

DT1 DIN Rail Surge Protection Class I+II 12.5 kA, 2+0 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

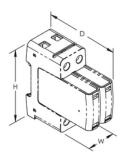
SPECIFICATIONS

| Catalog Number | DT130020R | DT175020R |
|---------------------------------------|------------------|---------------|
| Nominal System Voltage (Un) | 240 V | 600 V |
| Max Continuous Operating Voltage (Uc) | 300 V | 750 V |
| Nominal Discharge Current (In), IEC | 20kA 8/20 μs | 20kA 8/20 μs |
| Max Discharge Current (Imax), IEC | 50kA 8/20 μs | 35kA 8/20 μs |
| Impulse Current (limp) | 12.5kA 10/350 µs | 5kA 10/350 μs |
| Voltage Protection Level (Up) | 1400V | 2700V |

| Catalog Number | DT130020R | DT175020R |
|---|--|--|
| Response Time | 25 ns Max | 25 ns Max |
| Back-Up Fuse @ Isccr | 250 A @ 50 kA 315 A @ 25 kA | 250 A @ 50 kA |
| Frequency | 50 - 60 Hz | 50 - 60 Hz |
| Short Circuit Current Rating (Isccr) | 25kA 50kA | 50kA |
| Protection Modes | L-N N-PE | L-N N-PE |
| Temporary Over Voltage 120 min (Ut/mode) | 442 V Safe Fail | 1143 V Safe Fail |
| Temporary Over Voltage Withstand 5 s (Ut) | 337V | 871V |
| Voltage Protection Rating (VPR) | 900V | 2500V |
| Nominal Discharge Current (In), UL | 20kA 8/20 μs | 20kA 8/20 μs |
| Replacement Module | DT1300M | DT1750M |
| Short Circuit Current Rating (SCCR) | 150kA | 150kA |
| Technology | Thermal Disconnect | Thermal Disconnect |
| Connection, Solid | 35 mm² Max | 35 mm² Max |
| Connection, Stranded | 25 mm² Max | 25 mm² 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 |
| 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 |
| 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 | 0.35 kg | 0.4 kg |
| Certification Details | UL® 1449 Edition 5 Type 1CA | UL® 1449 Edition 5 Type 1CA |

| Catalog Number | DT130020R | DT175020R |
|----------------|---|---|
| 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 |
| Certifications | VDE, CE, ERICO DT1 Series, UR, cUR | |

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



Our powerful portfolio of brands:

CADDY ERICO HOFFMAN ILSCO SCHROFF TRACHTE