

# Wind CUBEFuse™

## For Wind Power Generation Applications



**Catalog Symbol:** WCF\_RN

**Description:** Finger-safe, fast-acting CUBEFuse for wind power generation.

**Electrical Characteristics:** Maximum clearing time at 200% rated current:

- 4 Minutes for 1 to 30A fuses
- 6 Minutes for 35 to 60A fuses
- 8 Minutes for 70 to 100A fuses

**Ratings:**

Volts — 690Vac  
Amps — 1-100A  
IR — 50kA AC (1-60A)  
IR — 30kA AC (70-100A)

**Agency Information:**

- UL Recognized Fuse: Guide JFHR, File E56412
- cURus component certified C22.2

**Other Ratings/Specifications:**

**Watts Loss at Rated Current:** WCF15RN: 3.48W  
WCF30RN: 5.45W  
WCF60RN: 7.27W  
WCF100RN: 11.50W

**Operating and Storage Temperature Range:** -40 to 90°C

**Material Specifications:**

- Case: Glass filled PES (Polyethersulfone)
- Terminals: Copper alloy
- Terminal plating: Electroless tin

**Installation:**

Fits 690V WCF holders as listed in the table

**Application:**

- Wind Systems:
  - Transformer protection
  - Pitch and speed control
  - Turbine HVAC and lighting

**Carton Quantity and Weight**

Amp Rating	Carton Qty.	Weight Per Carton	
		lbs	kg
WCF1-30A	12	1.39	0.63
WCF35-60A	12	1.42	0.65
WCF70-100A	6	1.74	0.79

**Features and Product Benefits**

- Maximize uptime and reliability using fuses designed and recognized to UL 248 for low voltage fuses
- Fast-acting protection specifically designed for low-fault current conditions that occur in wind power generation systems
- Minimize chances of equipment failure and personnel injury when using full range fuses having fast response time to low-magnitude faults
- Simplify compatibility with readily available industry standard Class CF holders while minimizing panel space by up to 80%
- Meets all UL specified overload opening requirements
- Minimizes incident energy and reduces arc flash hazards utilizing Class J electrical characteristics
- Finger-safe feature minimizes exposure to live parts, reducing hazard to personnel

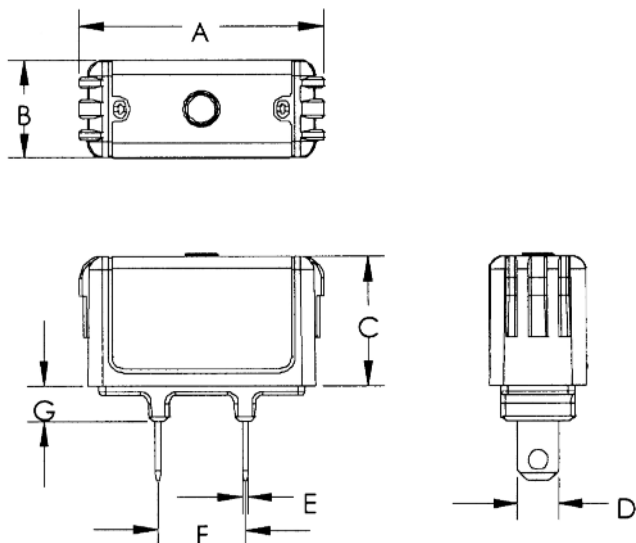
**Catalog Numbers (amp rating)**

Non-Indicating Wind CUBEFuse				
WCF1RN	WCF15RN	WCF35RN	WCF60RN	WCF100RN
WCF3RN	WCF20RN	WCF40RN	WCF70RN	—
WCF6RN	WCF25RN	WCF45RN	WCF80RN	—
WCF10RN	WCF30RN	WCF50RN	WCF90RN	—

**Wind CUBEFuse Holders**

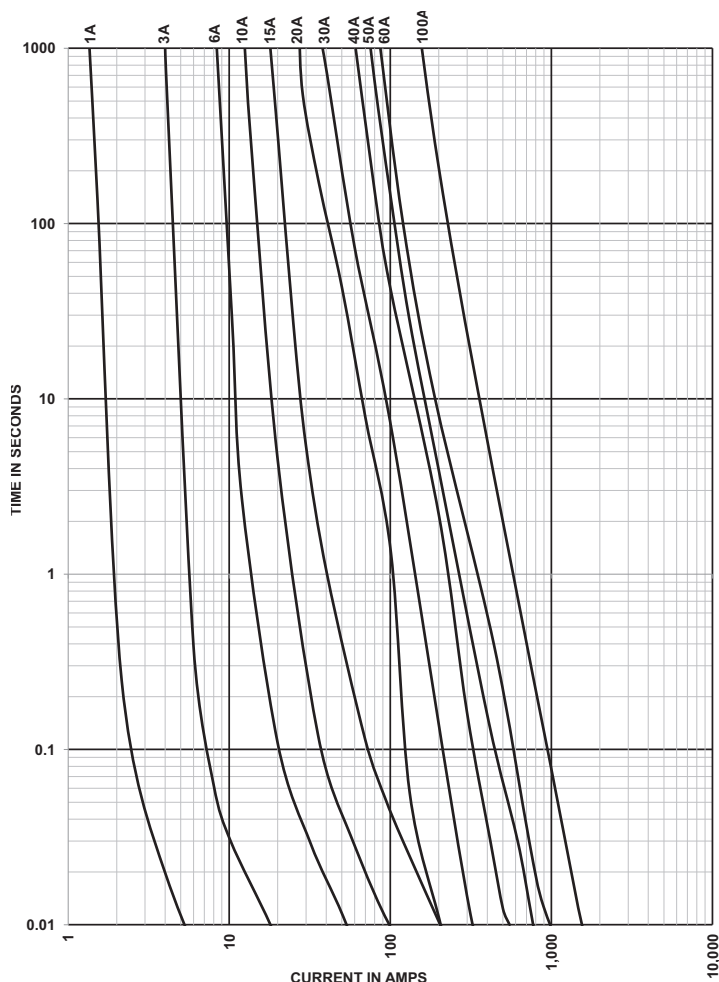
Catalog Numbers (amps)	Fits 690V Wind CUBEFuse Holder		
Non-Indicating	TCFH30NW	TCFH60NW	TCFH100NW
WCF1RN	X	X	X
WCF3RN	X	X	X
WCF6RN	X	X	X
WCF10RN	X	X	X
WCF15RN	X	X	X
WCF20RN	X	X	X
WCF25RN	X	X	X
WCF30RN	X	X	X
WCF35RN		X	X
WCF40RN		X	X
WCF50RN		X	X
WCF60RN		X	X
WCF70RN			X
WCF80RN			X
WCF90RN			X
WCF100RN			X

## WCF\_RN Dimensions – in (mm)

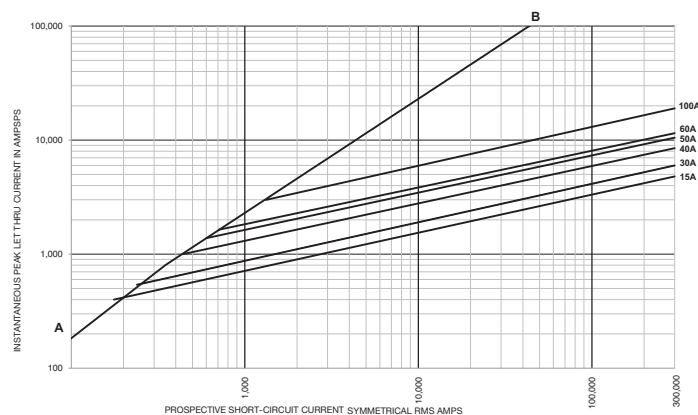


Fuse Amps	Dimensions - in (mm)						
	A	B	C	D	E	F	G
1-15	1.88 (47.75)	0.75 (19.05)	1.00 (25.40)	0.23 (5.84)	0.04 (1.02)	0.63 (15.93)	0.28 (7.11)
20	1.88 (47.75)	0.75 (19.05)	1.00 (25.40)	0.31 (7.87)	0.04 (1.02)	0.63 (15.93)	0.28 (7.11)
25-30	1.88 (47.75)	0.75 (19.05)	1.00 (25.40)	0.31 (7.87)	0.04 (1.02)	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



## Wind CUBEFuse Holders



All 690V 100, 60 and 30A Wind CUBEFuse holders can be dovetail together for the required number of poles.

## 690V Fuse Holder Catalog Numbers

Catalog Numbers	Amp Range
TCFH30NW	1-30
TCFH60NW	1-60
TCFH100NW	1-100

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