

Low-Peak CUBEFuse

Finger-Safe, Dual-Element, Time-Delay Class CF 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

Ratings:

Volts -600Vac/300Vdc

Amps −1 to 100A

IR -300kA RMS Sym. (UL)

-200kA RMS Sym. (CSA)

-100kA DC (UL & CSA)

Agency Information:

- UL Listed Fuse: Guide JFHR. File E4273
- CSA Certified Fuse: Class 1422- 02, File 53787
- CE compliance for the European Union low voltage directive
- RoHS Compliant

Other Ratings/Specifications:

Watts Loss at rated current: TCF30: 3.99W

TCF60: 6.23W TCF100: 9.51W

Operating and Storage Temperature Range: -40 to 80°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

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					

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	

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 CF and Class J time-delay electrical performance requirements.
- Available with and without open fuse indication.
- The indicating version features easyIDTM 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 CC, L, J and RK1 fuse with simple 2:1 amp ration between upstream
 and downstream fuses.

CUBEFuse Holders, Disconnects and Panelboards

The CUBEfuse is used in the following Cooper Bussmann products.



At 100, 60 & 30A CUBEFuse holders can be dovetail together for the smallest footprint possible of any Class J fuse solution. See CUBEFuse holder

Data Sheet 9007



The DIN-Rail mounted 1-, 2- and 3-Pole CCP_CF comes in 30, 60 and 100A versions.

See Data Sheet 1157

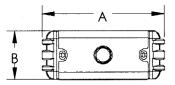


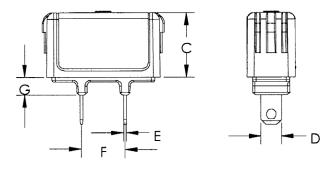
1-, 2- & 3-pole CCPB is an ampacity rejecting branch disconnect for the Quik-Spec[™] Coordination Panelboard that uses the CUBEFuse up to 100A.

See Data Sheet 1160

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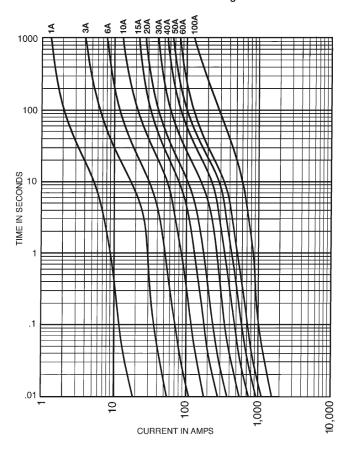
TCF_ and TCF_RN Dimensions - in (mm)



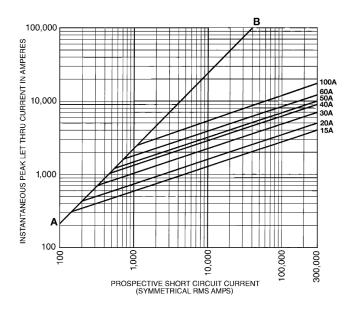


Fuse	Dimensions - in (mm)								
Amps	Α	В	С	D	Е	F	G		
1-15	1.88	0.75	1.00	0.23	0.04	0.63	0.28		
	(47.75)	(19.05)	(25.40)	(5.84)	(1.02)	(15.93)	(7.11)		
17 ½	1.88	0.75)	1.00	0.31	0.04	0.63	0.28		
	(47.75)	(19.05)	(25.40)	(7.87)	(1.02)	(15.93)	(7.11)		
20	1.88	0.75)	1.00	0.31	0.04	0.63	0.28		
	(47.75)	(19.05)	(25.40)	(7.87)	(1.02)	(15.93)	(7.11)		
25-30	1.88	0.75	1.00	0.31	0.04	0.63	0.28		
	(47.75)	(19.05)	(25.40)	(7.87)	(1.02)	(15.93)	(7.11)		
35-40	2.13	1.00	1.13	0.36	0.04	0.63	0.38		
	(54.10)	(25.40)	(28.58)	(9.10)	(1.02)	(15.93)	(9.65)		
45-50	2.13	1.00	1.13	0.44	0.04	0.63	0.38		
	(54.10)	(25.40)	(28.58)	(11.13)	(1.02)	(15.93)	(9.65)		
60	2.13	1.00	1.13	0.44	0.04	0.63	0.38		
	(54.10)	(25.40)	(28.58)	(11.13)	(1.02)	(15.93)	(9.65)		
70	3.01	1.00	1.26	0.49	0.06	0.58	0.38		
	(76.45)	(25.40)	(32.00)	(12.45)	(1.60)	(14.78)	(9.65)		
80-90	3.01	1.00	1.26	0.49	0.06	0.58	0.38		
	(76.45)	(25.40)	(32.00)	(12.45)	(1.60)	(14.78)	(9.65)		
100	3.01	1.00	1.26	0.57	0.06	0.58	0.38		
	(76.45)	(25.40)	(32.00)	(14.48)	(1.60)	(14.78)	(9.65)		

Time-Current Characteristic Curves-Average Melt



Current Limitation Curves



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