

# 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 dovetail 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
- SCCR
  - 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 |
|----------------------------|-----------------|----------------|
| <b>600 V UL Listed</b>     |                 |                |
| TCFH30N                    | 30              | 1-30           |
| TCFH60N                    | 60              | 1-60           |
| TCFH100N                   | 100             | 1-100          |
| TCFH200N                   | 200             | 110-200        |
| TCFH225N                   | 225             | 110-225        |
| TCFH400N                   | 400             | 110-400        |
| <b>690 V UL Recognized</b> |                 |                |
| 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 catalog no. | Volts | CUBEFuse type and amp range |        |        |
|--------------------|-------|-----------------------------|--------|--------|
|                    |       | TCF and TCF_RN              | FCF_RN | WCF_RN |
| TCFH30N            | 600   | 1-30                        | 1-30   |        |
| TCFH60N            |       | 1-60                        | 1-60   | —      |
| TCFH100N           |       | 1-100                       | 1-100  |        |
| TCFH30NW           | 690   |                             |        | 1-30   |
| TCFH60NW           |       | —                           | —      | 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 wire rating | Holder catalog no.              |                                |                                    |
|----------------------|---------------------------------|--------------------------------|------------------------------------|
|                      | TCFH30N / TCFH30NW              | TCFH60N / TCFH60NW             | TCFH100N / TCFH100NW               |
| Single               | 8-10; 2.8 (25), 12-18; 2.6 (20) | 10-14; 2.6 (20), 4-8; 3.9 (35) | 10-18; 2.6 (20)** , 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)†                       |

\* 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)               |



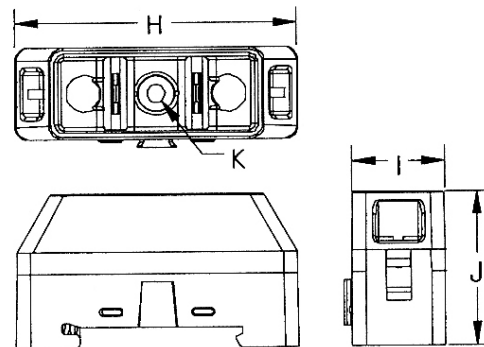
All 30, 60 and 100 A CUBEFuse holders dovetail together to create the desired number of poles. Each holder accepts CUBEFuse amp ratings up to its rating. E.g., the 60 amp holder will accept a CUBEFuse from 1 to 60 A.

### Recommended Bussmann series fuses

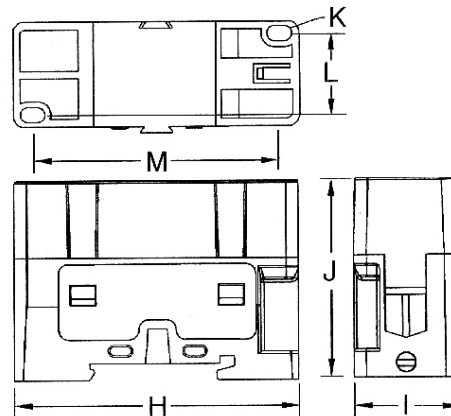
| Type                               | Amp range | Data sheet |
|------------------------------------|-----------|------------|
| <b>600 volt UL Listed</b>          |           |            |
| Time-delay indicating Low-Peak™    | 6-100 A   | 9000       |
| Time-delay non-indicating Low-Peak | 1-100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



### Dimensions — in (mm)



30 and 60 amp holders



100 amp holder

| Amps | H         | I         | 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           | 600 Vac/300 Vdc | 110-200            |
| TCFH225N           |                 | 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.

**Available lugs, conductor ratings and terminal torques**

| Catalog no.   | Description                                | Lugs per cat. no. | Wire range AWG (mm <sup>2</sup> ) | Wire type/ temp. | Conductor torque N·m (lb-in) | Lug mounting screw torque N·m (lb-in) |
|---|--|-------------------|-----------------------------------|------------------|------------------------------|---------------------------------------|
| <b>200/225 A holders</b>  |  |                   |                                   |                  |                              |                                       |
| 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)                             |
| * These lugs also accept 1/4" quick connect control wire terminals. Order catalog number CCP2-CWK2 (package of 12 terminals). |  |                   |                                   |                  |                              |                                       |
| <b>400 A holders</b>  |  |                   |                                   |                  |                              |                                       |
| CCP2-L4-1   | Stainless steel lug                        | 1                 | 500-3 (240-35)                    | Cu 75°C          | 42.0 (375)                   | 22.0 (200)                            |
| 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)                   |                                       |
| CCP2-L6-3A  | 2-port aluminum lug kit with shroud        | 3                 | (2) 500-2 (240-35)                | Cu/Al 75°C       | 42.0 (375)                   |                                       |
|   |  |                   |                                   |                  | 10-14 = 3.9 (35)             |                                       |
|   |  |                   |                                   |                  | 8 = 4.5 (40)                 |                                       |
|   |  |                   |                                   |                  | 4-6 = 5.0 (45)               |                                       |
|   |  |                   |                                   |                  | 1/0-2 = 5.6 (50)             |                                       |
| CCP2-MW6-6  | 6-port multi-wire terminal with shroud†    | 3                 | 1/0-14 (50-2.5)                   | Cu/Al 75°C       |                              |                                       |

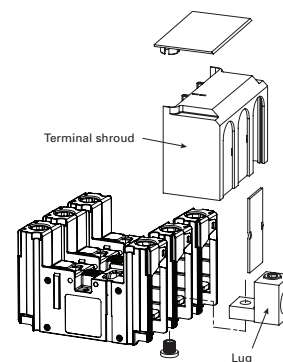
† This is a lug kit with three lugs and a shroud for installation on three ganged CUBEFuse holders.

**Accessories**

| Catalog no. | Holder amps | Description   |
|-------------|-------------|---|
| CCP2-TS2-3  | 200/225     | 3-pole terminal shroud  |
| CCP2-PB2    |             | Phase barriers (pack of 2)  |
| CCP2-CWK2   |             | 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    |             | Phase barriers (pack of 2)  |

**Recommended Bussmann series fuses**

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



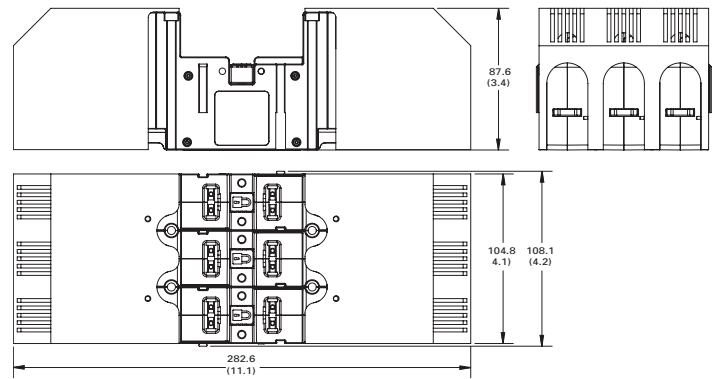
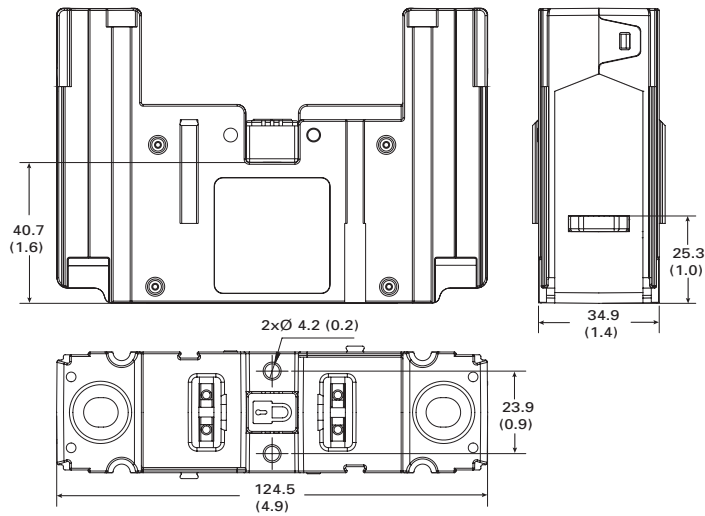
All 200, 225 and 400 amp holders require installing lugs. Only three ganged holders can accept terminal shrouds. See table below.

**Carton quantity**

| Catalog no.              | Description                               | Qty. |
|--------------------------|---|------|
| <b>200/225 A holders</b> |   |      |
| 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    |
| <b>400 A holders</b>     |   |      |
| 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    |

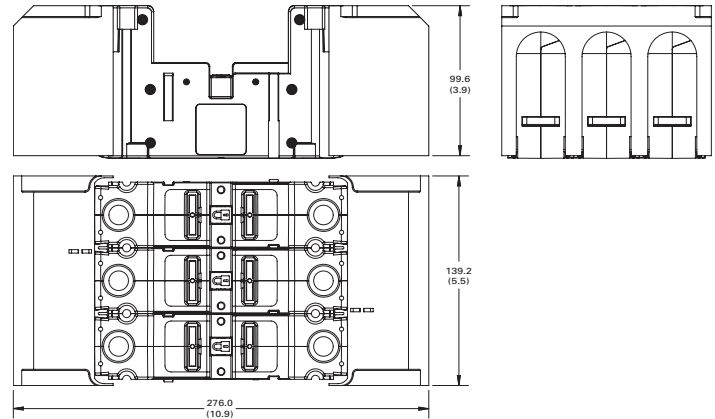
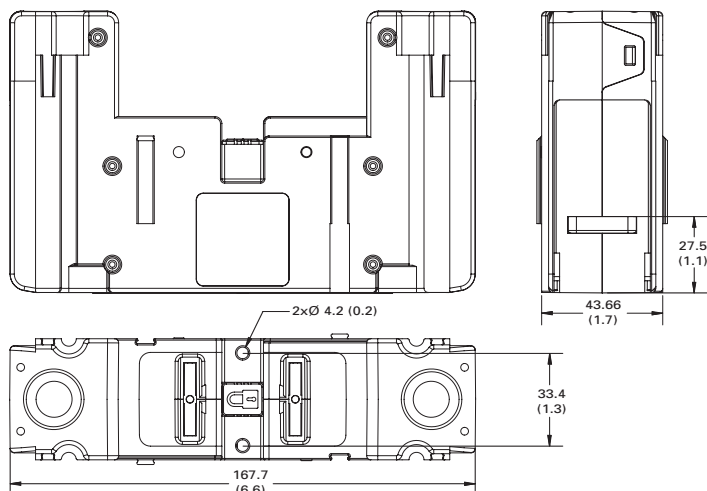
**Dimensions — mm (in)**

**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  |    | TCFH200N   | 200   | 1<br>Order required quantity for installation |
|   |   | TCFH225N   | 225   |   |
|   |    | 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       |  |   |   |
| And   |   |  |   |   |
| Accessories   |  | Terminal shrouds   | Description   |   |
|   |   | CCP2-TS2-3   | 3-pole terminal shroud with phase shields, 1 per pack     |   |
|   |   | Phase barriers   | Description   |   |
|   |   | 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<br><b>Order required quantity for installation</b> |  |
|             |    | And   |  |  |  |
|             |   | Lug kits  | Description  |  |  |
|             |   | 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 |  |  |  |
| And         |   |   |  |  |  |
| Accessories |  | Terminal 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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