

## 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

 $\textbf{Interrupting Rating:} \quad 300 \text{kA RMS Sym. (UL)}$ 

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**

	Carton	Weight Per Carton		
Rating	Qty.	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	TCF17-1/2	TCF20	TCF25				
TCF30	TCF35	TCF40	TCF45	TCF50	TCF60				
TCF70	TCF80	TCF90	TCF100						
Non-Indicating CUBEFuse									
TCF1RN	TCF3RN	TCF6RN	TCF10RN	TCF15RN	TCF17-1/2RN				
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 easy/D<sup>TM</sup> 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 timedelay 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

Data Sheet 9000

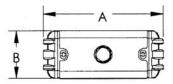


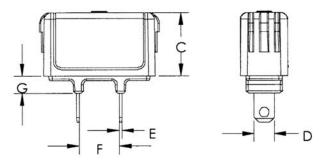
**CF**\_ Quik-Spec<sup>™</sup> Safety Switch disconnect (optional window). Data Sheet 1156



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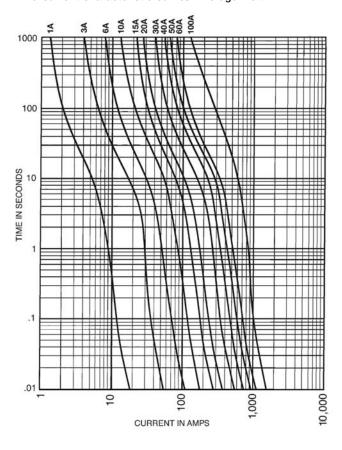
## TCF\_ and TCF\_RN Dimensions - in (mm)



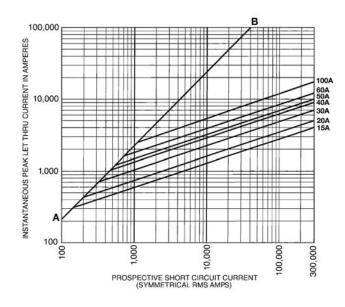


Fuse	Dimensions - in (mm)							
Amps	Α	В	С	D	Е	F	G	
1-15	1.88	0.75	1.00	0.23	0.04	0.63	0.27	
	(47.75)	(19.05)	(25.40)	(5.84)	(1.02)	(15.88)	(6.86)	
17.5-20	1.88	0.75)	1.00	0.27	0.04	0.63	0.27	
	(47.75)	(19.05)	(25.40)	(6.86)	(1.02)	(15.88)	(6.86)	
25-30	1.88	0.75	1.00	0.31	0.04	0.63	0.27	
	(47.75)	(19.05)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

## Time-Current Characteristic Curves-Average Melt



### **Current Limitation Curves**



Data Sheet 9000

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