

# DT2 DIN Rail Surge Protection Class II, 1+0 Mode, 100 kA



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 DT2 Series DIN Rail Surge Protective Devices provide reliable and efficient protection against voltage transients within the IEC Class II and UL Type 1CA environments. Tested and independently certified to the IEC and UL standards, the DT2 Series provides a range of safety and performance features for the harshest environments and suitable for protection within a wide range of applications.

## 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

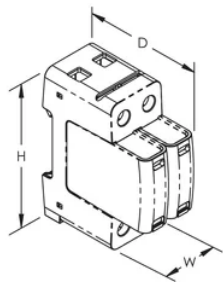
## SPECIFICATIONS

| Catalog Number                        | DT2150R100    | DT2350R100    | DT2550R100    | DT2300R100    |
|---------------------------------------|---------------|---------------|---------------|---------------|
| Nominal System Voltage (Un)           | 120 V         | 277 V         | 480 V         | 240 V         |
| Max Continuous Operating Voltage (Uc) | 150 V         | 350 V         | 550 V         | 300 V         |
| Nominal Discharge Current (In), IEC   | 40kA 8/20 μs  | 40kA 8/20 μs  | 40kA 8/20 μs  | 40kA 8/20 μs  |
| Max Discharge Current (Imax), IEC     | 100kA 8/20 μs | 100kA 8/20 μs | 100kA 8/20 μs | 100kA 8/20 μs |

| Catalog Number                            | DT2150R100                                                                           | DT2350R100                                                                           | DT2550R100                                                                     | DT2300R100                                                                           |
|-------------------------------------------|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| Voltage Protection Level (Up)             | 1250V                                                                                | 1750V                                                                                | 2500V                                                                          | 1500V                                                                                |
| Back-Up Fuse @ Isccr                      | 250 A @ 50 kA<br>315 A @ 25 kA                                                       | 250 A @ 50 kA<br>315 A @ 25 kA                                                       | 250 A @ 50 kA<br>315 A @ 25 kA                                                 | 250 A @ 50 kA<br>315 A @ 25 kA                                                       |
| Frequency                                 | 50 - 60 Hz                                                                           | 50 - 60 Hz                                                                           | 50 - 60 Hz                                                                     | 50 - 60 Hz                                                                           |
| Response Time                             | 25 ns Max                                                                            | 25 ns Max                                                                            | 25 ns Max                                                                      | 25 ns Max                                                                            |
| Protection Modes                          | L-PE<br>N-PE<br>L-N<br>L-PEN                                                         | L-PE<br>N-PE<br>L-N<br>L-PEN                                                         | L-PE<br>N-PE (TN-S)<br>L-PEN<br>L-N                                            | L-PE<br>N-PE<br>L-N<br>L-PEN                                                         |
| Short Circuit Current Rating (Isccr)      | 25kA<br>50kA                                                                         | 25kA<br>50kA                                                                         | 25kA<br>50kA                                                                   | 25kA<br>50kA                                                                         |
| Temporary Over Voltage 120 min (Ut/mode)  | 229 V Safe Fail                                                                      | 529 V Safe Fail                                                                      | 915 V Safe Fail                                                                | 442 V Safe Fail                                                                      |
| Temporary Over Voltage Withstand 5 s (Ut) | 229V                                                                                 | 403V                                                                                 | 697V                                                                           | 337V                                                                                 |
| Technology                                | Thermal Disconnect                                                                   | Thermal Disconnect                                                                   | Thermal Disconnect                                                             | Thermal Disconnect                                                                   |
| Connection, Solid                         | 35 mm <sup>2</sup> Max                                                               | 35 mm <sup>2</sup> Max                                                               | 35 mm <sup>2</sup> Max                                                         | 35 mm <sup>2</sup> Max                                                               |
| Connection, Stranded                      | 25 mm <sup>2</sup> Max                                                               | 25 mm <sup>2</sup> Max                                                               | 25 mm <sup>2</sup> Max                                                         | 25 mm <sup>2</sup> 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                               | -40 to 70 °C                                                                         | -40 to 70 °C                                                                         | -40 to 70 °C                                                                   | -40 to 70 °C                                                                         |
| Enclosure Material                        | UL® 94V-0<br>Thermoplastic                                                           | UL® 94V-0<br>Thermoplastic                                                           | UL® 94V-0<br>Thermoplastic                                                     | UL® 94V-0<br>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 DIN Rail, EN 60715                                                       | 35 mm top hat DIN rail                                                               |
| Remote Contact Switching Capacity         | 1 A @ 250 VAC<br>1 A @ 125 VAC<br>0.5 A @ 48 VDC<br>0.5 A @ 24 VDC<br>0.5 A @ 12 VDC | 1 A @ 250 VAC<br>1 A @ 125 VAC<br>0.5 A @ 48 VDC<br>0.5 A @ 24 VDC<br>0.5 A @ 12 VDC | 1 A @ 250 VAC<br>1 A @ 125 V<br>0.5 A @ 48 VDC<br>0.5 A @ 24 V<br>0.5 A @ 12 V | 1 A @ 250 VAC<br>1 A @ 125 VAC<br>0.5 A @ 48 VDC<br>0.5 A @ 24 VDC<br>0.5 A @ 12 VDC |
| Remote Contacts                           | Yes                                                                                  | Yes                                                                                  | Yes                                                                            | Yes                                                                                  |
| Status Indication                         | Mechanical flag                                                                      | Mechanical flag                                                                      | Mechanical flag                                                                | Mechanical flag                                                                      |
| Depth (D)                                 | 69.09mm                                                                              | 69.09mm                                                                              | 69.09mm                                                                        | 69.09mm                                                                              |
| Height (H)                                | 89.92 mm                                                                             | 89.92 mm                                                                             | 89.92 mm                                                                       | 89.92 mm                                                                             |
| Width (W)                                 | 36.07 mm                                                                             | 36.07 mm                                                                             | 36.07 mm                                                                       | 36.07 mm                                                                             |

| Catalog Number     | DT2150R100                                   | DT2350R100                                   | DT2550R100                                   | DT2300R100                                   |
|--------------------|----------------------------------------------|----------------------------------------------|----------------------------------------------|----------------------------------------------|
| Unit Weight        | 0.13 kg                                      | 0.14 kg                                      | 0.15 kg                                      | 0.14 kg Min                                  |
| Complies With      | EN 61643-11 Type 2<br>IEC® 61643-11 Class II | EN 61643-11 Type 2<br>IEC® 61643-11 Class II | EN 61643-11 Type 2<br>IEC® 61643-11 Class II | EN 61643-11 Type 2<br>IEC® 61643-11 Class II |
| Replacement Module | DT2150M                                      | DT2350M                                      | DT2550M                                      | DT2300M                                      |

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](http://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



Our powerful portfolio of brands:

CADDY   ERICO   HOFFMAN   ILSCO   SCHROFF   TRACHTE