75°C	62.0 (550)	
CCP2-L6-3	2-port stainless steel lug kit with shroud	3	(2) 500-2 (240-35)	Cu 75°C	42.0 (375)	00.0 (00.0)
CCP2-L6-3A	2-port aluminum lug kit with shroud	3	(2) 500-2 (240-35)	Cu/Al 75°C	42.0 (375)	22.0 (200)
					10-14 = 3.9 (35)	
CCP2-MW6-6	6-port multi-wire terminal with shroud†	3	1/0-14 (50-2.5)	Cu/Al 75°C	8 = 4.5 (40)	
CCI Z IVIVVO O	o port main wire terminal with shroad	3	1/0 14 (30 2.3)	Cu/Ai 75 C	4-6 = 5.0 (45	
					1/0-2 = 5.6 (50)	

<sup>†</sup> This is a lug kit with three lugs and a shroud for installation on three ganged CUBEFuse holders.

#### Accessories

Catalog no.	Holder amps	Description
CCP2-TS2-3		3-pole terminal shroud
CCP2-PB2	- 200/225	Phase barriers (pack of 2)
CCP2-CWK2	- 200/220	1/4" QC terminals. Use with CCP2-L2-1A, CCP2-MW2-3 and CCP2-MW2-6 lugs (pack of 12)
CCP2-TS6-3	- 400	3-pole terminal shroud
CCP2-PB6	400	Phase barriers (pack of 2)

#### **Recommended Bussmann series fuses**

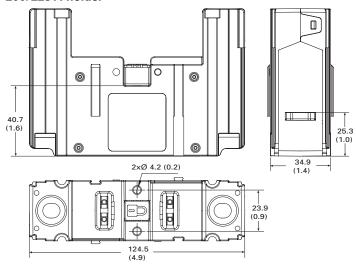
Туре	Amp range	Data sheet
Time-delay indicating Low-Peak	110-400 A	9000
Time-delay non-indicating Low-Peak	110-400 A	9000

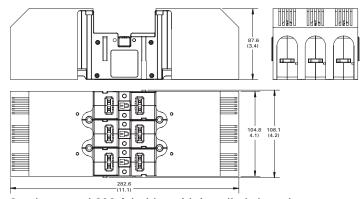
#### **Carton quantity**

Catalog no.	Description	Qty.
200/225 A holders		
TCFH200N	1-pole 200 A holder	1
TCFH225N	1-pole 225 A holder	1
CCP2-L2-1	Stainless steel lug	1
CCP2-L2-1A	Aluminum lug	1
CCP2-MW2-3	3-port multi-wire terminal with shroud	3
CCP2-MW2-6	6-port multi-wire terminal with shroud	3
CCP2-CWK2	1/4" quick connect control wire terminals	12
CCP2-TS2-3	3-pole terminal shroud	1
CCP2-PB2	Phase barriers (pack of 2)	2
400 A holders		
TCFH400N	1-pole 400 A holder	1
CCP2-L4-1	Stainless steel lug	1
CCP2-L4-1A	Aluminum lug	1
CCP2-L4B-3	Aluminum lug kit with shroud	3
CCP2-L4B-3A	Aluminum lug kit with shroud	3
CCP2-MW6-6	6-port multi-wire terminal with shroud	3
CCP2-TS6-3	3-pole terminal shroud	1
CCP2-PB6	Phase barriers (pack of 2)	2

### Dimensions — mm (in)

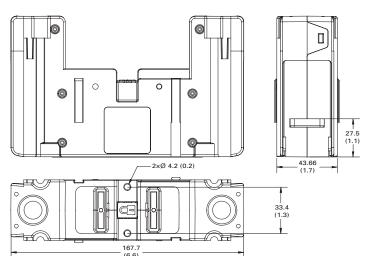
#### 200/225 A holder

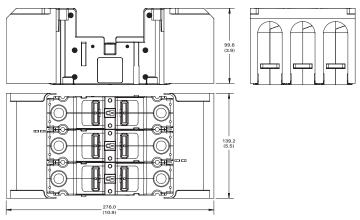




3-pole ganged 200 A holder with installed shroud

### 400 A holder





3-pole ganged 400 A holder with installed shroud

## Ordering a complete 200/225 A holder installation

For a complete installation, select from the following required and optional components, and accessories.

	Catalog no.				
		Holders	Amps	Poles	
Required	First Williams Increased	TCFH200N	200	1	
		TCFH225N	225	Order required quantity for installation	
		And			
_		Lug kits	Description		
		CCP2-L2-1	Stainless steel lug, 75° Cu only, 350 kcmil-4, 1 per pack		
		CCP2-L2-1A	Aluminum lug, 75°C Cu/Al, 350 kcmil-4, 1 per pack		
		CCP2-MW2-3	3-port multi-wire lug, 75°C Cu/Al, 2-14, 3 per pack, includes terminal shroud		
		CCP2-MW2-6	6-port multi-wire lug, 75°C Cu/Al, 6-14, 3 per pack, includes terminal shroud		
		Terminal shrouds	Description		
		CCP2-TS2-3	3-pole terminal shroud with phase shields, 1 per pack		
		Phase barriers	Description		
Accessories		CCP2-PB2	Phase barriers, 2 per pack		
			And		
		Control terminals	Description		
		CCP2-CWK2	1/4" quick-connect control wire terminals - mounts on installed lug (cannot be used with lug CCP2-L2-1), 12 per pack		

#### Ordering a complete 400 A holder installation

For a complete installation, select from the following required and optional components, and accessories.

		Catalog no.			
		Holder	Amps	Poles	
Required		TCFH400N	400	1 Order required quantity for installation	
dui		Lug kits	And Description		
Re		CCP2-L4-1	Stainless steel lug, 75° Cu only, 500 kcmil-3, 1 per pack		
		CCP2-L4-1A	Aluminum lug, 75° Cu only, 500 kcmil-3, 1 per pack		
		CCP2-L4B-3	Stainless steel lug, 75° Cu only, 750-500 kcmil, 3 per pack, includes terminal shroud		
		CCP2-L4B-3A	Aluminum lug, 75°C Cu/Al, 750-500 kcmil, 3 per pack, includes terminal shroud		
		CCP2-L6-3	2-port stainless steel lug, 75° Cu only, 500 kcmil-2, 3 per pack, includes terminal shroud		
		CCP2-L6-3A	2-port aluminum lug, 75° Cu only, 500 kcmil-2, 3 per pack, includes terminal shroud		
		CCP2-MW6-6	6-port multi-wire lug, 75°C Cu/Al, 1/0-14, 3 per pack, includes terminal shroud		
		Terminal	And		
Accessories		shrouds	Description		
		CCP2-TS6-3	3-pole terminal shroud with phase shields, 1 per pack		
		Phase barriers	Description		
		CCP2-PB6	Phase barriers, 2 per pack		

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