

# PVT2 Photovoltaic Surge Protection Class II

## Power Utilities



### CERTIFICATIONS



### FEATURES

Suited for use at the DC input of distributed string inverters in solar arrays

Thermal protection included to ensure safe failure modes

Compact, yet high surge rated pluggable design, using minimum DIN rail width

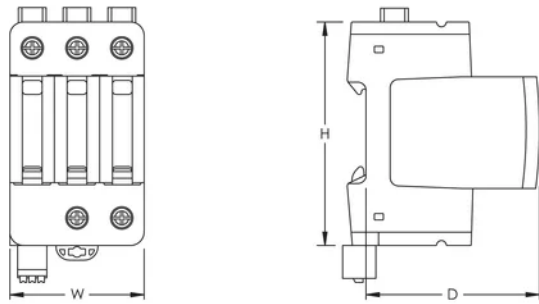
### SPECIFICATIONS

Catalog Number	PVT21000R	PVT21500R
Max Continuous Operating Voltage (Ucpv)	1,100 V	1,500 VDC
Nominal Discharge Current (In), IEC	20 kA 8/20 $\mu$ s	20 kA 8/20 $\mu$ s
Max Discharge Current (Imax)	40 kA 8/20 $\mu$ s	30 kA 8/20 $\mu$ s
Total Discharge Current (Itotal)	50 kA 8/20 $\mu$ s	40 kA 8/20 $\mu$ s
Voltage Protection Level (Up)	4,000 V	5,000 V

Catalog Number	PVT21000R	PVT21500R
Response Time	25 ns Max	25 ns Max
Short Circuit Current Rating (I <sub>sc</sub> )	11 kA	11 kA
Max Continuous Operating Voltage (V <sub>pvdc</sub> )	1,100 VDC	1,500 VDC
Voltage Protection Rating (VPR)	2,500 V	4,000 V
Nominal Discharge Current (I <sub>n</sub> ), UL	20 kA 8/20 μs	20 kA 8/20 μs
Short Circuit Current Rating (SCCR)	50 kA	65 kA
Protection Modes	-ve to PE -ve to +ve +ve to PE	-ve to PE -ve to +ve +ve to PE
Altitude	2,000 m Max	2,000 m Max
Humidity	5 – 95 % RH	5 – 95 % RH
Temperature	-40 to 85 °C	-40 to 85 °C
Connection, Flexible	25 mm <sup>2</sup>	25 mm <sup>2</sup>
Connection, Solid	35 mm <sup>2</sup>	35 mm <sup>2</sup>
Connection, Stranded	35 mm <sup>2</sup>	35 mm <sup>2</sup>
Enclosure Rating	IP 20	IP 20
Remote Contact Switching Capacity	1.0 A @ 125 VAC 1.0 A @ 250 VAC 0.5 A @ 12 VDC 0.5 A @ 24 VDC 0.5 A @ 48 VDC	1.0 A @ 125 VAC 1.0 A @ 250 VAC 0.5 A @ 12 VDC 0.5 A @ 24 VDC 0.5 A @ 48 VDC
Remote Contacts	Yes	Yes
Status Indication	Mechanical flag	Mechanical flag
Height (H)	90 mm	90 mm
Width (W)	54 mm	54 mm
Unit Weight	0.410 kg	0.450 kg
Replacement Module	PVT2500M	PVT2750M
Certification Details	UL® 1449 Edition 5 Type 1CA	UL® 1449 Edition 5 Type 1CA

## DIAGRAMS

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## WARNING

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nVent products shall be installed and used only as indicated in nVent's product instruction sheets and training materials. Instruction sheets are available at [www.nvent.com](http://www.nvent.com) and from your nVent customer service representative. Improper installation, misuse, misapplication or other failure to completely follow nVent's instructions and warnings may cause product malfunction, property damage, serious bodily injury and death and/or void your warranty.



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