



**ST-TDF3xx-DINx**  
**International DIN SPD/TDF**  
DIN Rail Mounted Surge Protective Device and  
Transient Dissipation Filter

**CODE: IN-1020010**  
[www.intransltda.com](http://www.intransltda.com)



5500 E. Loop 820 #205  
Ft. Worth, TX 76119  
Phone: 817.483.8497  
Fax: 817.572.2242  
[www.sinetamer.com](http://www.sinetamer.com)

The TDF Family of devices provide the best ring-wave and oscillatory transient protection available along with robust impulse transient protection. These devices are intended for multi-phase applications at locations feeding sensitive / mission-critical equipment. They are extremely effective in limiting transients generated inside the facility, switching transients originating from outside the facility – as well as lightning induced surges – and are an absolute must on circuits feeding critical microprocessor-based equipment.

This DIN rail mounted surge protective device is unique in that it is designed to protect against the entire spectrum of surges encountered in today's electrical environment – not just impulse surge originating from the power distribution system. Its compact size makes installation a breeze. The unique design of this device makes it among the most versatile SPD devices on the market with performance specs that are superior to our competition. These units are just another example of providing superior protection for modern and highly sensitive electronic systems.

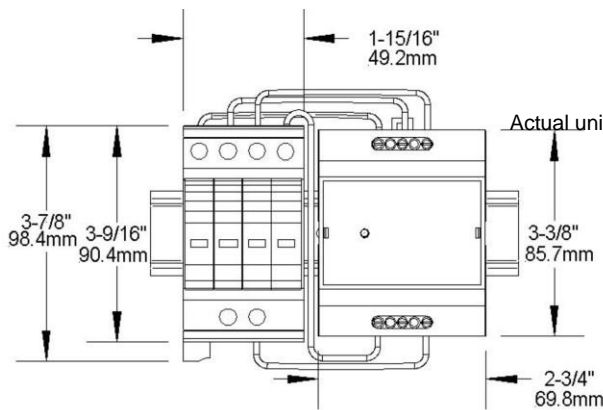
**Key Features:**

- Composite enclosure
- DIN rail mountable
- Wire clamping box terminals
- Power frequency – 50-60 Hz
- Surge current capacity 50 kA 8/20  $\mu$ s Class 2
- Low voltage protection level on ring wave transients with exclusive Frequency Attenuation Network™
- Degradation failure indication and optional remote signal contact
- Pluggable Class 2 SPD module for easy replacement
- Five Year Warranty (with DIN module). (One Year on module alone.)
- Global patented thermal disconnecter design with arc extinguishing device, fail-safe & self-protected, quick thermal response and perfect circuit cutoff function

Model	MCOV	Test Mode	Reference ANSI/IEEE Standards C62.41.1™-2002, C62.41.2™-2002, C62.45™-2002, and C62.62™-2010, IEC 61643-11	
			IEEE Category A (A1) 2 kV, 67 A 100 KHz Ring Wave 270° Phase Angle	IEEE Category B3/C1 6 kV, 3 kA (8/20 us) Impulse Wave 90° Phase Angle
ST-TDF3Y1-DIN Class II/T2 50 kA I <sub>max</sub>	150	L-N	< 60 V <sub>pk</sub> /U <sub>p</sub>	< 480 V <sub>pk</sub> /U <sub>p</sub>
	150	L-G	< 70 V <sub>pk</sub> /U <sub>p</sub>	< 530 V <sub>pk</sub> /U <sub>p</sub>
	300	L-L	< 60 V <sub>pk</sub> /U <sub>p</sub>	< 840 V <sub>pk</sub> /U <sub>p</sub>
	150	N-G	< 65 V <sub>pk</sub> /U <sub>p</sub>	< 640 V <sub>pk</sub> /U <sub>p</sub>
ST-TDF3Y2-DIN Class II/T2 50 kA I <sub>max</sub>	300	L-N	< 65 V <sub>pk</sub> /U <sub>p</sub>	< 750 V <sub>pk</sub> /U <sub>p</sub>
	300	L-G	< 70 V <sub>pk</sub> /U <sub>p</sub>	< 800 V <sub>pk</sub> /U <sub>p</sub>
	600	L-L	< 70 V <sub>pk</sub> /U <sub>p</sub>	< 1420 V <sub>pk</sub> /U <sub>p</sub>
	300	N-G	< 60 V <sub>pk</sub> /U <sub>p</sub>	< 860 V <sub>pk</sub> /U <sub>p</sub>
ST-TDF3N4-DIN Class II/T2 50 kA I <sub>max</sub>	550	L-L	< 70 V <sub>pk</sub> /U <sub>p</sub>	< 1450 V <sub>pk</sub> /U <sub>p</sub>
	550	L-G		< 1450 V <sub>pk</sub> /U <sub>p</sub>

**Measured Limiting Voltage (MLV) Test Parameters:** Positive polarity, Category A: Voltages are peak (±10%). Measured Limiting Voltages are measured from the insertion point on the to the peak of the surge. In order to duplicate the results, the specified mode of protection must be tested 10 times in all modes and the individual results are averaged together. (Individual mode or shot results may vary by more than 10%. Scope Settings: Time Base = 10 microseconds per division, Sampling Rate = 2.5 GigaSamples/sec, Bandwidth = 400 MHz, Probes: Tektronix P5100/P6015A. These settings help to assure MLV

(Column with IEEE Category A results are on the ST-TDF module. The ST-TDF module is NOT a standalone SPD. It must be connected to a Class 1 or 2 Din Rail unit. It can be purchased separately from the Energy Control Systems -DIN supplied Din Rail device.



Actual unit may vary from picture.

	Frequency (Hz)		Decibels (dB)						
	3dB	Max	Max	1k	10k	100k	1M	10M	100M
L-N	2.3K	148K	52	1	14	38	21	5	1
L-G	5.9K	214K	49	0	6	26	18	8	4
N-G	4K	166K	51	0	9	31	17	5	1
L-L	4K	198K	47	0	9	30	21	7	2

