

## MODEL:- TLP-30D-3A

Transtech Lightning Protector for **HIGH** Current Loops – 2 Channels.



### GENERAL DESCRIPTION

The TLP-30D-3A is a compact 3 Amp dual Channel **17.5mm wide** lightning and transient arrester providing protection for equipment with low voltage digital or analogue inputs as well as power circuits. The TLP-30D-3A limits the transient over-voltage to less than twice the normal working voltage.

The TLP-30D-S3A has true three stage protection in all modes and the unique three stage protection involves several clamping devices that make up the three stages.

\* **Stage one** primary protection is a high speed 3-electrode surge arrester with ultra fast di/dt characteristics.  
 \* **Stage two** is a combination of high energy Varistors with solid-state switches that automatically reset under normal operation. This stage has a ghost effect and is only activated by a transient or surge. This unique combination gives the benefit of fast automatic clamping and resetting with no capacitive effect under normal operating conditions.

\* **Stage three** has solid state semiconductor clamps that are designed for transient voltage suppression. These clamps have ultra-fast response times with high surge handling capability and flat voltage clamping at high currents.

The combination of the three stages provide protection from both differential and common mode transients  
 The TLP-30D-S3A also has low end to end resistance giving optimum signal strength and little volt drop effect.

### TECHNICAL DATA

<b>Voltage rating</b>	
Normal working voltage	+/- 30 Vdc
Peak let thru volts	44V @ 1p = 3A
<b>Current/Resistance rating</b>	
End to End resist.	Less than 6 ohms
Max Current	3 Amps
Surge Current:	
Imax	10kA/mode (8/20us) – total 40kA
In	4kA per mode
Discharge Power	400W PPPD @ (8/20uS) (Peak Pulse Power Discharge)
Leakage Current	Less than 1microamp @ 25C
Response time.	Under 10nsec

### FEATURES

- ◆ Low “let thru” voltage
- ◆ Two independent and isolated channels
- ◆ Protection between ALL lines
- ◆ 20kA discharge capacity for each channel
- ◆ 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	@ 1mMz, 75pF
Operating Temp	-10 to 60 Deg C
Storage Temp	-55 to 75 Deg C
RH rating	90% non-condensing
Terminals	Self-opening 2.5mm/12AWG
Housing Material	KRILEN
Mounting Style	DIN
Dimensions	116mm X 88mm X17.5mm
Weight	125 grams

### WIRING/CONNECTION NOTE:

The TLP-30D-3A must be connected the correct way around. Terminals 1-2 are always the field input and terminals 7-8 (clean lines) must always input to the equipment being protected.

