

# Modular TDX Panel Protector, 100 kA with Surge Counter



## CERTIFICATIONS



## 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

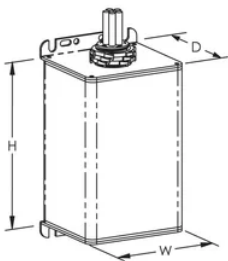
## SPECIFICATIONS

| Catalog Number              | TDX100S347600 | TDX100S120240D | TDX100S277480T |
|-----------------------------|---------------|----------------|----------------|
| Service Configuration       |               | Delta          |                |
| Nominal System Voltage (Un) | 347/600 V     | 120/240 V      | 277/480 V      |

| Catalog Number                          | TDX100S347600                                                                                        | TDX100S120240D                                                                                       | TDX100S277480T                                                                                       |
|-----------------------------------------|------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| Distribution System                     | 3Ph 4W+G                                                                                             | 3PhΔ 4W+G                                                                                            | 3Ph 4W+G (suitable for TT system)                                                                    |
| Max Continuous Operating Voltage (Uc)   | 550/1100 VAC                                                                                         | 170/276 VAC                                                                                          | 320/550 VAC                                                                                          |
| Stand-off Voltage                       | 790/1370 VAC                                                                                         | 240/415 VAC                                                                                          | 480/831 VAC                                                                                          |
| Frequency                               | 50 - 60 Hz                                                                                           | 50 - 60 Hz                                                                                           | 50 - 60 Hz                                                                                           |
| Short Circuit Current Rating (SCCR)     | 200kA                                                                                                | 200kA                                                                                                | 200kA                                                                                                |
| Nominal Discharge Current (In), IEC     | 40kA 8/20 μs                                                                                         | 40kA 8/20 μs                                                                                         | 40kA 8/20 μs                                                                                         |
| Nominal Discharge Current (In), UL      | 20kA 8/20 μs                                                                                         | 20kA 8/20 μs                                                                                         | 20kA 8/20 μs                                                                                         |
| Max Discharge Current (Imax), Per Phase | 100kA 8/20 μs                                                                                        | 100kA 8/20 μs                                                                                        | 100kA 8/20 μs                                                                                        |
| Impulse Current (Iimp), Per Mode        | 12.5kA 10/350 μs                                                                                     | 12.5kA 10/350 μs                                                                                     | 12.5kA 10/350 μs                                                                                     |
| Voltage Protection Rating (VPR), L-L    |                                                                                                      |                                                                                                      | 25                                                                                                   |
| Voltage Protection Rating (VPR), L-N    | 1800 V @ 3 kA<br>2600 V @ 20 kA                                                                      | 600 V @ 3 kA<br>1200 V @ 20 kA                                                                       | 1200 V @ 3 kA<br>1800 V @ 20 kA                                                                      |
| Protection Modes                        | L-N<br>L-PE<br>N-PE                                                                                  | L-N<br>L-PE<br>N-PE                                                                                  | L-N<br>N-PE                                                                                          |
| Status Indication                       | LED<br>Mechanical flag<br>Audible alarm                                                              | LED<br>Mechanical flag<br>Audible alarm                                                              | LED<br>Mechanical flag<br>Audible alarm                                                              |
| Surge Counter                           | Yes                                                                                                  | Yes                                                                                                  | Yes                                                                                                  |
| Technology                              | TD technology with thermal disconnect<br>Over-current replaceable cartridge fusing<br>EMI/RFI filter | TD technology with thermal disconnect<br>Over-current replaceable cartridge fusing<br>EMI/RFI filter | TD technology with thermal disconnect<br>Over-current replaceable cartridge fusing<br>EMI/RFI filter |
| Remote Contacts                         | Yes                                                                                                  | Yes                                                                                                  | Yes                                                                                                  |
| Lead Length                             | 762mm                                                                                                | 762mm                                                                                                | 762mm                                                                                                |
| Lead Size                               | 5.26 mm <sup>2</sup>                                                                                 | 5.26 mm <sup>2</sup>                                                                                 | 5.26 mm <sup>2</sup>                                                                                 |
| Ground Lead Length                      | 914mm                                                                                                | 914mm                                                                                                | 914mm                                                                                                |
| Temperature                             | -40 to 80 °C                                                                                         | -40 to 80 °C                                                                                         | -40 to 80 °C                                                                                         |
| Enclosure Material                      | Metal                                                                                                | Metal                                                                                                | Metal                                                                                                |
| Enclosure Rating                        | IP 65<br>NEMA®-4                                                                                     | IP 65<br>NEMA®-4                                                                                     | IP 65<br>NEMA®-4                                                                                     |

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|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mounting              | 3/4" straight nipple                                                                                                                                                            | 3/4" straight nipple                                                                                                                                                            | 3/4" straight nipple                                                                                                                                                            |
| Depth (D)             | 78mm                                                                                                                                                                            | 78mm                                                                                                                                                                            | 78mm                                                                                                                                                                            |
| Height (H)            | 240 mm                                                                                                                                                                          | 240 mm                                                                                                                                                                          | 240 mm                                                                                                                                                                          |
| Width (W)             | 84 mm                                                                                                                                                                           | 84 mm                                                                                                                                                                           | 84 mm                                                                                                                                                                           |
| Unit Weight           | 1.41 kg                                                                                                                                                                         | 1.41 kg                                                                                                                                                                         | 1.41 kg                                                                                                                                                                         |
| Certification Details | UL® 1449 Edition 5 Type 2, 20 kA Mode                                                                                                                                           | UL® 1449 Edition 5 Type 2, 20 kA Mode                                                                                                                                           | UL® 1449 Edition 5 Type 2, 20 kA Mode                                                                                                                                           |
| 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 8/20 $\mu$ s, 10 kA 10/350 $\mu$ s<br>IEC® 61643-1 Class I, Class II | 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 8/20 $\mu$ s, 10 kA 10/350 $\mu$ s<br>IEC® 61643-1 Class I, Class II | 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 8/20 $\mu$ s, 10 kA 10/350 $\mu$ s<br>IEC® 61643-1 Class I, Class II |
| Replacement Module    | TDS150M560                                                                                                                                                                      | TDS150M150<br>TDS150M240                                                                                                                                                        | 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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