

# Universal Transient Barrier, Single Pair Isolated Ground



## CERTIFICATIONS



## FEATURES

Compact design universal transient barrier provides protection of low-voltage circuits and transducers

Separate plug and base design allows hot swappable module replacement

Multi-stage protection and fine over-voltage protection helps ensure lowest residual surge voltages reach sensitive equipment

Common-mode and differential-mode protection protects against both possible surge conditions

Surge rating to 20 kA 8/20  $\mu$ s is ideal for exposed wiring

Allows for protection of 25 analog signals or 50 digital signals per linear foot (0,3 m) of DIN rail space

## SPECIFICATIONS

| Catalog Number              | UTB15SPG                 | UTB30SPG                   | UTB60SPG                   |
|-----------------------------|--------------------------|----------------------------|----------------------------|
| Article Number              | 702874                   | 702876                     | 702877                     |
| Nominal System Voltage (Un) | 3 - 10 VAC<br>5 - 15 VDC | 10 - 21 VAC<br>15 - 30 VDC | 21 - 42 VAC<br>30 - 60 VDC |

| Catalog Number                        | UTB15SPG                                                                                | UTB30SPG                                                                                | UTB60SPG                                                                                |
|---------------------------------------|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| Max Continuous Operating Voltage (Uc) | 12 VAC<br>18 VDC                                                                        | 23 VAC<br>33 VDC                                                                        | 45 VAC<br>64 VDC                                                                        |
| Rated Load Current (IL)               | 2A                                                                                      | 2A                                                                                      | 2A                                                                                      |
| Frequency                             | 1 MHz                                                                                   | 2 MHz                                                                                   | 3 MHz                                                                                   |
| Loop Resistance                       | 1 $\Omega$                                                                              | 1 $\Omega$                                                                              | 1 $\Omega$                                                                              |
| Max Discharge Current (Imax), L+L-PE  | 20kA 8/20 $\mu$ s                                                                       | 20kA 8/20 $\mu$ s                                                                       | 20kA 8/20 $\mu$ s                                                                       |
| Protection Modes                      | Common<br>Differential                                                                  | Common<br>Differential                                                                  | Common<br>Differential                                                                  |
| Technology                            | Gas Discharge Tube (GDT)<br>Metal Oxide Varistor (MOV)<br>Silicon Avalanche Diode (SAD) | Gas Discharge Tube (GDT)<br>Metal Oxide Varistor (MOV)<br>Silicon Avalanche Diode (SAD) | Gas Discharge Tube (GDT)<br>Metal Oxide Varistor (MOV)<br>Silicon Avalanche Diode (SAD) |
| Voltage Protection Level (Up), L-L    | 25 V @ 3 kA                                                                             | 44 V @ 3 kA                                                                             | 85 V @ 3 kA                                                                             |
| Connection, Stranded                  | 1 - 4 mm <sup>2</sup>                                                                   | 1 - 4 mm <sup>2</sup>                                                                   | 1 - 4 mm <sup>2</sup>                                                                   |
| Mounting                              | 35 mm top hat DIN rail                                                                  | 35 mm top hat DIN rail                                                                  | 35 mm top hat DIN rail                                                                  |
| Temperature                           | -20 to 65 °C                                                                            | -20 to 65 °C                                                                            | -20 to 65 °C                                                                            |
| Enclosure Material                    | UL® 94V-0 Thermoplastic                                                                 | UL® 94V-0 Thermoplastic                                                                 | UL® 94V-0 Thermoplastic                                                                 |
| Enclosure Rating                      | IP 20<br>NEMA®-1                                                                        | IP 20<br>NEMA®-1                                                                        | IP 20<br>NEMA®-1                                                                        |
| Depth (D)                             | 72mm                                                                                    | 72mm                                                                                    | 72mm                                                                                    |
| Height (H)                            | 90 mm                                                                                   | 90 mm                                                                                   | 90 mm                                                                                   |
| Width (W)                             | 12 mm                                                                                   | 12 mm                                                                                   | 12 mm                                                                                   |
| Unit Weight                           | 0.07 kg                                                                                 | 0.07 kg                                                                                 | 0.07 kg                                                                                 |
| Certification Details                 | UL® 497B                                                                                | UL® 497B                                                                                | UL® 497B                                                                                |
| Complies With                         | ANSI®/IEEE® C62.41.2-2002<br>Cat A, Cat B, Cat C                                        | ANSI®/IEEE® C62.41.2-2002<br>Cat A, Cat B, Cat C                                        | ANSI®/IEEE® C62.41.2-2002<br>Cat A, Cat B, Cat C                                        |
| Replacement Module                    | UTB15SPGM                                                                               | UTB30SPGM                                                                               | UTB60SPGM                                                                               |

## 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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