



CONNECT AND PROTECT

# Surge Protection Solutions

Class I Surge Protection Devices



**ERICO**

# DT1M Series DIN Rail Surge Protection Device

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.

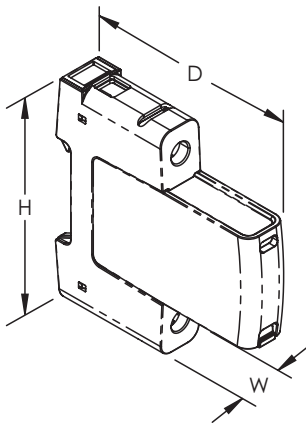
**DT1M27510R**



**DT1M27530R**






**DT1M27531R, DT1M27540R**



## FEATURES

- Spark gap surge performance with MOV-like current extinction
- Universally coordinated with any Class II or Class III surge protection devices
- 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

# DT1M Series DIN Rail Surge Protection Device

Part Number	DT1M27510R	DT1M27530R	DT1M27540R	DT1M27531R
				
Nominal System Voltage (Un)	240 VAC			
Max Continuous Operating Voltage (Uc)	275 VAC			275 VAC L-N 305 VAC N-PE
Nominal Discharge Current (In), IEC	25 kA 8/20 µs			25 kA 8/20 µs L-N 100 kA 8/20 µs N-PE
Max Discharge Current (Imax), IEC	65 kA 8/20 µs			65 kA 8/20 µs L-N 150 kA 8/20 µs N-PE
Impulse Current (Iimp)	25 kA 10/350 µs			25 kA 10/350 µs L-N 50 kA 10/350 µs N-PE
Voltage Protection Level (Up)	1,550 V			–
Voltage Protection Level (Up), L-N	–			1,800 V
Voltage Protection Level (Up), N-PE	–			1,500 V
Back-Up Fuse @ Iscrr	315 A @ 50 kA			
Response Time	100 ns Max			
Short Circuit Current Rating (Iscrr)	50 kA			
Distribution System	TN-C; TN-S; TT (L-N)	TN-C	TN-S	TN-S; TT
Protection Modes	L-N; L-PE; L-PEN; N-PE (TN-S)	L-PEN	L-PE; N-PE	
Temporary Over Voltage 120 min (Ut/mode)	442 V Safe Fail			–
Temporary Over Voltage 120 min (Ut/mode), L-N	–			442 V Safe Fail
Temporary Over Voltage Withstand 200 ms (Ut), N-PE	–			1,200 V
Technology	Thermal Disconnect			
Connection, Solid	35 mm <sup>2</sup> Max			
Connection, Stranded	25 mm <sup>2</sup> Max			
Torque (TQ)	4.5 N-m			
Altitude	2,000 m Max			
Humidity	5 – 95 % RH			
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	1.0 A @ 250 VAC; 1.0 A @ 125 VAC; 0.5 A @ 48 VDC; 0.5 A @ 24 VDC; 0.5 A @ 12 VDC			
Remote Contacts	Yes			
Status Indication	Mechanical flag			
Depth (D)	85 mm			
Height (H)	90 mm			
Width (W)	18 mm	54 mm	72 mm	
Replacement Module	DT1M275M			
Complies With	EN 61643-11 Type 1, Type 2; IEC® 61643-11 Class I, Class II			
Standard Packaging Quantity	1 pc			
UPC	78285698727	78285698728	78285698729	78285698730
EAN-13	0782856987277	0782856987284	0782856987291	0782856987307

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**CADDY ERICO HOFFMAN RAYCHEM SCHROFF TRACER**



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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 [nVent.com/ERICO](https://www.nvent.com/ERICO) 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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