

PVT1 Photovoltaic Surge Protection Class I+II

Power Utilities



CERTIFICATIONS



FEATURES

Uniquely designed for protection of centralized solar inverters on the DC input side and string boxes

Thermal protection included to ensure safe failure modes

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

SPECIFICATIONS

Catalog Number	PVT11000R	PVT11500R
Max Continuous Operating Voltage (Uc _{pv})	1,100 V	1,500 VDC
Nominal Discharge Current (I _n), IEC	20 kA 8/20 μs	20 kA 8/20 μs
Impulse Current (I _{imp})	6.25 kA 10/350 μs	5 kA 10/350 μs
Total Discharge Current (I _{total})	12.5 kA 10/350 μs 50.0 kA 8/20 μs	10 kA 10/350 μs 40 kA 8/20 μs
Voltage Protection Level (U _p)	4,000 V	5,000 V

Catalog Number	PVT11000R	PVT11500R
Response Time	25 ns Max	25 ns Max
Short Circuit Current Rating (Isccr)	11 kA	11 kA
Max Continuous Operating Voltage (Vpdc)	1,100 VDC	1,500 VDC
Voltage Protection Rating (VPR)	2,500 V	4,000 V
Nominal Discharge Current (In), 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 ²	25 mm ²
Connection, Solid	35 mm ²	35 mm ²
Connection, Stranded	35 mm ²	35 mm ²
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	0.460 kg	0.500 kg
Replacement Module	PVT1500M PVT1500SM	PVT1750M PVT1750SM
Certification Details	UL® 1449 Edition 5 Type 1CA	UL® 1449 Edition 5 Type 1CA

DIAGRAMS



WARNING

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 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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