## TDS MT



### NVENT ERICO TRANSIENT DISCRIMINATING MOVTEC

#### **FEATURES**

- Transient Discriminating (TD) Technology
  provides increased service life
- Primary protection suitable for high exposure sites and point-of-entry protection applications
- TDS-MT configurable to L-L, L-N, L-G or N-G protection
- TDS-MTU provides simultaneous L-N, L-G & N-G protection
- Small foot print effective use of real estate
- 5 segment electronic status indication
  displays percentage of capacity
  remaining
- CE, UL® 1449 Edition 3 Listed

The TDS-MOVTEC family of surge diverters offers economical and reliable protection from voltage transients in even the most strenuous applications.

The small footprint provides integrators and OEMs with an effective use of real estate when installing within panels and equipment.

Transient Discriminating (TD) Technology, which meets the safety standards of UL® 1449 Edition 3, provides a superior life by eliminating the common temporary over-voltage failure mode of most SPDs. TD Technology is essential for any site where abnormal over-voltages can occur or where the possible catastrophic failure of traditional technologies can not be tolerated.

Alarm contacts are provided which may be used to shut down the system or to activate an external warning if the internal surge material is below optimum condition.



Model	TDSMT120	TDSMT277	TDSMTU277	
Nominal Voltage, Un	110-120 V	230-277 V	230-277 V	
System Compatibility	TN-C, TN-S, TN-C-S, IT, TT			
Max Cont. Operating Voltage, Uc	170 VAC	400 VAC		
Stand-off Voltage	240 V	480 V		
Frequency	50/60 Hz			
Operating Current @ Un	25 mA			
Aggregate Surge Rating	200 kA 8/20 μs		See table	
$\begin{array}{l} \text{Max Discharge Current,} \\ I_{\text{max}} \end{array}$	100 kA 8/20 μs		See table	
Nominal Discharge Current, In	80 kA 8/20 μs			
Impulse Current, Iimp	20 kA 10/350 μs			
Protection Modes	Single mode (L-L, L-N, L-G or N-G) L-G, L-N, N-G			
Technology	MOV/Silicon, TD Technology			
Voltage Protection Level, U <sub>p</sub>	760 V @ 20 kA 480 V @ 3 kA 330 V @ 500 A	980 V @ 20 kA 750 V @ 3 kA 700 V @ 500 A	See table	
Status	5 segment LED bar grap	h per phase, Normally	Open Contact	
Dimensions H x D x W: mm (in)	140 x 45 x 150 (5.51 x 1.77 x 5.91)			
Weight: kg (lbs)	0.6 (1.32)			
Enclosure	UL94V-0 thermoplastic			
Connection	≤16 mm² (#6AWG) connecting to M6 bolt			
Back-up Overcurrent Protection	100 A			
Temperature	-35°C to 55°C (-31°F to 1	31°F)		
Humidity	0 % to 90 %			
Approvals	AS3260, C-Tick, IEC® 950, UL® 1449 Ed. 3 Recognized Component Type 2			
Surge Rated to Meet	ANSI®/IEEE® C62.41.2 C	at A, Cat B, Cat C	ANSI®/IEEE®	

ANSI®/IEEE® C62.41.2 Scenario II,

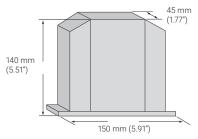
UL® 1449 Ed. 3 In 20 kA mode

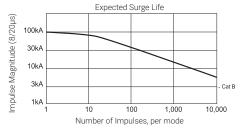
Exposure 3, 100 kA 8/20 μs, 10 kA 10/350 μs

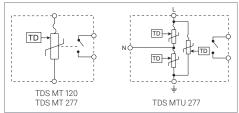
C62.41.2

Cat A, Cat B,

	L-N	L-G	N-G
Aggregate Surge Rating	80 kA	80 kA	40 kA 8/20 μs
Max. Discharge Current, Imax	40 kA	40 kA	20 kA 8/20 μs
Voltage Protection Level, $U_{\scriptscriptstyle p}$			
@500 A 8/20 μs (UL SVR)	700 V	700 V	600 V
@Cat B3, 3 kA 8/20 μs	<750 V	<870 V	<850 V
@20 kA 8/20 μs	<1200 V	<1290 V	<1200 V







# NVENT ERICO TDS MPM — TRANSIENT DISCRIMINATING MOVTEC PROTECTION MODULE

#### **FEATURES**

- Primary protection suitable for high exposure sites and point-of-entry facility protection
- Modular design allows easy replacement of surge modules
- 5 segment electronic status indication displays percentage of capacity remaining
- Lug connection allows Kelvin (in and out) connection of large cables
- Transient Discriminating (TD) Technology
  provides increased service life

The Transient Discriminating MOVTEC Protection Module (TDS-MPM) integrates three TDS-MOVTEC units into one enclosure to simplify three phase protection applications.

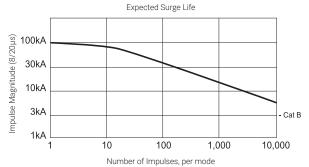
The TDS-MPM is ideal for primary point-of-entry protection applications where it is connected to the main service panel.

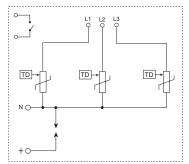


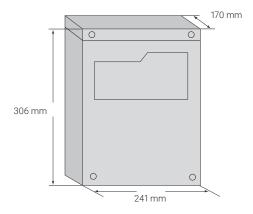
Model	TDSMPM277
Nominal System Voltage, Un	240/415 V & 277/480 V
Distribution System	3Ph Y 4W+G
System Compatibility	TN-C, TN-S, TN-C-S, TT
Max Cont. Operating Voltage, Uc	400/692 V AC
Stand-off Voltage	440 V N-PE; 480/831 V L-N
Frequency	50/60 Hz
Operating Current @ Un	25 mA
Aggregate Surge Rating	200 kA 8/20 μs (L-N)
Max Discharge Current, I <sub>max</sub>	100 kA 8/20 µs L-N (NEMA®-LS1) 130 kA 8/20 µs N-PE (NEMA-LS1)
Nominal Discharge Current, In	80 kA 8/20 μs
Impulse Current, I <sub>imp</sub>	20 kA 10/350 μs L-N; 50 kA 10/350 μs L-PE
Protection Modes	All modes protected
Technology	TD Technology and MOV/Silicon L-N Triggered Spark Gap N-PE
Status	(#16 AWG) connecting wire 5 segment LED bar graph per phase Normally open contact, 250 V~/10 A, ≤1.5mm²
Dimensions H x D x W: mm (in)	306 x 170 x 241 (12.05 x 6.69 x 9.49)
Weight: kg (lbs)	5 (11)
Enclosure	Metal, IP33 (NEMA-2)
Connection	≤16 mm² (#6AWG) connecting to M6 bolt
Mounting	Wall mount
Back-up Overcurrent Protection	100 A
Temperature	-35°C to 55°C (-31°F to 131°F)
Humidity	0 % to 90 %
Approvals	AS3260, C-Tick, IEC® 950

Voltage Protection Level, U <sub>p</sub>	L-N	N-PE	
@Cat B3, 3 kA 8/20 μs	<750 V	<1.5 kV	
@20 kA 8/20 μs	<980 V	<2.3 kV	

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CADDY

ANSI®/IEEE® C62.41.2 Cat A, Cat B, Cat C

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