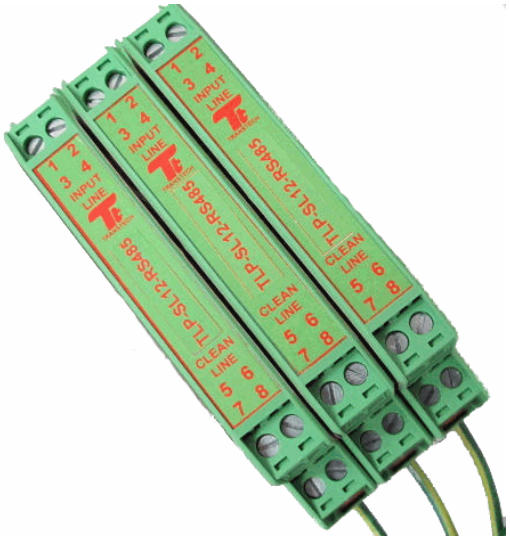
DATA SHEET – Communication – Surge Protectors

Subject to change without notice

MODEL:- TLP-SL12-RS485

Transtech Lightning Protector for RS485 Bus



GENERAL DESCRIPTION

The TLP-SL12-RS 485 is a very compact 12mm wide lightning and transient arrester providing protection for equipment connected to the RS 485 multi-point or party line bus by limiting the transient over-voltage to less than twice the normal working voltage.

The TLP-SL12-RS 485 provides protection between all conductors, line to line and each line to earth. It is mounted on to "DIN" rail (46277-3) and offers screen termination via terminals and the earth via a 300 mm earth wire "tail".

The TLP-SL12-RS 485 is suitable for all types of RS485 protocol due to the unique design whereby it has a high speed voltage sensitive switch which only enables the MOV protection when it senses a surge.

TECHNICAL DATA

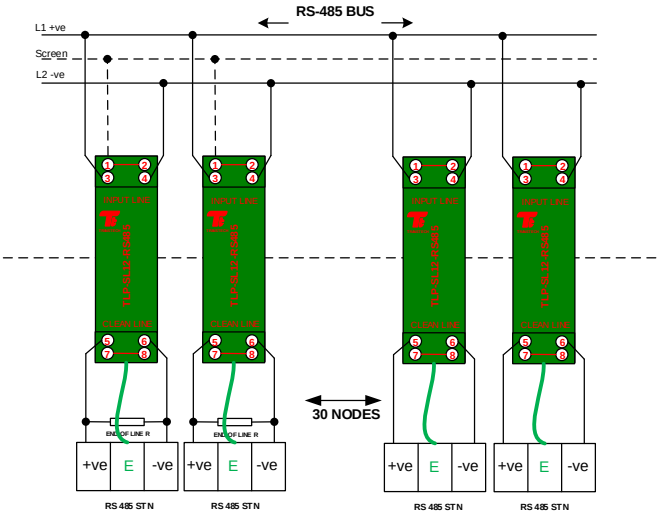
Voltage rating	
Normal working volt	+/-12V
Peak let thru volts	19V @ Ip = 1A
Peak let thru volts	30V @ Ip = 30A
Protocols	Modbus | Profibus | Profibus Extender
Current/Resistance rating	
End to End resist.	Less than 0.8 ohms
Max Current	1 Amp
Surge Current Imax	10kA/mode (8/20us) 2 kA/mode (10/350us)
Discharge Power	600W PPPD @ (8/20uS) (Peak Pulse Power Discharge)
Response rating	
Response time	Under 10nsec

FEATURES

- Low "let thru" voltage
- All common protocols MB | PB | PB/TDR
- Protection between ALL lines
- Fast snap on DIN rail mounting
- Fail to safe status design
- High speed switch technology to prevent signal attenuation
- Low line losses (volt drop)
- Designed and manufactured to ISO 9001
- C-Tick/ CE Compliant
- IEC 1000-4-2 & EN50082
- IEC 61643-1 and IEC 62305-4
- AS1768:2003

GENERAL SPECIFICATION

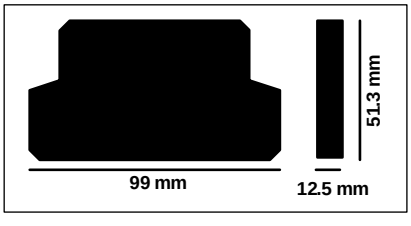
Capacitance	@ 1MHz, 75pF
Operating Temp	-10 to 60 Deg C
Storage Temp	-55 to 75 Deg C
Terminals	Self-opening 2.5mm/12AWG
Housing Material	KRILEN
Mounting Style	DIN
Dimensions	100mm X 51.3mm X12.5mm
Weight	60 grams



CONNECTION SCHEDULE

Model	Working Voltage Line - Line	Frequency.	Imax	In 15x8/20us	Let Thru V 1p @ 10Amp	Response Time
TLP-SL12-RS485	+/-12VDC	DCV	10kA	2kA	<16	10nS
TLP-SL12-RS485MB	+/-12VDC	DCV	10kA	2kA	<16	10nS
TLP-SL12-RS485PB	+/-12VDC	DCV	10kA	2kA	<16	10nS
TLP-SL12-RS485PB/TDR	+/-12VDC	DCV	10kA	2kA	<16	10nS
TLP-DNET	See separate data-sheet for DeviceNet protector					
Other communication protocols on request						

TABLE No 2



DESIGNED & MANUFACTURED by: Transtech Electronic Controls Pty Ltd Perth W.A. ABN: 21 070 629 499
Design changes may occur in the interests of product performance & development **E&OE**