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	TCF17-½	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

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

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 *easy*ID™ 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 CC, L, J and RK1 fuse with simple 2:1 amp ration between upstream and downstream fuses.

CUBEFuse Holders, Disconnects and Panelboards

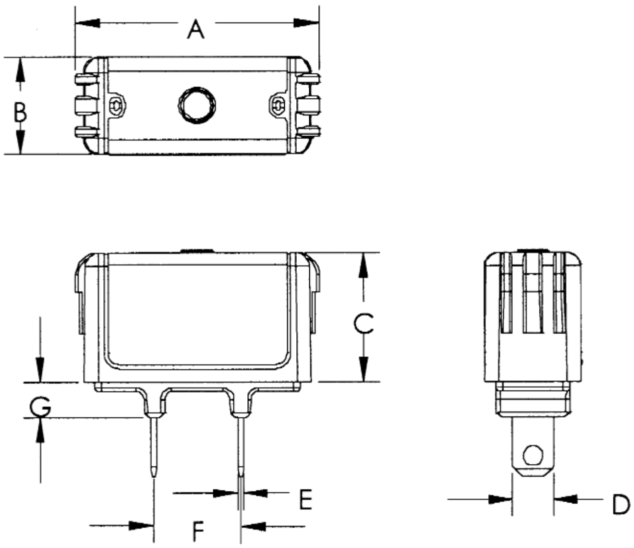
The CUBEfuse is used in the following Cooper Bussmann products.

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

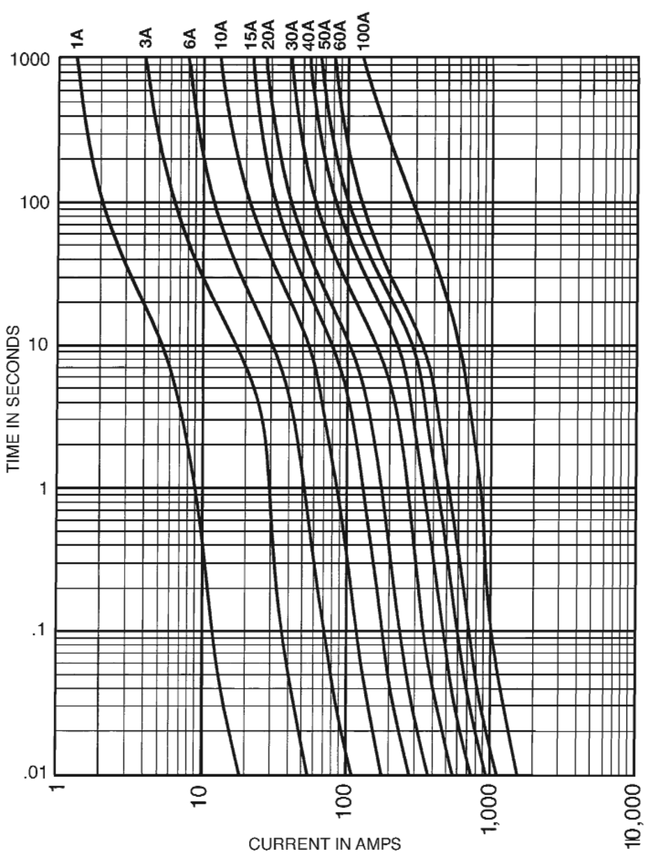
1-, 2- & 3-pole CCPB is an ampacity rejecting branch disconnect for the Quik-Spec™ Coordination Panelboard that uses the CUBEFuse up to 100A. See Data Sheet 1160

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 (15.93)	0.28 (7.11)
17 ½	1.88 (47.75)	0.75) (19.05)	1.00 (25.40)	0.31 (7.87)	0.04 (1.02)	0.63 (15.93)	0.28 (7.11)
20	1.88 (47.75)	0.75) (19.05)	1.00 (25.40)	0.31 (7.87)	0.04 (1.02)	0.63 (15.93)	0.28 (7.11)
25-30	1.88 (47.75)	0.75 (19.05)	1.00 (25.40)	0.31 (7.87)	0.04 (1.02)	0.63 (15.93)	0.28 (7.11)
35-40	2.13 (54.10)	1.00 (25.40)	1.13 (28.58)	0.36 (9.10)	0.04 (1.02)	0.63 (15.93)	0.38 (9.65)
45-50	2.13 (54.10)	1.00 (25.40)	1.13 (28.58)	0.44 (11.13)	0.04 (1.02)	0.63 (15.93)	0.38 (9.65)
60	2.13 (54.10)	1.00 (25.40)	1.13 (28.58)	0.44 (11.13)	0.04 (1.02)	0.63 (15.93)	0.38 (9.65)
70	3.01 (76.45)	1.00 (25.40)	1.26 (32.00)	0.49 (12.45)	0.06 (1.60)	0.58 (14.78)	0.38 (9.65)
80-90	3.01 (76.45)	1.00 (25.40)	1.26 (32.00)	0.49 (12.45)	0.06 (1.60)	0.58 (14.78)	0.38 (9.65)
100	3.01 (76.45)	1.00 (25.40)	1.26 (32.00)	0.57 (14.48)	0.06 (1.60)	0.58 (14.78)	0.38 (9.65)

Time-Current Characteristic Curves–Average Melt



Current Limitation Curves