

TCF Class CF Low-Peak time-delay CUBEFuse™



The Bussmann series Low-Peak CUBEFuse is a finger-safe UL Class CF current-limiting, dual-element, time-delay branch circuit fuse and fuse holder system; 10 seconds minimum operating time at 500% rated amps. With Class J electrical performance, the time-delay CUBEFuse is available in indicating and non-indicating versions, this finger-safe fuse has a very compact, space-saving size and is easily applied using the CUBEFuse holder (TCFH_N), UL 98 Compact Circuit Protector switch (CCP2-_CF) or Compact Circuit Protector Base (CCP2B up to 100 A) used in the Quik-Spec™ Coordination Panelboard). For dimensions, see page 1-3.

Ratings

- Volts
 - 600 Vac
 - 300 Vdc
- Amps
 - 6-400 A (indicating)
 - 1-400 A (non-indicating)
- Interrupting rating
 - 300 kA RMS Sym. (Up to 100 A UL)
 - 200 kA RMS Sym. (110 to 400 A UL)
 - 200 kA RMS Sym. (Up to 100 A CSA)
 - 100 kA DC (Up to 400 A UL and up to 100 A CSA)

Watts loss at rated current

Fuse amps	Watts
30	3.99
60	6.23
100	9.51
200	18.6
225	17.6
400	35.2

Agency information

- UL Listed Class CF fuse: Guide JDDZ, File E4273 (up to 400 A)
- CSA® Certified fuse: Class 1422-02, File 053787_C_000 (up to 100 A)
- CE (100 A and below)
- RoHS compliant

Operating and storage temperature range

- 40 to 80°C (-40°F to 176°F)

Data sheet no. 9000 (fuses) and 9007 (holders)

Features

- Smallest installed footprint of any UL Class CC, J, or R fuse solution
- Easy application using CUBEFuse holders (TCFH_N), UL 98 Compact Circuit Protector (CCP2) switches and Compact Circuit Protector Base (CCP2B up to 100 A). See data sheet 9007 for details on the CUBEFuse holder, 10801 for details on the CCP2-_CF switch and 1161 for the CCP2B.
- Holders and switches have an amp rating rejection feature to help prevent overfusing; 30, 60 and 100 A switches and holders will hold any CUBEFuse up to its rating, 200 and 400 A switches and 200, 225 and 400 A holders will hold any CUBEFuse 110 A and above up to its rating
- The indicating version features local *easyID™* open fuse technology for faster troubleshooting and reduced downtime
- Faster response to damaging faults helps reduce destructive thermal and magnetic forces
- True dual-element fuse construction with a minimum 10 seconds time-delay at 500% of rating
- Long time-delay minimizes nuisance openings caused by temporary overloads and transient surges
- Up to 300 kA interrupting rating safely interrupts virtually any fault
- Robust cycling and inrush current withstand
- Low let-through currents under fault conditions
- Provides Type 2 “No Damage” protection for IEC motor starters when properly sized
- Easy selective coordination with any other Bussmann series Low-Peak Class CC, J, L or RK1 fuse with simple 2:1 amp ratio between upstream and downstream fuses

* Finger-safe status depends on final, installed application, and will require using accessory shrouds for 110 to 400 A ratings.

Typical applications

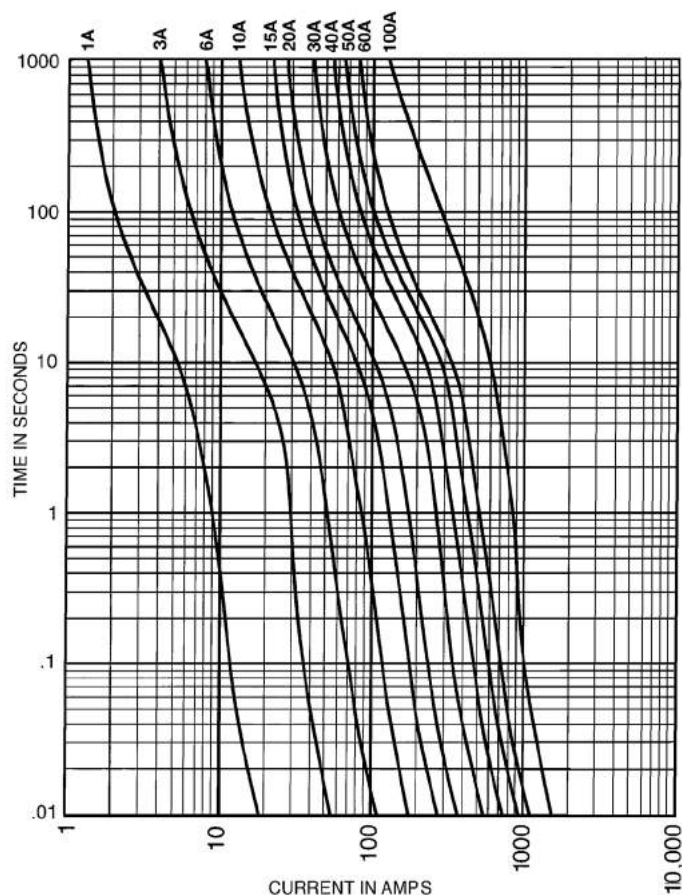
- Electrical panelboards
- Machinery disconnects
- Industrial controls and panels
- Required finger-safe systems

Catalog numbers (amps)

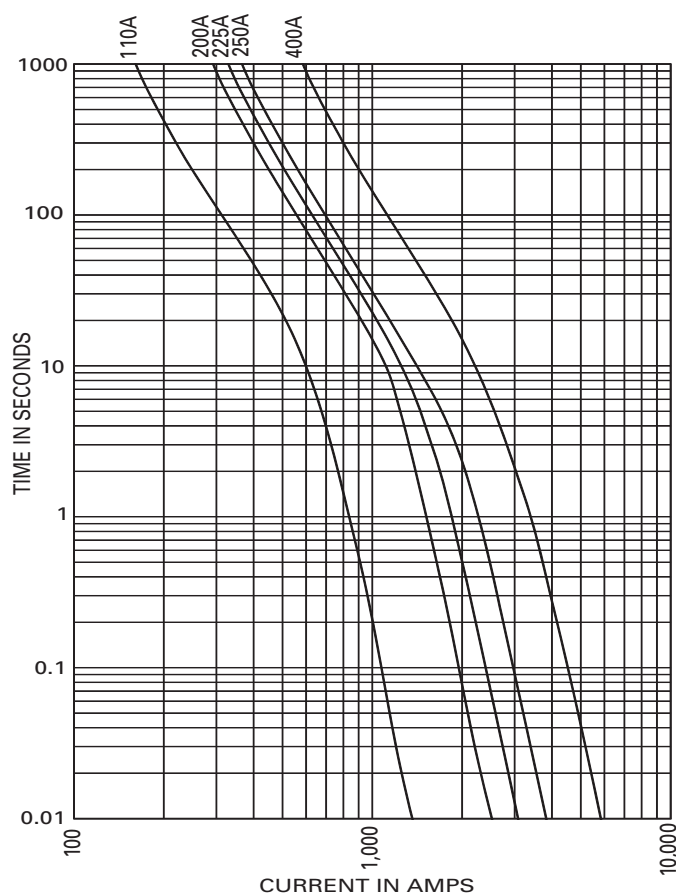
Indicating CUBEFuse			
TCF6	TCF35	TCF90	TCF225
TCF10	TCF40	TCF100	TCF250
TCF15	TCF45	TCF110	TCF300
TCF17-1/2	TCF50	TCF125	TCF350
TCF20	TCF60	TCF150	TCF400
TCF25	TCF70	TCF175	
TCF30	TCF80	TCF200	
Non-Indicating CUBEFuse			
TCF1RN	TCF25RN	TCF70RN	TCF175RN
TCF3RN	TCF30RN	TCF80RN	TCF200RN
TCF6RN	TCF35RN	TCF90RN	TCF225RN
TCF10RN	TCF40RN	TCF100RN	TCF250RN
TCF15RN	TCF45RN	TCF110RN	TCF300RN
TCF17-1/2RN	TCF50RN	TCF125RN	TCF350RN
TCF20RN	TCF60RN	TCF150RN	TCF400RN

Recommended holders for Class CF fuses, see page 1-12.

Up to 100 A time-current characteristics — average melt

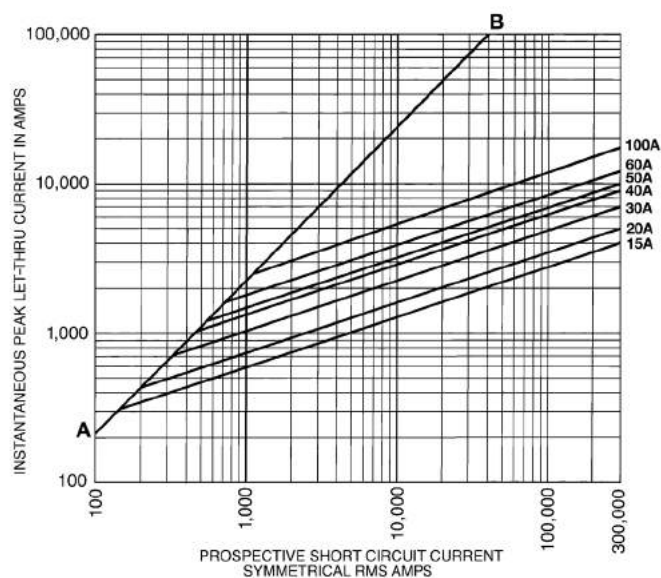


110 to 400 A time-current characteristics — average melt

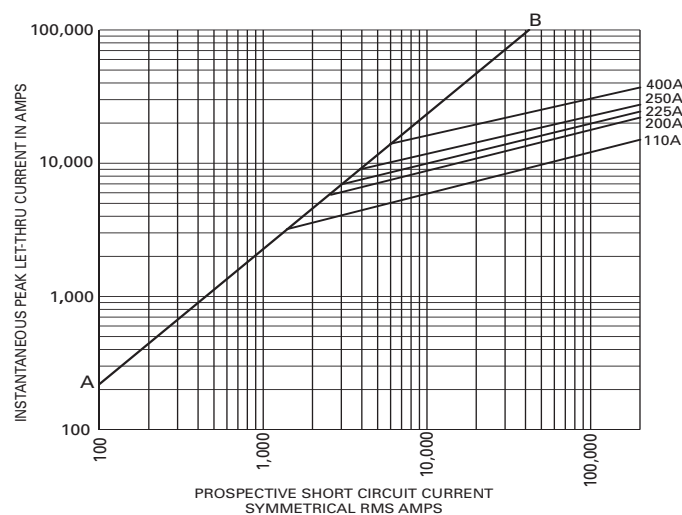


Low voltage,
branch circuit fuses

Up to 100 A current let-through curves



110 to 400 A current let-through curves



CUBEFuse (cat. no. TCFH_N) holders

The CUBEFuse is used in holders that can be dovetail together for the smallest footprint possible of any Class J fuse solution (see data sheet no. 9007 for details).



Finger-safe DIN-Rail or panel mount holders up to 100 A.

- 30 A holder accepts any CUBEFuse up to 30 A.
- 60 amp holder accepts any CUBEFuse up to 60 A.
- 100 amp holder accepts any CUBEFuse up to 100 A.



Panel mount holders from 200 to 400 A.

- 200 A holder accepts any CUBEFuse from 110 to 200 A
- 225 A* holder accepts any CUBEFuse from 110 to 225 A
- 400 A holder accepts any CUBEFuse from 110 to 400 A

Finger-safe installation achievable for three ganged holders and lug kits with shroud

* 200 A and 225 A holders share the same overall dimensions, but the 200 A holder will reject a 225 A fuse.

30, 60 and 100 A Compact Circuit Protector (cat. no. CCP2_CF) switches



These DIN-Rail mounted 1-, 2- and 3-pole switches are UL 98 horsepower rated disconnects available with front or side rotary operators. Each CCP2 will accept a fuse amp rating equal to or less than its rating (e.g., a 60 A CCP will accept any CUBEFuse up to 60 A). Accessories include multi-wire lug kits with shrouds, auxiliary contacts and PLC fuse monitor (see data sheet no. 10801 for details).

UL Class CF branch circuit time-delay CUBEFuse

200 and 400 A Compact Circuit Protector (cat. no. CCP2-CF) switches



These panel mounted 1-, 2- and 3-pole switches are UL 98 horsepower rated disconnects. Each CCP2 will accept a fuse amp rating equal to or less than its rating (e.g., a 200 A CCP will accept any CUBEFuse from 110 to 200 A). Complete installation requires installing various lugs to meet the application requirement. Accessories include side or front rotary operators and auxiliary contacts (see data sheet no. 10801 for details).

Compact Circuit Protector Base (cat. no. CCP2B)



These 1-, 2- and 3-pole switches are UL 98 horsepower rated branch circuit disconnects. Primarily used in the Quik-Spec Coordination Panelboard, they're available in ratings up to 100 A. The CCP2B has amp rejection breaks that prevent installing any CUBEFuse amp rating greater than that of the switch. These coincide with standard conductor ampacities to help prevent overfusing and are available at 15, 20, 30, 40, 50, 60, 70, 90 and 100 amps for all 1-, 2- and 3-pole switches.

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