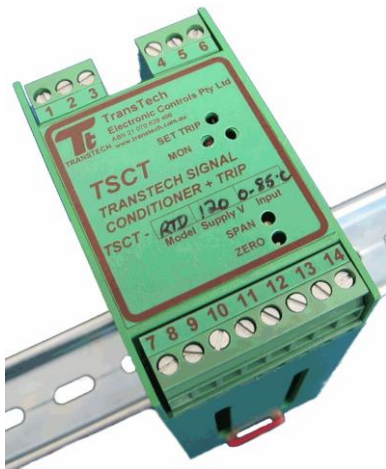


MODEL:- TSCT-XXX

Powered Transmitter with Trip Series



GENERAL DESCRIPTION

The TSCT-XXX signal conditioner series accepts a range of inputs such as mA dc, mV dc, DC Volts/Current, RTD, TC and Slide wire and provides a proportional standard instrument output in mA dc or Volts dc. **In addition** the TSCT-XXX offers a single changeover relay output for a high or low alarm.

The TSCT-XXX series are mains powered devices offering true 3 port galvanic isolation between input – output - power supply and providing a transmitted output that gives true zero output or any standard instrument signal in mA dc or mV dc or Volts dc.

FEATURES

- ◆ All standard inputs are link selectable
- ◆ Input monitor 0 - 10Vdc = 0 - 100%
- ◆ Full 3 Port galvanic isolation
- ◆ Externally accessible span/zero pot's (non-interactive)
- ◆ Plug off terminals for easy removal from service
- ◆ Two outputs as standard :- 0 to 10Vdc and a selected one (e.g. 4 - 20mA)
- ◆ Single Trip Relay c/o contact – configurable.
- ◆ Krilen housing non-combustible material
- ◆ Very small footprint area

Power Supply.

Nominal 120, 220/240 (40-60Hz) +/- 15%
24Vdc (20-32Vdc), 48Vdc (18 – 60Vdc) 110Vdc
Typically 2.0VA

VA Rating

Input (link selectable)

ACV Up to 600Vac
ACI 1 amp or 5 Amp input
mV dc 0-1mV up to 0-1000mV
V dc 0-1V, 0-2V, 0-5V, 0-10V up to 300V max
mA dc 0-1mA, 0-5mA, 0-10mA, 0-20mA, 0-50mA, 4-20mA, 10-50mA etc

Input Impedance

Thermocouple J, K, T, R, S,T Range 0 – 1000 Deg. C
RTD PT-100, PT-1000 2 and 3 wire.
Frequency Switch, Proximity or Frequency,

Others inputs upon request

Output (two as standard)

No 1 (fixed) 0-10Vdc
No 2 (selected) 4-20mA etc. (max loop load 900 Ohms).

Output Trip as standard.

Relay A Form C changeover contact
Rated 24Vdc @ 1Amp / 120Vac @ 0.5Amp

Other ranges outputs upon request (Including bi-polar + / 0 / -).

GENERAL SPECIFICATION

Accuracy 0.1% of span
Linearity 0.1% of span
Repeatability 0.1% over 10,000 hrs.
Common Mode RR 120dB
Response time 10 to 90% step in 250mSecs
Drift 0.03% of span per Deg. C
Isolation level 2500Vrms between input, output and power supply

Controls & Indication

External Span/Zero adjust and external Monitor 0-10Vdc

Operating Temp

0 to 60 Deg. C

Storage Temp

0 to 75 Deg. C

Terminals

Self-opening 2.5mm/12AWG

Housing Material

KRILEN (non-combustible)

Mounting Style

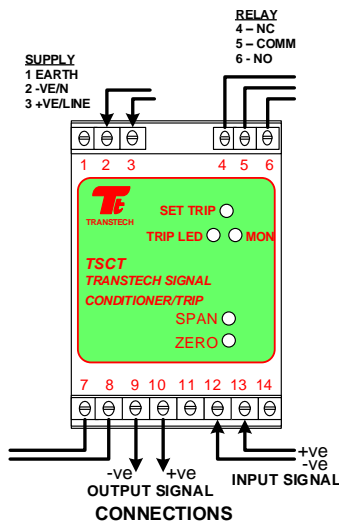
DIN (or G rail with adaptor)

Dimensions

105mm X 75mm X 45mm (H x D x W)

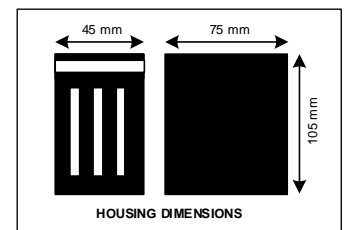
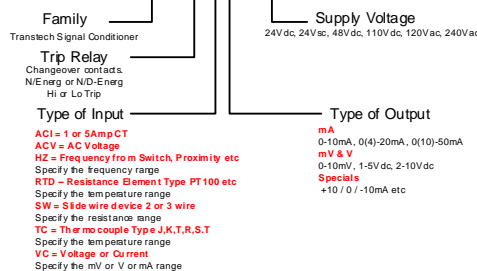
Weight

130 grams



PART NUMBERING

TSCT-VC-240V



TSCT-VC-240VAC

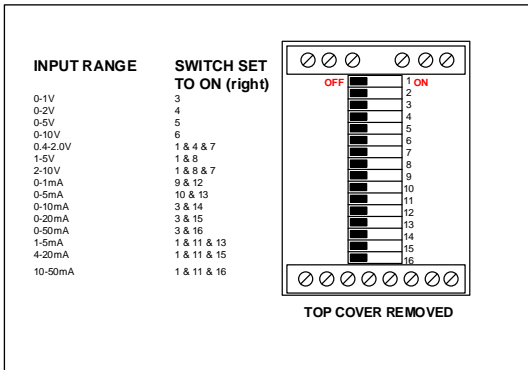
MODEL:- TSCT-XXX

Powered Transmitter with Trip Series



Terminal #	Type of Input											
	V/mV	mA	TWTX	TC	RTD	SW	HZ/Freq	N.Prox	3W Prox PNP	HZ/Sw	HZ/Electr	HV
14	-	-	+ve	-	1	1	-	-ve	+ve	1	-ve	+ve
13	+ve	+ve	-ve	+ve	2	2	+ve	+ve	switch	2	+ve	-
12	-ve	-ve	-	-ve	3	3	-ve	-	-ve	-	-	-ve

CONNECTION INFORMATION



All TransTech signal conditioners are normally factory set to calibration details supplied by the customer. If field adjustments are necessary the following steps should be taken:-

If the range selection module (optional) is not fitted, re-calibration can be done by AOT resistor changing, in this case contact the factory.

CALIBRATION & TRIP SETTING

- Remove the top cover and set SW1 to required trip function as per chart bottom left.
 - Set the input signal to zero and adjust the zero adjustment potentiometer on the top of the module to give 0.000V D.C at the 0-10V output (7-ve / 8+ve).
 - Set the input signal to maximum and adjust the span potentiometer on the top of the module to give 10.000V at the 0-10V output (7-/8+V).1
- The input is now fully calibrated as the span and zero adjustments are not inter-reactive.
- The input trip is set via the set trip potentiometer on the top of the module. The monitor has a range of 0 -10V D.C which is directly proportional to 0 - 100% of input signal, ie 5V = 50%, 7.5V = 75%, 10V = 100%.
 - Set trip level via the set trip potentiometer to give required trip point.

Note: Do not connect monitor 0V to Term 12.

- Adjust the input to the trip point and monitor the status of the relay to confirm trip point is correct.

RELAY & LED STATUS SETTINGS (see table on left)

Actions for trip on INCREASING signal (Hi)

- DIP Setting 011001**
Signal below = LED off / RELAY Energised
- DIP Setting 011010**
Signal above = LED off / RELAY De-energised
- DIP Setting 100101**
Signal below = LED on / RELAY De-Energised
- DIP Setting 100110**
Signal above = LED on / RELAY Energised

Actions for trip on FALLING signal (Lo)

- DIP Setting 011001**
Signal below = LED on / RELAY De-energised
- DIP Setting 011010 (factory default setting)**
Signal above = LED on / RELAY Energised
- DIP Setting 100101**
Signal below = LED off / RELAY Energised
- DIP Setting 100110**
Signal above = LED off / RELAY De-energised

LED set by A-B-C-D

RELAY set by E-F

