

## PTS-VC-XX/RC

### Powered Alarm **Single** Trip Module



#### GENERAL DESCRIPTION

The PTS-VC-XX/RC is a fully isolated trip amplifier/alarm module that accepts either a voltage or current input signal and provides a single (1) independently adjustable trip relay output.

The PTS-VC-XX/RC can be used as a standalone alarm unit for high or low level alarms. The relay can be field set by the use of internal links for high or low and energized or de-energised. The relay has its own dead band adjustment which can be set from between 0 - 60% of input signal.

#### FEATURES

- ◆ Special 24VDC Supply Level
- ◆ Output current to 3 Amps (fused)
- ◆ Externally Accessible Set Points
- ◆ System Healthy Indication
- ◆ Voltage Healthy Indication
- ◆ Current Healthy Indication
- ◆ OFF time delay (factory set)
- ◆ Fail Safe System
- ◆ Very small footprint area.

#### TECHNICAL DATA

**Power Supply.** 12Vdc, 24Vdc or 48Vdc  
 VA Rating Typically 1.0VA  
 Max Power Typically 1.5 VA (relay energised)

**Input – Standard Ranges**  
 Volts 0-10 Vdc  
 Current 4-20 mA  
 Amps dc 0 - 3 Amps dc  
 Input Resistance 0.03R  
**Other ranges upon request**

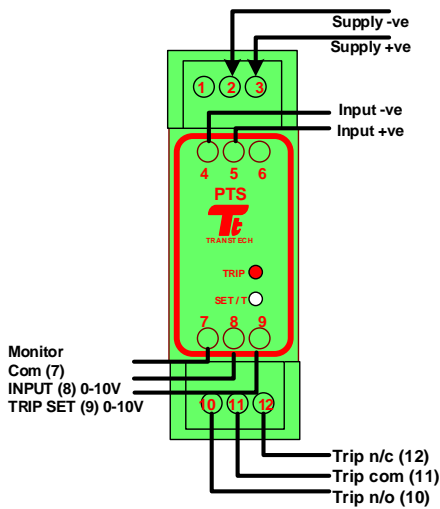
**Output (one c/o relay)** 1 Relay c/o contact

#### GENERAL SPECIFICATION

Accuracy 0.1% of span  
 Linearity 0.1% of span  
 Repeatability 0.5% over 10,000 hrs  
 Common Mode 110dB  
 Response time 20 to 90% step in 150mSecs  
 Drift 0.3% of span per Deg C  
 Isolation level 2500Vrms between input, output and power supply  
 Dead Band Adjustable 1% - 60%  
 Trip Settings Adjustable 0 - 100%  
 Trip Status LED (external)

**Output Relay**  
 Contact Configuration 1 Form C (SPDT)  
 Contact Rating 240Vac 1 Amp  
 30Vdc 1 Amp  
 Max Cont. Current 2 Amps  
 Vibration 20G, 10 - 300Hz  
 Shock Error 50G  
 Life Expectancy Mechanical 5 X 10,000,000  
 Operating Time 5 mSec  
 Max Switching Freq. 5 Hz

Operating Temp 0 to 60 Deg C  
 Store Temp -25 to +75 Deg C  
 Mounting Style DIN & G Rail  
 Terminals Self-opening 2.5mm/12AWG  
 Housing Material KRILEN  
 Dimensions 79 x 106 x 25mm wide  
 Weight 110 grams



CONNECTION DIAGRAM

#### SETTING THE RELAY OPERATION

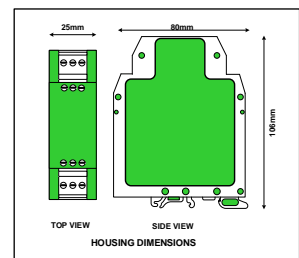
The relay in the PTS series is fully programmable according to the customer's wishes/application. Please request the set-up tables from Transtech.

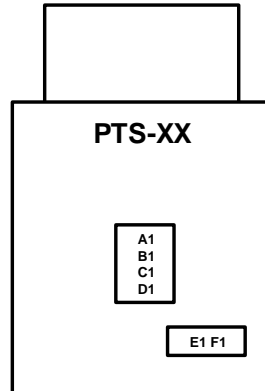
At power-up the relay is selected to be normally energised or de-energised and to trip upon an increasing input signal (high trip) or decreasing input signal (low trip).

**HI-TRIP** is defined as the relay operating when the input signal increases past the set point.

**LO-TRIP** is defined as the relay operating when the input signal decreases below the set point.

**DEADBAND** (hysteresis) has been incorporated to prevent the output relay from switching when the input signal varies slightly on the set point. Dead band level is adjustable from 0 to 60% of the input signal.





**Example 1 Relay set for Hi Trip and N/Energised**

Link B1 and C1 for Hi trip

Link E1 for N/Eng relay

**Example 2 Relay set for Lo Trip and N/De-Energised**

Link A1 and D1 for Lo trip

Link F1 for N/De-Energised relay