DIN RAIL SURGE PROTECTION CLASS I+II 25 KA, 240/415 VAC UN, TN-S, TT

CATALOG NUMBER

DT1M27531R



Surges and voltage transients are a major cause of expensive electronic equipment failure and business disruption. Damage may result in the loss of capital outlays, such as computers and communications equipment, as well as consequential loss of revenue and profits due to unscheduled system down-time. nVent ERICO offers multiple series of surge protective devices (SPDs) suitable for a vast range of applications that provide reliable protection from voltage transients on power distribution systems. The DT1M Series DIN Rail Surge Protective Devices provide reliable and efficient protection against voltage transients within the IEC Class I (25 kA) environment. Tested and independently certified to the IEC standard, the DT1M Series provides a range of compact, safe and high surge rated performance features for the harsh IEC Class I environment and suitable for protection within a wide range of applications.

Additionally, the nVent ERICO DT1M Series sets itself apart from the competition with an innovative and unique technology. This technology advancement provides spark gap-like performance with MOV current extinction. The same technology allows the DT1M Series to be thinner than the competition by as much as 50% and can also be universally coordinated with any Class II or Class III SPD.

CERTIFICATIONS

FEATURES

- Spark gap surge performance with MOV-like current extinction
- Universally coordinated with any Class II or Class III surge protection devices
- Follow current limitation, no tripping of a 16 A gG fuse
- Compact, yet high surge rated pluggable design, using minimum DIN rail width
- Retaining clip ensures enhanced vibration and shock resistance performance
- Red/Green status indication and change-over contacts standard for remote monitoring

Includes thermal disconnect for safe end of life

PRODUCT ATTRIBUTES

Nominal System Voltage (Un): 220/380 - 240/415 VAC

Max Continuous Operating Voltage (Uc): 275 VAC L-N; 305 VAC N-PE

Nominal Discharge Current (In), IEC: 25 kA 8/20 -s L-N;100 kA 8/20 -s N-PE

Max Discharge Current (Imax), IEC: 65 kA 8/20 -s L-N;150 kA 8/20 -s N-PE

Impulse Current (Iimp): 25; 100

Voltage Protection Level (Up), L-N: 1800 V

Voltage Protection Level (Up), N-PE: 1500 V

Back-Up Fuse @ Isccr: 315 A @ 50 kA A

Frequency: 50 – 60 Hz

Response Time: 100 ns max

Short Circuit Current Rating (Isccr): 50 kA

Distribution System: TN-S; TT

Protection Modes: L-N; N-PE

Follow Current Interrupt Rating (Ifi): 50 kA; 100 kA

Temporary Over Voltage 120 min (Ut/mode), L-N: 442 V Withstand

Temporary Over Voltage Withstand 200 ms (Ut), N-PE: 1200 V

Technology: Thermal Disconnect

Connection, Solid: 35 mm² max

Connection, Stranded: 25 mm² max

Torque: 4.5 N·m

Altitude: 2000 m max

Humidity: 5 – 95

Temperature: −40 to 70 °C

Enclosure Material: UL® 94V-0 Thermoplastic

Enclosure Rating: IP 20

Mounting: 35 mm top hat DIN rail

Remote Contact Switching Capacity: 1 A @ 250 VAC A; 1 A @ 125 VAC A; 0.5 A @ 48 VDC A; 0.5 A @ 24 VDC A; 0.5 A @ 12 VDC A

Remote Contacts: Yes

Status Indication: Mechanical flag

Depth: 85 mm

Height: 90 mm

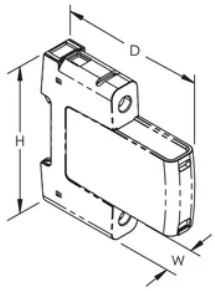
Width: 72 mm

Unit Weight: 0.69 kg

Replacement Module: DT1M27531M; SGT1100M

Complies With: 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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