

# Modular TDX Panel Protector, 100 kA



## FEATURES

Transient Discriminating (TD) Technology provides increased service life

Modular design allows easy replacement of surge modules

Built-in features include TD Technology, thermal protection and short circuit current fusing

Compact NEMA®-4 enclosure design can be flush mounted or installed in a small space

Status indication flag per mode, voltage presence LEDs, audible alarm and voltage-free contacts providing remote status monitoring

100 kA 8/20  $\mu$ s maximum surge rating provides protection suitable for main-distribution panels and an extended operational life



## SPECIFICATIONS

Table 1/2

|                             |                                   |
|-----------------------------|-----------------------------------|
| <b>Catalog Number</b>       | <b>TDX100M277/480TT</b>           |
| Nominal System Voltage (Un) | 277/480 V                         |
| Distribution System         | 3Ph 4W+G (suitable for TT system) |

| Catalog Number                          | TDX100M277/480TT                                                                                     |
|-----------------------------------------|------------------------------------------------------------------------------------------------------|
| Max Continuous Operating Voltage (Uc)   | 320/550 VAC                                                                                          |
| Stand-off Voltage                       | 480/831 VAC                                                                                          |
| Frequency                               | 50 - 60 Hz                                                                                           |
| Protection Modes                        | L-N<br>N-PE                                                                                          |
| Short Circuit Current Rating (SCCR)     | 200kA                                                                                                |
| Nominal Discharge Current (In), IEC     | 40kA 8/20 µs                                                                                         |
| Nominal Discharge Current (In), UL      | 20kA 8/20 µs                                                                                         |
| Max Discharge Current (Imax), Per Phase | 100kA 8/20 µs                                                                                        |
| Impulse Current (Iimp), Per Mode        | 12.5kA 10/350 µs                                                                                     |
| Voltage Protection Rating (VPR), L-N    | 1200 V @ 3 kA<br>1800 V @ 20 kA                                                                      |
| Impulse Current (Iimp), N-PE            | 25kA 10/350 µs                                                                                       |
| Status Indication                       | LED<br>Mechanical flag<br>Audible alarm                                                              |
| Surge Counter                           | No                                                                                                   |
| Technology                              | TD technology with thermal disconnect<br>Over-current replaceable cartridge fusing<br>EMI/RFI filter |
| Remote Contacts                         | Yes                                                                                                  |
| Lead Length                             | 762mm                                                                                                |
| Lead Size                               | 5.26 mm <sup>2</sup>                                                                                 |

Table 2/2

| Catalog Number        | TDX100M277/480TT                        |
|-----------------------|-----------------------------------------|
| Ground Lead Length    | 914mm                                   |
| Temperature           | -40 to 80 °C                            |
| Enclosure Material    | Metal                                   |
| Enclosure Rating      | IP 65<br>NEMA®-4                        |
| Mounting              | 3/4" straight nipple                    |
| Depth (D)             | 78mm                                    |
| Height (H)            | 240 mm                                  |
| Width (W)             | 84 mm                                   |
| Unit Weight           | 1.41 kg                                 |
| Certification Details | UL® 1449 Edition 5 Type 1/2, 20 kA Mode |

|                    |                                                                                                                                                                          |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Catalog Number     | <b>TDX100M277/480TT</b>                                                                                                                                                  |
| Complies With      | ANSI®/IEEE® C62.41.2-2002 Cat A, Cat B, Cat C<br>ANSI®/IEEE® C62.41.2-2002 Scenario II, Exposure 3, 100 kA<br>8/20 µs, 10 kA 10/350 µs<br>IEC® 61643-1 Class I, Class II |
| Replacement Module | TDS150M277<br>SGD125M                                                                                                                                                    |

### 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.

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