ST201
Temperature Indicator/Trip

FEATURES

- Accurate electronic heat fuse
- Temperature indicator
- Simultaneous room temperature monitoring & trip facility
- Automatic reset on power-on
- Fully adjustable
- User-selectable thermocouple types – R,S,K & N
- Lock facility
- Compact panel-mounting DIN case (45mm square cut-out)

DESCRIPTION

GENERAL   The ST201 is an indicating temperature trip designed to protect kilns and furnaces from over-firing. It acts like a re-settable heat fuse. It can share the thermocouple used by a temperature controller or can utilise an independent or duplex thermocouple as required. As well as detecting kiln over-temperature it can also be user-configured to simultaneously monitor room temperature and to trip off if this gets too high e.g. in the case of ventilation fan failure. The small DIN case requires a 45mm square panel cut-out and 90mm of behind-panel space. It is fitted with a 2-part screw terminal connector for ease of wiring.

SETTING UP   To select the kiln trip temperature press the 'hand' key. The warning legend will flash. The trip temperature can now be adjusted with the   &   setting keys which can be held down for acceleration. After a short delay the instrument reverts to showing the kiln temperature. To lock the instrument press and hold both   &   keys for 5 seconds   – the padlock legend will then light showing the keyboard to be locked. Repeating this procedure unlocks the instrument.

OPERATION   The instrument will trip if the kiln temperature reaches the kiln temperature trip setting. It can also be configured to trip if the room temperature exceeds a set limit. When tripped the warning legend illuminates. To reset the trip either turn the instrument off then on, or press the 'hand' key for a few seconds. During this process the reason for tripping will be displayed i.e. kiln over-temperature or room over-temperature. The instrument will not reset if the over-temperature condition is still present.

INSTALLATION   The instrument can be configured during installation by pressing and holding down the 'hand' key while powering up. The required thermocouple type (R,S,K or N) can be selected with the   &   keys. Press the 'hand' key again and now the room trip temperat   ure can be set in the range 40 to 60°C or 'OFF' (to disable this feature). Another press of the 'hand' key causes the instrument to reset and start normal operation.

SPECIFICATION

Electrical

Power supply
Voltage range: 216.2 - 253V
Frequency: 50Hz (nom)
Single phase
Power: 5VA (max)

Control Relay
Contact type: SPDT
Volt-free contacts
2A @ 230VAC

Thermocouple
R, S, K or N type
(user selectable)

Connectors
2-part connector -
Max. wire size 1.5mm²
Plug has M2 screw connections

Temperature

Kiln Temperature Display Range
R & S type: 0 to 1650ºC
K & N type: 0 to 1260ºC
Resolution: 1ºC

Kiln Temperature Trip Setting Range
100 to 1700ºC
Resolution: 1ºC

Room Temperature Trip Setting Range
40 to 60ºC + OFF
Resolution: 5ºC

Kiln Reading & Trip Accuracy
±0.25% FSD ±1 digit

Room Temperature Trip Accuracy
±3°C

Cold Junction Compensation: Yes

Environmental

Operating temperature range: -10º to +60°C
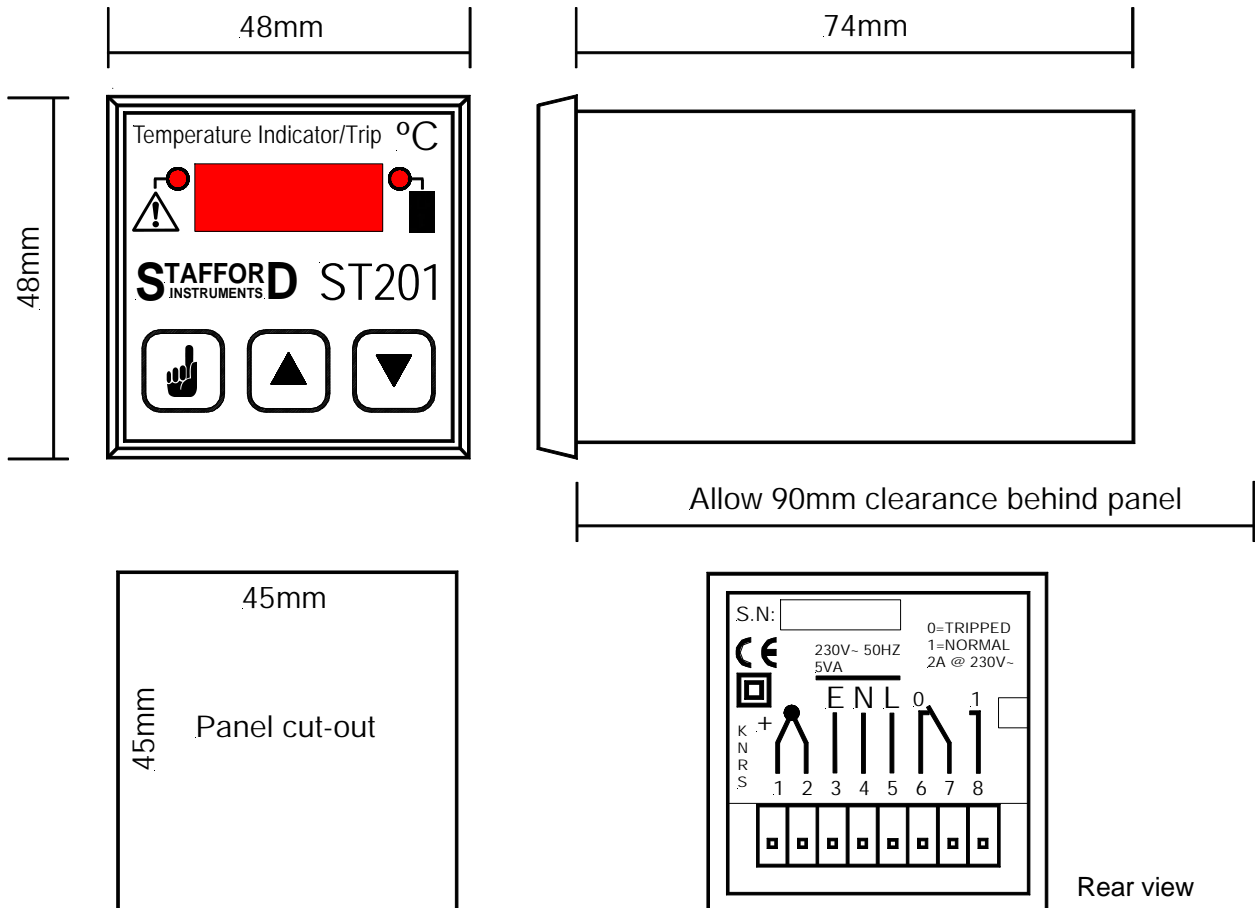Storage temperature range: -10º to +60ºC

Enclosure

Material: Glass reinforced Nylon
Colour: Light Grey
Fixing: moulded clip + 2 screws (supplied)

Error Handling

Thermocouple failure detection
Thermocouple reversal detection

Other

Keyboard lock facility + indicator
Trip indicator

48mm

74mm

48mm

Temperature Indicator/Trip ºC

STAFFORD INSTRUMENTS ST201

Allow 90mm clearance behind panel

45mm

45mm

Panel cut-out

S.N:

CE

230V~ 50HZ
5VA

0=TRIPPED
1=NORMAL
2A @ 230V~

E N L   0   1

K
N
R
S

1 2 3 4 5 6 7 8

Rear view

FURTHER DETAILS

Complete operating & installation instruction handbooks can be downloaded from our web site at http://www.stanton-kilns.co.uk

Stanton Pottery Supplies Ltd.
Canal Lane, Westport Lake, Tunstall, Stoke-on-Trent, Staffordshire, ST6 4NZ U.K.
Tel: +44 (0)1782 835467 / 575545
Fax: +44 (0)1782 812435
email: sales@stanton-kilns.co.uk