

DT1 DIN Rail Surge Protection Class I+II 12.5 kA, 1+1 Mode



CERTIFICATIONS



FEATURES

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

External back-up fuse is not required up to 315 A (IEC only)

Retaining clip ensures enhanced vibration and shock resistance performance

Red/Green status indication and change-over contacts standard for remote monitoring

SPECIFICATIONS

Catalog Number	DT17511R	DT130011R
Nominal System Voltage (Un)	60 V	240 V
Max Continuous Operating Voltage (Uc)	305 V N-PE 75 V L-N	300 V L-N 305 V N-PE
Nominal Discharge Current (In), IEC, L-N	20kA 8/20 μ s	20kA 8/20 μ s
Nominal Discharge Current (In), IEC, N-PE	50kA 8/20 μ s	50kA 8/20 μ s

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Max Discharge Current (I _{max}), IEC, L-N	50kA 8/20 μs	50kA 8/20 μs
Max Discharge Current (I _{max}), IEC, N-PE	100kA 8/20 μs	100kA 8/20 μs
Impulse Current (I _{imp}), L-N	12.5kA 10/350 μs	12.5kA 10/350 μs
Impulse Current (I _{imp}), N-PE	50kA 10/350 μs	50kA 10/350 μs
Voltage Protection Level (Up), L-N	700V	1400V
Voltage Protection Level (Up), N-PE	1500V	1500V
Back-Up Fuse @ I _{sc} cr	250 A @ 50 kA 315 A @ 25 kA	250 A @ 50 kA 315 A @ 25 kA
Frequency	50 - 60 Hz	50 - 60 Hz
Response Time, L-N	25 ns Max	25 ns Max
Response Time, N-PE	100 ns Max	100 ns Max
Short Circuit Current Rating (I _{sc} cr)	25kA 50kA	25kA 50kA
Protection Modes	L-N N-PE	L-N N-PE
Temporary Over Voltage 120 min (U _t /mode), L-N	114 V Withstand	442 V Safe Fail
Temporary Over Voltage Withstand 200 ms (U _t), N-PE	1200V	1200V
Temporary Over Voltage Withstand 5 s (U _t), L-N	114V	337V
Nominal Discharge Current (I _n), UL	20kA 8/20 μs	20kA 8/20 μs
Replacement Module	DT175M	DT1300M SGT150M
Voltage Protection Rating (VPR), L-N	330V	900V
Voltage Protection Rating (VPR), N-PE	1500V	1500V
Short Circuit Current Rating (SCCR)	100kA	150kA
Technology	Thermal Disconnect	Thermal Disconnect
Connection, Solid	35 mm ² Max	35 mm ² Max
Connection, Stranded	25 mm ² Max	25 mm ² Max
Torque (TQ)	4.5 N·m	4.5 N·m
Humidity	5 - 95	5 - 95
Temperature	-35 to 85 °C	-35 to 85 °C
Enclosure Material	UL® 94V-0 Thermoplastic	UL® 94V-0 Thermoplastic
Enclosure Rating	IP 20	IP 20
Mounting	35 mm top hat DIN rail	35 mm top hat DIN rail

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Remote Contact Switching Capacity	1 A @ 250 VAC 1 A @ 125 VAC 0.5 A @ 48 VDC 0.5 A @ 24 VDC 0.5 A @ 12 VDC	1 A @ 250 VAC 1 A @ 125 VAC 0.5 A @ 48 VDC 0.5 A @ 24 VDC 0.5 A @ 12 VDC
Remote Contacts	Yes	Yes
Status Indication	Mechanical flag	Mechanical flag
Depth (D)	92mm	92mm
Height (H)	90 mm	90 mm
Width (W)	36 mm	36 mm
Unit Weight	0.32 kg	0.34 kg
Certification Details	UL® 1449 Edition 5 Type 1CA	UL® 1449 Edition 5 Type 1CA
Complies With	EN 61643-11 Type 1, Type 2 IEC® 61643-11 Class I, Class II	EN 61643-11 Type 1, Type 2 IEC® 61643-11 Class I, Class II

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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