

DT1 DIN Rail Surge Protection Class I+II 12.5 kA, 1+0 Mode



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

Table 1/3

Catalog Number	DT115010R	DT130010R	DT175010R	DT17510R
Nominal System Voltage (Un)	120 V	240 V	600 V	60 V
Max Continuous Operating Voltage (Uc)	150 V	300 V	750 V	75 V
Nominal Discharge Current (In), IEC	20kA 8/20 μ s	20kA 8/20 μ s	20kA 8/20 μ s	20kA 8/20 μ s
Max Discharge Current (Imax), IEC	50kA 8/20 μ s	50kA 8/20 μ s	35kA 8/20 μ s	50kA 8/20 μ s
Impulse Current (Iimp)	12.5kA 10/350 μ s	12.5kA 10/350 μ s	5kA 10/350 μ s	12.5kA 10/350 μ s
Voltage Protection Level (Up)	1000V	1400V	2700V	700V
Response Time	25 ns Max	25 ns Max	25 ns Max	25 ns Max

Catalog Number	DT115010R	DT130010R	DT175010R	DT17510R
Back-Up Fuse @ Isccr	250 A @ 50 kA 315 A @ 25 kA	250 A @ 50 kA 315 A @ 25 kA	250 A @ 50 kA	250 A @ 50 kA 315 A @ 25 kA
Frequency	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz
Short Circuit Current Rating (Isccr)	25kA 50kA	25kA 50kA	50kA	25kA 50kA
Protection Modes	L-N L-PE L-PEN N-PE	L-PE L-PEN N-PE L-N	L-N L-PE L-PEN N-PE	L-PE L-PEN N-PE L-N
Temporary Over Voltage 120 min (Ut/mode)	229 V Safe Fail	442 V Safe Fail	1143 V Safe Fail	114 V Withstand
Temporary Over Voltage Withstand 5 s (Ut)	175V	337V	871V	114V
Voltage Protection Rating (VPR)	700V	900V	2500V	330V
Nominal Discharge Current (In), UL	20kA 8/20 μ s	20kA 8/20 μ s	20kA 8/20 μ s	20kA 8/20 μ s
Replacement Module	DT1150M	DT1300M	DT1750M	DT175M
Short Circuit Current Rating (SCCR)	200kA	200kA	150kA	100kA
Technology	Thermal Disconnect	Thermal Disconnect	Thermal Disconnect	Thermal Disconnect
Connection, Solid	35 mm ² Max	35 mm ² Max	35 mm ² Max	35 mm ² Max

Table 2/3

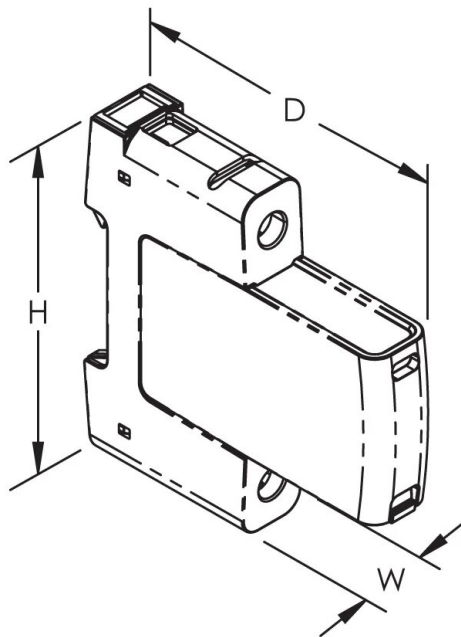
Catalog Number	DT115010R	DT130010R	DT175010R	DT17510R
Connection, Stranded	25 mm ² Max	25 mm ² Max	25 mm ² Max	25 mm ² Max
Torque (TQ)	4.5 N·m	4.5 N·m	4.5 N·m	4.5 N·m
Humidity	5 - 95	5 - 95	5 - 95	5 - 95
Temperature	-35 to 85 °C	-35 to 85 °C	-35 to 85 °C	-35 to 85 °C
Enclosure Material	UL® 94V-0 Thermoplastic	UL® 94V-0 Thermoplastic	UL® 94V-0 Thermoplastic	UL® 94V-0 Thermoplastic
Enclosure Rating	IP 20	IP 20	IP 20	IP 20
Mounting	35 mm top hat DIN rail	35 mm top hat DIN rail	35 mm top hat DIN rail	35 mm top hat DIN rail
Remote Contact Switching Capacity	0.5 A @ 12 VDC 0.5 A @ 24 VDC 0.5 A @ 48 VDC 1 A @ 125 VAC 1 A @ 250 VAC	0.5 A @ 12 VDC 0.5 A @ 24 VDC 0.5 A @ 48 VDC 1 A @ 125 VAC 1 A @ 250 VAC	0.5 A @ 12 VDC 0.5 A @ 24 VDC 0.5 A @ 48 VDC 1 A @ 125 VAC 1 A @ 250 VAC	0.5 A @ 12 VDC 0.5 A @ 24 VDC 0.5 A @ 48 VDC 1 A @ 125 VAC 1 A @ 250 VAC

Catalog Number	DT115010R	DT130010R	DT175010R	DT17510R
Remote Contacts	Yes	Yes	Yes	Yes
Status Indication	Mechanical flag	Mechanical flag	Mechanical flag	Mechanical flag
Depth (D)	92mm	92mm	92mm	92mm
Height (H)	90 mm	90 mm	90 mm	90 mm
Width (W)	18 mm	18 mm	18 mm	18 mm

Table 3/3

Catalog Number	DT115010R	DT130010R	DT175010R	DT17510R
Unit Weight	0.17 kg	0.18 kg	0.2 kg	0.17 kg
Certification Details	UL® 1449 Edition 5 Type 1CA	UL® 1449 Edition 5 Type 1CA	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	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
Certifications		UR, CE, ERICO DT1 Series, cUR, VDE		VDE, CE, ERICO DT1 Series, cUR, UR

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.

North America

+1.800.753.9221
Option 1 – Customer Care
Option 2 – Technical
Support

Europe

Netherlands:
+31 800-0200135
France:
+33 800 901 793

Europe

Germany:
800 1890272
Other Countries:
+31 13 5835404

APAC

Shanghai:
+ 86 21 2412 1618/19
Sydney:
+61 2 9751 8500

