

# Fast-acting 690 V wind CUBEFuse



### Catalog symbol

- WCF\_RN

### Description

The Bussmann™ series wind CUBEFuse is a fast-acting, finger-safe, current-limiting fuse developed for wind power generation applications up to 690 Vac. It features a small installed footprint for application versatility. The wind CUBEFuse must be applied using the 690 V CUBEFuse holder.

### Ratings

- Volts 690 Vac
- Amps 1-100 A
- Interrupting rating
  - 50 kA RMS Sym (up to 60 A)
  - 30 kA RMS Sym. (70-100 A)

### Agency information

- UL Recognized: Guide JFHR, File E56412
- cURus Component Certified, C22.2
- RoHS compliant
- CE

### Catalog Numbers (amp)

WCF1RN	WCF20RN	WCF45RN	WCF90RN
WCF3RN	WCF25RN	WCF50RN	WCF100RN
WCF6RN	WCF30RN	WCF60RN	
WCF10RN	WCF35RN	WCF70RN	
WCF15RN	WCF40RN	WCF80RN	

### Electrical characteristics

- 4 minutes max clearing time at 200% rated current for up to 30 A fuses
- 6 minutes max clearing time at 200% rated current for 35 to 60 A fuses
- 8 minutes max clearing time at 200% rated current for 70 to 100 A fuses

### Watts loss at rated current

Fuse amps	Watts
WCF15RN	3.48
WCF30RN	5.45
WCF60RN	7.27
WCF100RN	11.50

### Operating and storage temperature range

-40°C to 90°C

### Materials

- Case: glass filled PES (Polyethersulfone)
- Terminals: electroless tin plated copper alloy

### Features

- 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
- Current limitation minimizes incident energy and reduces arc flash hazards
- Finger-safe feature minimizes exposure to live parts, reducing hazard to personnel

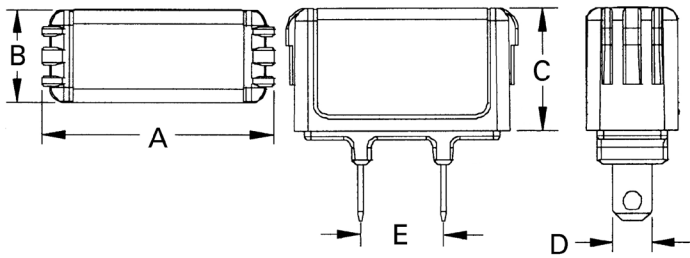
### Carton quantity and weight

Amps	Qty.	Weight lbs (kg)
up to 30	12	1.39 (0.63)
35-60	12	1.42 (0.65)
70-100	6	1.74 (0.79)



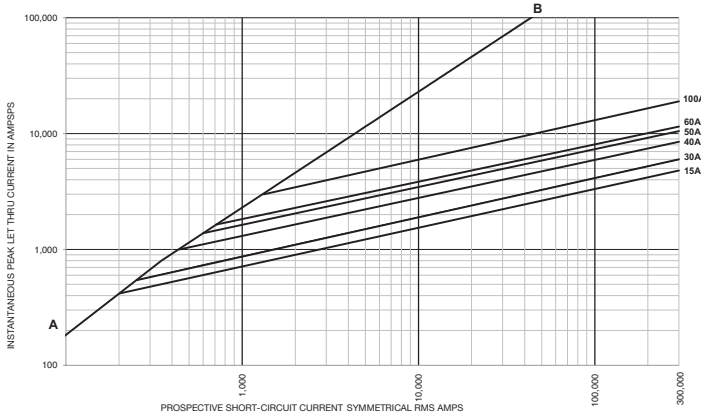
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Dimensions – in (mm)

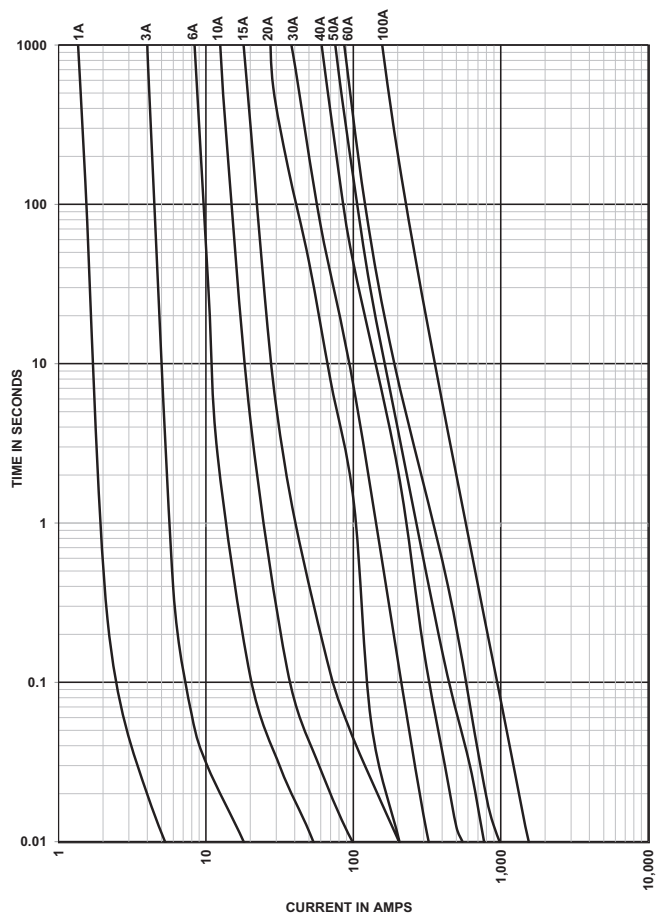


Amp range	A	B	C	D	E
1-15				0.23 (6)	
20	1.88 (48)	0.75 (19)	1.0 (25)	0.27 (7)	
25-30				0.31 (8)	0.67 (17)
35-40				0.36 (9)	
45-50	2.13 (54)		1.13 (29)	0.44 (11)	
60		1.0 (25)			
70				0.49 (12)	
80-90	3.01 (76)		1.26 (32)	0.49 (12)	0.64 (16)
100				0.57 (14)	

Current limitation curves



Time-current characteristic curves – average melt



Wind CUBEFuse holders

The 690 V wind CUBEfuse must be applied using the wind CUBEfuse holder that is rated for 690 V. See data sheet 9007 for details.

Fuse amps	Catalog no.	Amp range
up to 30	TCFH30NW	1-30
35-60	TCFH60NW	1-60
70-100	TCFH100NW	1-100



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