

# Low-Peak® CUBEFuse® With and Without Indication

## Finger-Safe, Dual-Element, Time-Delay Class J Performance Fuse, 1-100A, 600Vac/300Vdc



70-100A Case Size      35-60A Case Size      1-30A Case Size

**Catalog Symbols:** TCF\_ Indicating fuse (6-100A)

TCF\_RN Non-indicating fuse (1-100A)

**Dual-Element, Time-Delay Fuse:** 10 Seconds Minimum Operating Time at 500% Rated Current

**Ampere Rating:** 1 to 100A

**Voltage Rating:** 600Vac/300Vdc

**Interrupting Rating:** 300kA RMS Sym. (UL)  
200kA RMS Sym. (CSA)  
100kA DC (UL & CSA)

**Agency Information:**

- UL Listed Special Purpose Fuse: Guide JFHR, File E56412
- CSA Certified Fuse: Class 1422- 02, File 53787
- CE compliance for the European Union low voltage directive

**Other Ratings/Specifications:**

**Watts Loss at rated current:** TCF30: 3.99W  
TCF60: 6.23W  
TCF100: 9.51W

**Operating and Storage Temperature Range:** 14 to 149°F(-10 to 65°C)

**Material Specifications:**

- Case: Glass filled PES (Polyethersulfone)
- Terminals: Copper alloy
- Terminal plating: Electroless tin
- Indicator lens: PES (Polyethersulfone) (indicating version only)
- Indicator: Energetic chemical

**Carton Quantity and Weight**

Amp Rating	Carton Qty.	Weight Per Carton	
		lbs	kg
TCF1-30A	12	1.39	0.63
TCF35-60A	12	1.42	0.65
TCF70-100A	6	1.74	0.79

**Catalog Numbers (amp rating)**

Indicating CUBEFuse					
TCF6	TCF10	TCF15	TCF17-½	TCF20	TCF25
TCF30	TCF35	TCF40	TCF45	TCF50	TCF60
TCF70	TCF80	TCF90	TCF100		
Non-Indicating CUBEFuse					
TCF1RN	TCF3RN	TCF6RN	TCF10RN	TCF15RN	TCF17-½RN
TCF20RN	TCF25RN	TCF30RN	TCF35RN	TCF40RN	TCF45RN
TCF50RN	TCF60RN	TCF70RN	TCF80RN	TCF90RN	TCF100RN

**Features and Product Benefits**

- The world's first finger-safe power fuse system.
- Smallest footprint of any class fuse including Class J, CC, T and RK.
- Meets Class J time-delay electrical performance requirements.
- Available with and without open fuse indication to meet every customer requirement.
- The indicating version features *easyID™* open fuse technology for faster troubleshooting and reduced downtime.
- Faster response to damaging faults to help reduce destructive thermal and magnetic forces.
- True dual-element fuse construction with a minimum of 10 seconds time-delay at 500% of rating.
- Long time-delay minimizes nuisance circuit openings due to temporary overloads and transient surges.
- High interrupting rating to safely interrupt faults up to 300kA.
- No venting of arc or molten metal and gases during opening.
- Robust cycling and inrush current withstand.
- Low let-through currents under fault conditions.
- Provides Type 2 "No Damage" protection for IEC motors starters when properly sized.
- Easy selective coordination with any other Cooper Bussmann® Low-Peak® Class L, J and RK1 fuse with simple 2:1 amp ration between upstream and downstream fuses.

**CUBEFuse Holders, Disconnects and Safety Switch**

The CUBEfuse is used in the following Cooper Bussmann® products.



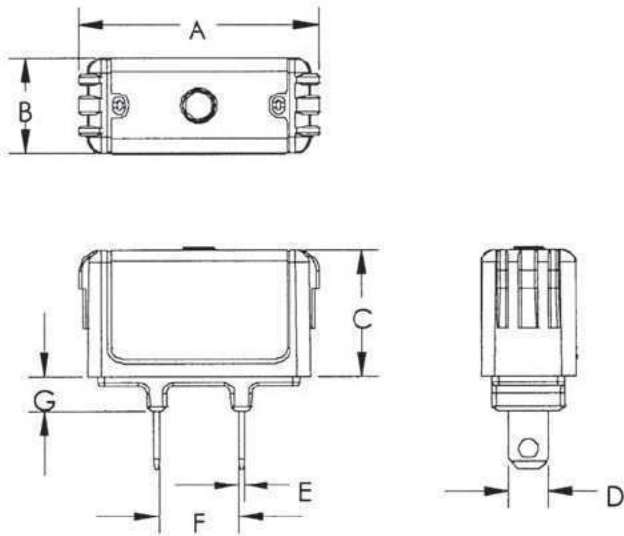
TCFH\_N 100, 60 & 30A Holders. Data Sheet 9007

CCP\_CF 1-, 2- & 3-Pole switched disconnects. Data Sheet 1157

CCPB 1-, 2- & 3-Pole disconnects for the Quik-Spec™ Coordination Panelboard. Data Sheet 1160

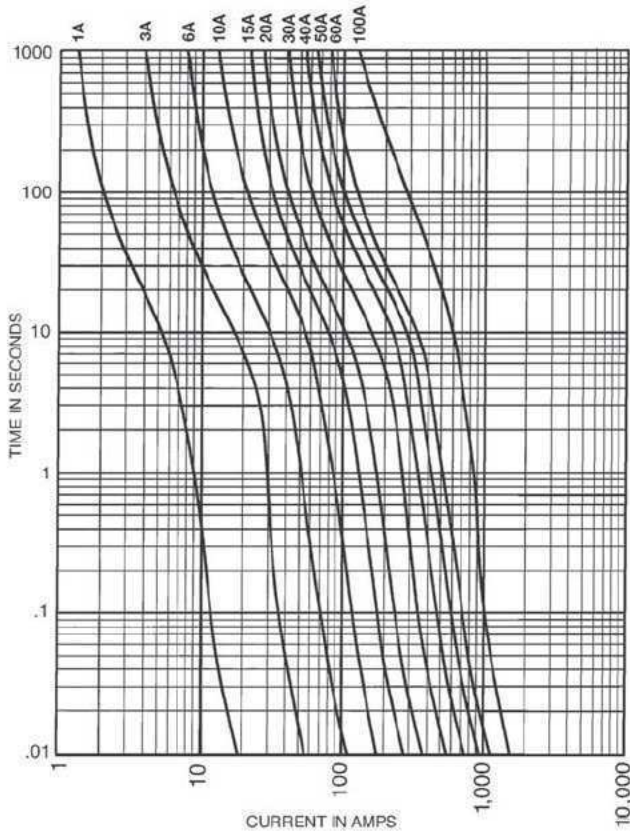
CF\_ Quik-Spec™ Safety Switch disconnect (optional window). Data Sheet 1156

TCF\_ and TCF\_RN Dimensions – in (mm)

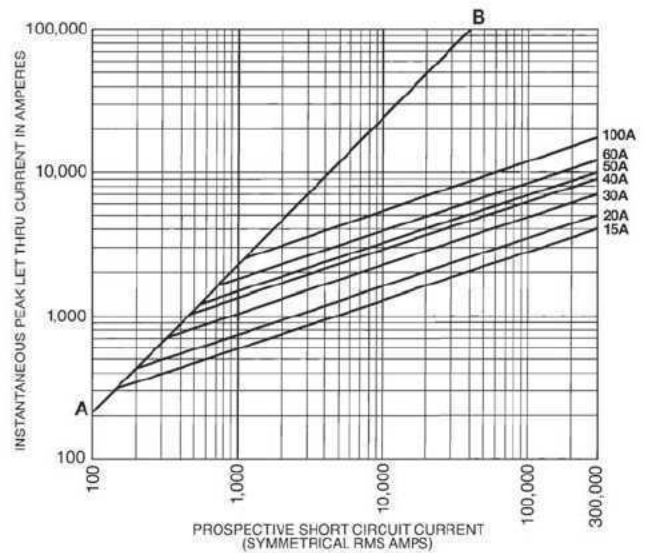


Fuse Amps	Dimensions - in (mm)						
	A	B	C	D	E	F	G
1-15	1.88 (47.75)	0.75 (19.05)	1.00 (25.40)	0.23 (5.84)	0.04 (1.02)	0.63 (15.88)	0.27 (6.86)
17.5-20	1.88 (47.75)	0.75 (19.05)	1.00 (25.40)	0.27 (6.86)	0.04 (1.02)	0.63 (15.88)	0.27 (6.86)
25-30	1.88 (47.75)	0.75 (19.05)	1.00 (25.40)	0.31 (7.94)	0.04 (1.02)	0.63 (15.88)	0.27 (6.86)
35-40	2.13 (54.10)	1.00 (25.40)	1.13 (28.58)	0.36 (9.14)	0.04 (1.02)	0.63 (15.88)	0.38 (9.65)
45-50	2.13 (54.10)	1.00 (25.40)	1.13 (28.58)	0.40 (10.16)	0.04 (1.02)	0.63 (15.88)	0.38 (9.65)
60	2.13 (54.10)	1.00 (25.40)	1.13 (28.58)	0.44 (11.11)	0.04 (1.02)	0.63 (15.88)	0.38 (9.65)
70-100	3.01 (76.45)	1.00 (25.40)	1.26 (32.00)	0.57 (14.4)	0.06 (1.60)	0.63 (15.88)	0.39 (9.93)

Time-Current Characteristic Curves—Average Melt



Current Limitation Curves



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