STAFFORD INSTRUMENTS

ST132 Over-Temperature Trip

FEATURES

- Accurate fixed temperature cut-off trip
- Low cost
- 2 jumper selectable trip temperatures:-
- 1310°C for R type thermocouples
- 970°C for K type thermocouples
- Other thermocouple types & trip temperatures can be factory programmed to special order
- Reset by power cycling
- Worldwide operation with universal power supply
- Volt free relay contacts
- Alarm buzzer
- Relay energised indicator LED
- DIN rail mounting

DESCRIPTION

The ST132 is a fixed temperature trip module with an internal alarm buzzer and volt-free normally open relay contacts. It has a universal power supply suitable for world wide use. It is DIN rail mountable so can be mounted next to contactor control gear.

The ST132 can utilise an existing controller thermocouple (by being wired in parallel with the controller).

OPERATION

The relay contacts are open when the ST132 is powered off.

When powered on the relay contacts close if the measured temperature is less than the trip temperature.

The relay contacts latch open and the alarm buzzer sounds if the measured temperature exceeds the trip temperature. The ST132 remains in this tripped state until it is reset by being powered off.

Custom trip temperatures and thermocouple type (R, S, K or N) can be factory programmed.

SPECIFICATION

Electrical

Power supply
Voltage range: 90 - 264V
Frequency: 50/60Hz
Power: 4VA

Relay
Contact type: SPNO   Volt-free
3A max. @230VAC

Thermocouples types supported
R,S,K,N

Connectors
Screw terminal blocks with 'rising clamp' connectors. Wire size range: 0.2mm^2 to 2.0mm^2. Screw diameter 2.5mm.

Temperature

Accuracy
±1°C typical, ±3°C maximum

Cold Junction Compensation
Yes

Weight

Unit weight: 72g
Packaged weight: 102g

Size

Unit size (mm):   90(L) x 35(W) x 32(D)
Packaged size (mm): 108(L) x 95(W) x 67(D)

Environmental

Operating temperature range: -10°C to +70°C
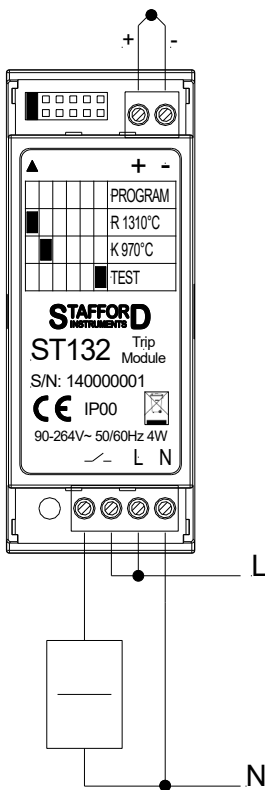Storage temperature range: -10ºC to +70ºC

Enclosure

Material: Polycarbonate (UL 94 V0)
Sealing: none
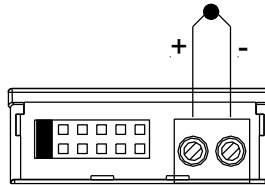Colour: light grey (RAL 7035)
IP00

Error Handling

Thermocouple failure detection
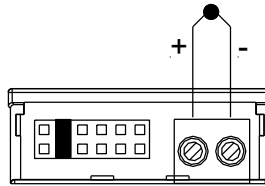Warning buzzer

WIRING

Note: simplest wiring scheme shown

CONFIGURING

R TYPE 1310°C JUMPER SETTING

K TYPE 970°C JUMPER SETTING

Use jumper to configure ST132 as shown.

Note: Configuration is only read at power on - so cycle power off/on if necessary after changing configuration.

If no jumper is fitted then the ST132 defaults to R 1310°C

On power up the thermocouple type setting is confirmed with a Morse code buzzer beep sequence:

R type: dot dash dot
K type: dash dot dash
S type: dot dot dot   (special order)
N type: dash dot   (special order)

FURTHER DETAILS

Further information can be found at:
www.staffordinstruments.co.uk

Stafford Instruments Ltd.
Unit 22 Wolseley Court,
Staffordshire Technology Park,
Stafford, ST18 0GA U.K.
Tel: +44 (0)1785 255588

Issue: 1.00 dated 14 May 2021

email: sales@staffordinstruments.co.uk

Supplied by:-