

PVM 600 Vdc 13/32" x 1-1/2" midget PV fuses

A range of UL 248-19 fast-acting 600 Vdc 13/32" x 1-1/2" (10x38mm) midget fuses specifically designed to protect solar power systems in extreme ambient temperature, high cycling and low level fault current conditions (reverse current, multi-array fault).



Ratings

- Volts 600 Vdc
- Amps 4-30 A
- IR 50 kA DC (4-30 A)

Agency information

- UL Listed 248-19, Guide JFGA, File E335324, CSA Component Certified C22.2, RoHS compliant, CE

Watts loss

Catalog no.	Amps	Power loss (watts)	
		0.8 I _n	I _n
PVM-10	10	1.0	1.9
PVM-15	15	1.0	1.7
PVM-30	30	1.6	2.9

Catalog no. (amps)			
PVM-4	PVM-7	PVM-10	PVM-20
PVM-5	PVM-8	PVM-12	PVM-25
PVM-6	PVM-9	PVM-15	PVM-30

Features

- Specifically designed to protect photovoltaic systems in extreme ambient temperature per UL 248-19 listed
- Capable of withstanding high cycling and low level fault current conditions

Typical applications

- Combiner boxes
- String protectors

Recommended fuse holders and blocks, see pages 6-8 and 6-9.

Data sheet no. 2153

PVS-R 600 Vac/dc Class RK5 PV fuse

A range of UL 248-19 fast-acting 600 Vdc Class RK5 fuses specifically designed to protect photovoltaic power systems in extreme ambient temperature, high cycling and low level fault current conditions (reverse current, multi-array fault).

Ratings

- Volts
 - 600 Vac to UL 248-12
 - 600 Vdc to UL 248-19
- Amps 20-400 A
- IR
 - 200 kA RMS Sym. AC
 - 20 kA DC (20-60 A)
 - 10 kA DC (70-400 A)

Agency information

- UL Listed, Std. 248-12, Class RK5, Guide JFGA, File E335324. Photovoltaic to UL 248-19, CSA Component Certified C22.2, CE



Catalog no. (amps)			
PVS-R-20	PVS-R-60	PVS-R-125	PVS-R-300
PVS-R-25	PVS-R-70	PVS-R-150	PVS-R-350
PVS-R-30	PVS-R-80	PVS-R-175	PVS-R-400
PVS-R-35	PVS-R-90	PVS-R-200	
PVS-R-40	PVS-R-100	PVS-R-225	
PVS-R-50	PVS-R-110	PVS-R-250	

Features

- Current limitation for non-inductive circuits provides Class RK5 current-limiting response to ground fault and short-circuit conditions
- Designed for the protection and isolation of photovoltaic systems

Typical applications

- Photovoltaic systems
- Inverters
- Photovoltaic system DC safety switches
- Recombiner boxes

Recommended fuse blocks, see page 8-19.

Data sheet no. 4203

PV 1000 Vdc 10x38mm PV fuses

A range 10x38mm, 1000 Vdc PV fuses for the protection and isolation of photovoltaic strings that are specifically designed for use in PV systems with extreme ambient temperature, high cycling and low fault current conditions (reverse current, multi-array fault) string arrays. For application flexibility, the PV 10x38mm fuse is available as a cylindrical fuse as well as bolt-on, single and dual PCB tab and in-line crimp terminal versions.



Ratings

- Volts 1000 Vdc
- Amps 1-20 A
- IR 50 kA

Terminals and conductors

- Crimp connection for single, 75°C/90°C Cu Stranded 12-8 AWG PV wire

Agency information

- UL Listed to 248-19†, Guide JFGA, File E335324, IEC 60269-6 (gPV), CSA File 53787, Class 1422-30 (1-15A), 20 A Pending, CCC (1-20 A), RoHS Compliant

† Except crimp terminal version that is UL Recognized to UL 248-19, Guide JFGA2, File E335324.

Features

- Meets UL and IEC photovoltaic standards for global acceptance
- Low watts loss performance for energy efficiency
- Low temperature rise performance for more precise sizing
- In-line crimp terminal version is easy to apply in wire harness construction

Typical applications

- Combiner boxes
- Inverters
- PV wire harnesses

Recommended fuse blocks, holders and fuseclips

- BPVM modular fuse block with optional cover, see page 6-9
- CHPV 1- and 2-pole modular fuse holders with optional open fuse indication, see page 6-8
- 1A3400-09 PCB fuseclip, see page 3-16
- HPV in-line fuse holder assembly, see page 6-4

Catalog no. (amp)					Amps	I ² t (A ² s)		Watts loss	
Cylindrical	Bolt-on	PCB single pin	PCB double pin	Crimp terminal		Pre-arcing	Total @rated volts	0.8 I _n	I _n
PV-1A10F	PV-1A10-T	PV-1A10-1P	PV-1A10-2P	PV-1A10F-CT	1	0.15	0.4	0.8	1.5
PV-2A10F	PV-2A10-T	PV-2A10-1P	PV-2A10-2P	PV-2A10F-CT	2	1.2	3.4	0.6	1.0
PV-3A10F	PV-3A10-T	PV-3A10-1P	PV-3A10-2P	PV3A10F-CT	3	4	11	0.8	1.3
PV-3-5A10F	PV-3-5A10-T	PV-3-5A10-1P	PV-3-5A10-2	PV-3.5A10F-CT	3.5	6.6	18	0.9	1.4
PV-4A10F	PV-4A10-T	PV-4A10-1P	PV-4A10-2P	PV-4A10F-CT	4	9.5	26	1.0	1.5
PV-5A10F	PV-5A10-T	PV-5A10-1P	PV-5A10-2P	PV-5A10F-CT	5	19	50	1.0	1.6
PV-6A10F	PV-6A10-T	PV-6A10-1P	PV-6A10-2P	PV-6A10F-CT	6	30	90	1.1	1.8
PV-8A10F	PV-8A10-T	PV-8A10-1P	PV-8A10-2P	PV-8A10F-CT	8	3	32	1.2	2.1
PV-10A10F	PV-10A10-T	PV-10A10-1P	PV-10A10-2P	PV-10A10F-CT	10	7	70	1.2	2.3
PV-12A10F	PV-12A10-T	PV-12A10-1P	PV-12A10-2P	PV-12A10F-CT	12	12	120	1.5	2.7
PV-15A10F	PV-15A10-T	PV-15A10-1P	PV-15A10-2P	PV-15A10F-CT	15	22	220	1.7	2.9
PV-20A10F	PV-20A10-T	PV-20A10-1P	PV-20A10-2P	PV-20A10F-CT	20	34	350	2.1	3.6

PV fuses, holders, blocks and SPDs

CHPV Modular, IP20 finger-safe DIN-Rail holders for 10x38mm fuses

Bussmann series CHPV DIN-Rail fuse holders are for 10x38mm IEC and UL photovoltaic fuses rated up to 1000 Vdc. They are available with and without indication in 1- and 2-pole IP20 finger-safe versions. A variety of accessories extends their application flexibility and they may be ganged together to meet specific application requirements.



Ratings

- Volts 1000 Vdc (or less)
- Amps 30 A
- SCCR 33 kA DC

Agency information

- UL Listed to 4248-19, Guide IZMR, File E348242
- CSA, Class 6225-30, File 47235
- IEC 60269-2
- CCC
- RoHS compliant
- CE

Mounting 35mm DIN-Rail

Wire range - AWG (mm²)

- 75°C and 90°C* Cu
- 18-4 (0.8-21.1)
- Solid, stranded, fine stranded

* May be used with higher temperature rated conductors with appropriate derating.

Terminals

- Single or dual conductors
- Comb busbar

Torque 30 lb-in (3.4 N·m) maximum

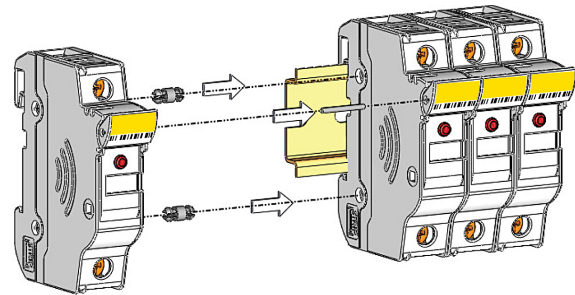
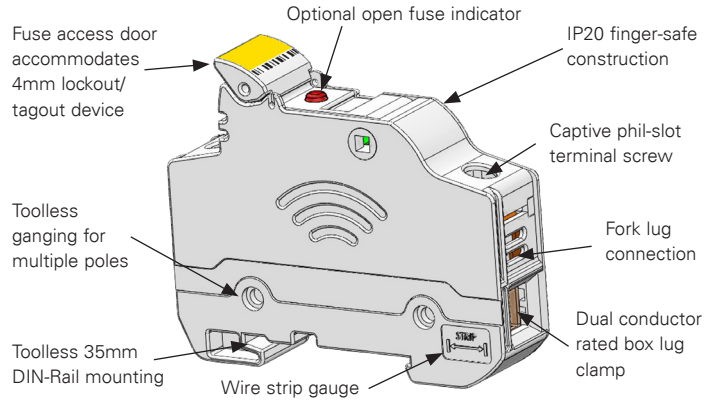
Flammability UL 94V0, self-extinguishing

Storage and operating temperature

- -4°F (-20°C) to 194°F (90°C) indicating
- -4°F (-20°C) to 248°F (120°C) non-indicating

Features

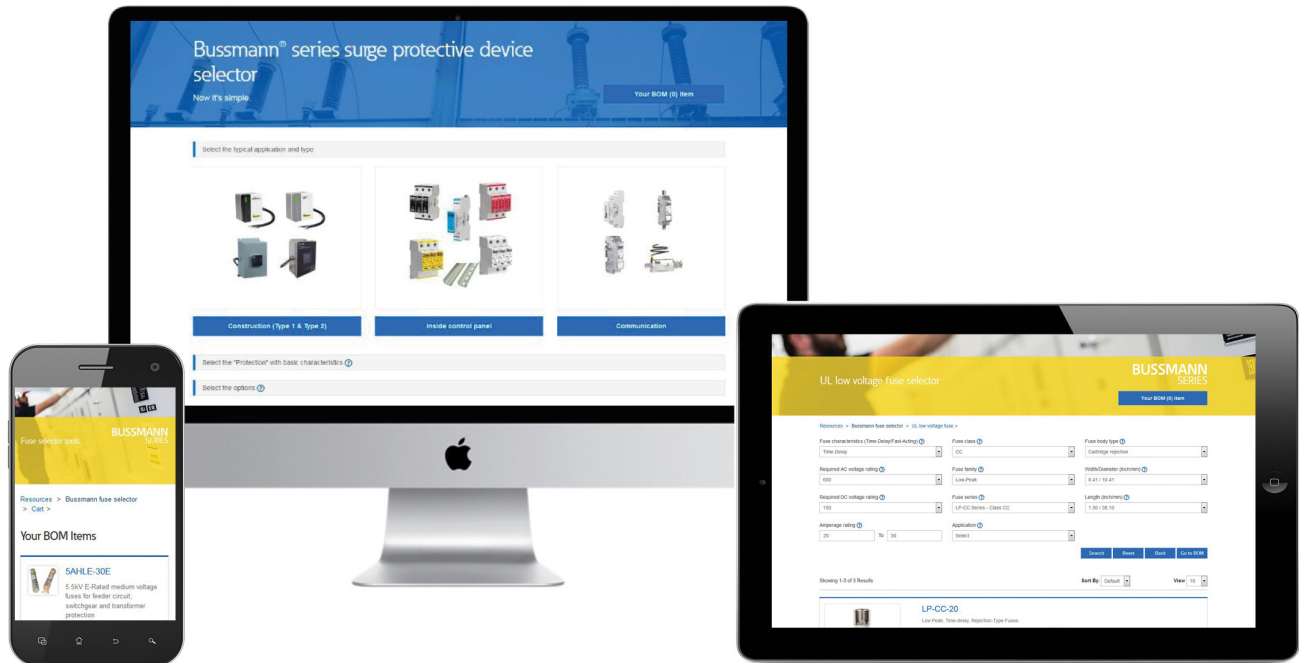
- Enhanced safety with IP20 finger-safe construction
- Wiring flexibility with terminals rated for use with 75°C or 90°C solid, stranded and fine stranded wire, and spade terminals and comb busbars. (Use any higher temperature insulations at the 90°C ampacity with appropriate derating.)
- Complete range of UL Listed and high SCCR rated one- and three-phase finger-safe comb busbars and power feed lugs



Gang multiple poles to meet application requirements using kit catalog number **JV-L** (gangs up to four poles).

Catalog no.		Volts / amps	Agency marks	Poles	SCCR	Recommended Bussmann series fuses
With indication*	Without indication					
CHPV1IU	CHPV1U	1000 Vdc/30 A	UL, CSA, , UL 4248-18, IEC 60269-1, CCC	1	33 kA DC	PV-(amp)A10F, PV10M-(amp)
CHPV2IU	CHPV2U			2		

* All models require 90 V minimum for illumination.



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