

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		
	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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