

# Protection for Photovoltaic Applications Made Simple

**COOPER** Bussmann

## Application Specific CUBEFuse Delivers Superior Photovoltaic Protection with up to a 70% Smaller Footprint

- Fast-acting protection specifically designed for low-fault current conditions that occur in PV systems
- Finger-safe feature minimizes exposure to live parts, reducing hazard to personnel
- UL 2579 Listed for use in 600Vdc photovoltaic systems
- Demonstrated performance in extreme temperature cycling conditions, ranging from -40°C through 90°C
- Integral use with the CUBEFuse holder minimizes panel space by up to 70%



Catalog Symbol: PVCF\_RN

Fast-Acting Fuse: 6 minutes maximum clearing time at 200%

rated current for 35 to 60A fuse

8 minutes maximum clearing time at 200%

rated current for 70 to 100A fuse

Ratings:

Volts — 600Vdc (or less)

Amps - 35-100A

IR - 50kA DC (UL & CSA)

Agency Information:

• UL Listed Fuse: Guide JFGA, File E335324

• CSA component certified C22.2

Other Ratings/Specifications:

Watts Loss at Rated Current: PVCF35RN: 5.45W

PVCF60RN: 7.27W PVCF100RN: 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 Standard Class CF holders as listed in the table below **Application:** 

- Photovoltaic Systems:
  - Combiner Boxes
  - Re-combiner Boxes
  - DC Safety Switches

#### Catalog Numbers (amp rating)

Non-Indicating Photovoltaic CUBEFuse					
PVCF35RN	PVCF45RN	PVCF60RN	PVCF80RN	PVCF100RN	
PVCF40RN	PVCF50RN	PVCF70RN	PVCF90RN		

#### **CUBEFuse Holders**

Catalog Numbers			
(amps)	Fits Fuse Holder		
Non-Indicating	TCFH60N	TCFH100N	
PVCF35RN	Χ	Χ	
PVCF40RN	Χ	Χ	
PVCF45RN	Χ	Χ	
PVCF50RN	Χ	Χ	
PVCF60RN	Χ	Χ	
PVCF70RN		Χ	
PVCF80RN		Χ	
PVCF90RN		Χ	
PVCF100RN		Χ	

#### **Protection for Many PV Applications**

Cooper Bussmann is committed to developing products that offer superior protection to PV installations.

The PVCF\_RN fuse is just one of many innovative products that can be applied in many areas and offers operators, integrators, contractors and distributors the best protection available.

The result is that personnel, equipment and the environment all receive a higher level of protection that optimizes system performance throughout the entire life cycle of installation.

#### **Features and Product Benefits**

- Maximize uptime and reliability using fuses designed and listed to UL 2579: Low Voltage Fuses- Fuses for 600Vdc Photovoltaic Systems
- Fast-acting protection specifically designed for low-fault current conditions that occur in PV systems
- Maximize return on investment with fuses proven to withstand harsh temperatures; demonstrated performance in extreme temperature cycling conditions, ranging from -40°C through 90°C
- Simplify compatibility with readily available industry standard Class CF holders while minimizing panel space by up to 70%
- Proven to clear faults faster than the UL requirement
- Minimal energy consumption leading to increased efficiency
- Ampacity rejecting holders help prevent overfusing
- Finger-safe feature minimizes exposure to live parts, reducing hazard to personnel

#### **CUBEFuse Holders**



All 100 and 60A CUBEFuse holders can dovetail together for the required number of poles with the smallest footprint possible compared to Class J solutions. See CUBEFuse holder Data Sheet 9007



### **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

### Cooper Bussmann:

PVCF10RN PVCF10RN PVCF15RN PVCF18RN PVCF20RN PVCF20RN PVCF30RN PVCF35RN PVCF35RN PVCF45RN PVCF50RN PVCF60RN PVCF60RN PVCF60RN PVCF40RN PVCF40RN PVCF40RN PVCF40RN