

PVT1 PHOTOVOLTAIC SURGE PROTECTION CLASS I+II



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

Table 1/5

Catalog Number	Max Continuous Operating Voltage (Ucpv)	Total Discharge Current (Itotal)	Voltage Protection Level (Up)	Nominal Discharge Current (In), IEC	Response Time	Impulse Current (Iimp)
PVT11000R	1,100 V	12.5 kA 10/350 μ s, 50.0 kA 8/20 μ s	4,000 V	20 kA 8/20 μ s	25 ns Max	6.25 kA 10/350 μ s
PVT11500R	1,500 VDC	10 kA 10/350 μ s, 40 kA 8/20 μ s	5,000 V	20 kA 8/20 μ s	25 ns Max	5 kA 10/350 μ s

Table 2/5

Catalog Number	Short Circuit Current Rating (Iscrr)	Max Continuous Operating Voltage (Vpvdc)	Nominal Discharge Current (In), UL	Voltage Protection Rating (VPR)	Short Circuit Current Rating (SCCR)	Protection Modes
PVT11000R	11 kA	1,100 VDC	20 kA 8/20 μ s	2,500 V	50 kA	-ve to PE, -ve to +ve, +ve to PE
PVT11500R	11 kA	1,500 VDC	20 kA 8/20 μ s	4,000 V	65 kA	-ve to PE, -ve to +ve, +ve to PE

Table 3/5

Catalog Number	Altitude	Humidity	Temperature	Connection, Solid	Mounting	Connection, Stranded
PVT11000R	2,000 m Max	5 – 95 % RH	-40 to 85 °C	35 mm ²	35 mm top hat DIN rail	35 mm ²
PVT11500R	2,000 m Max	5 – 95 % RH	-40 to 85 °C	35 mm ²	35 mm top hat DIN rail	35 mm ²

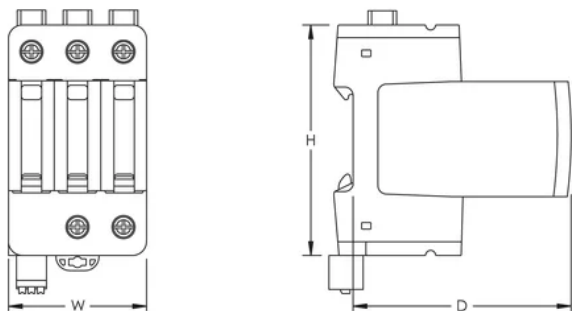
Table 4/5

Catalog Number	Torque (TQ)	Connection, Flexible	Status Indication	Remote Contacts	Remote Contact Switching Capacity	Enclosure Rating
PVT11000R	4.50 N-m Max	25 mm ²	Mechanical flag	Yes	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	IP 20
PVT11500R	4.50 N-m Max	25 mm ²	Mechanical flag	Yes	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	IP 20

Table 5/5

Catalog Number	Height (H)	Width (W)	Unit Weight	Certification Details	Replacement Module
PVT11000R	90 mm	54 mm	0.460 kg	UL® 1449 Edition 5 Type 1CA	PVT1500M, PVT1500SM
PVT11500R	90 mm	54 mm	0.500 kg	UL® 1449 Edition 5 Type 1CA	PVT1750M, PVT1750SM

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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