

## Series T22SRX/T25B

### One and Two Stage Room Thermostats for Heating, Cooling or Air-conditioning

#### Introduction

These room thermostats are designed to control heating and/or cooling equipment, in commercial industrial or residential installations. Typical uses are for unit heaters, fan coils, cooling rooms etc. Type T22SRX can be used for either heating or cooling. Type T25B (2 stages) can be used for:

- two stages heating
- two stages cooling
- heating/cooling with dead band and automatic change over

#### Description

These thermostats with a sturdy steel cover are provided with a liquid filled sensing element. This element is formed to achieve maximum sensitivity to surrounding air temperature changes. Coupled with a highly efficient diaphragm and leverage mechanism, the element operates a totally enclosed Penn switch contact with a close differential switching action without the use of "heat or cool" anticipators.



T22SRX (right) and T25B (left) room thermostats.

#### Note

These controls are designed for use only as operating controls. Where an operating control failure would result in personal injury or loss of property it is the responsibility of the installer to add devices or systems that protect against, or warn of, control failure.

#### Optional constructions

(quantity orders only):

- Custom labelling.
- Heat-Off-Cool selector switch (T22 only).
- Bimetal thermometer (T22SRX-9100 is executed with a built-in thermometer).
- Signal lamp in cover (T25B-9103 is executed with a signal lamp).

#### Feature and Benefits

<input type="checkbox"/> <b>Liquid filled elements.</b>	Accurate control and quick response.
<input type="checkbox"/> <b>Dust tight Penn switch.</b>	Prevent pollution of the contacts by electrostatic influences.
<input type="checkbox"/> <b>Small differential.</b>	No heat anticipators required
<input type="checkbox"/> <b>Two Stage Thermostats with dead band and automatic change-over.</b>	Suitable for heating/cooling.

## Mounting

The devices are suitable for wall mounting. After removing the cover, the mounting holes will become visible.

## Adjustment

T22SRX and T25B models are available with knob adjustment or with a concealed scale, screwdriver adjustment. For details see selection table. T22SRX models have a fixed differential of 1 K. T25B models have an adjustable differential between stages of 1 to 3 K.

## Contact functions

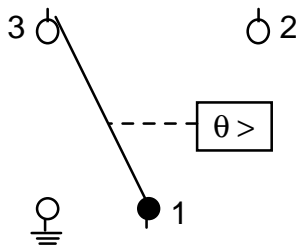


Fig. 1  
T22SRX

1 - 2 closes on temperature increase.

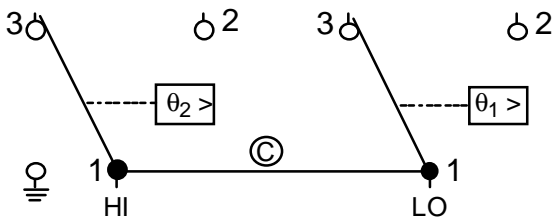
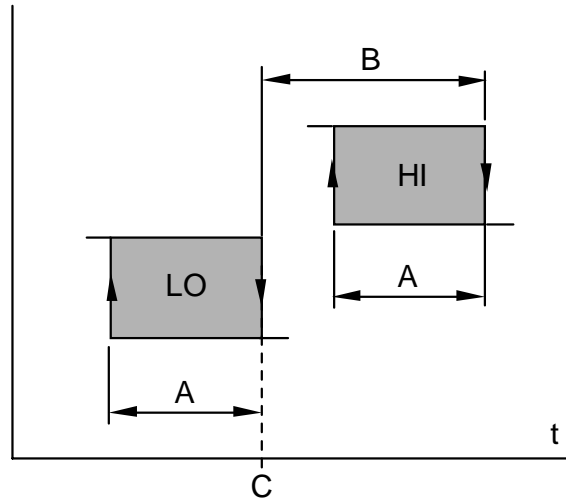


Fig. 2  
T25B

1 - 2 closes on temperature increase.  
(C) Removable jumper.

## Switching diagram T25

(Heating Mode)



- (A) = Differential per stage (1 K).
- (B) = Differential between stages (adjustable 1 to 3 K).
- (C) = Dial setting.
- (T) = Temperature increase.
- LO = Low stage
- HI = High stage

Fig. 3

## Optional construction note

If what you need is not in the specific type numbering selection table, then please contact your representative.

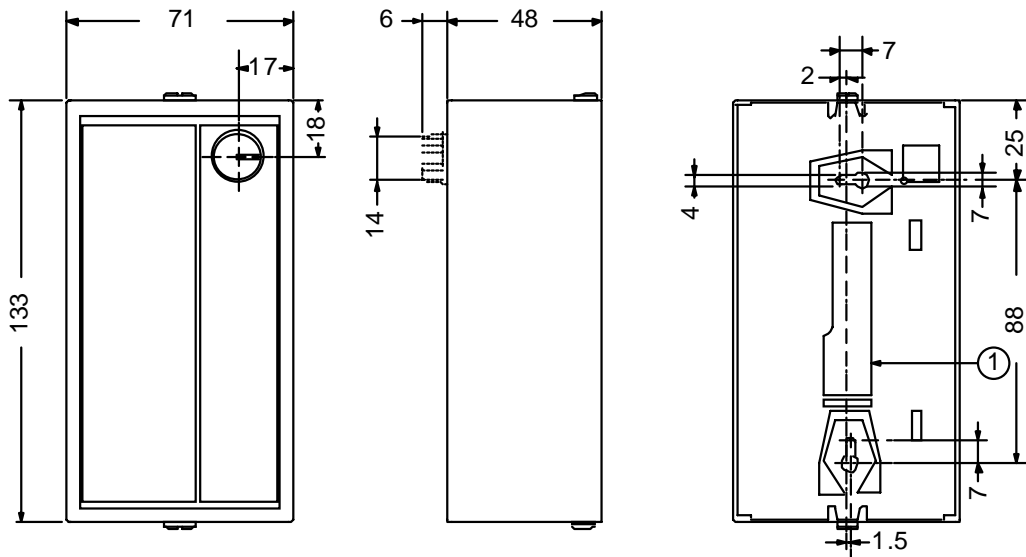
## Repair and replacement

Repair is not possible. In case of an improperly functioning control, please check with your nearest supplier. When contacting the supplier for a replacement you should state the type/model number of the control. This number can be found on the data plate or cover label.

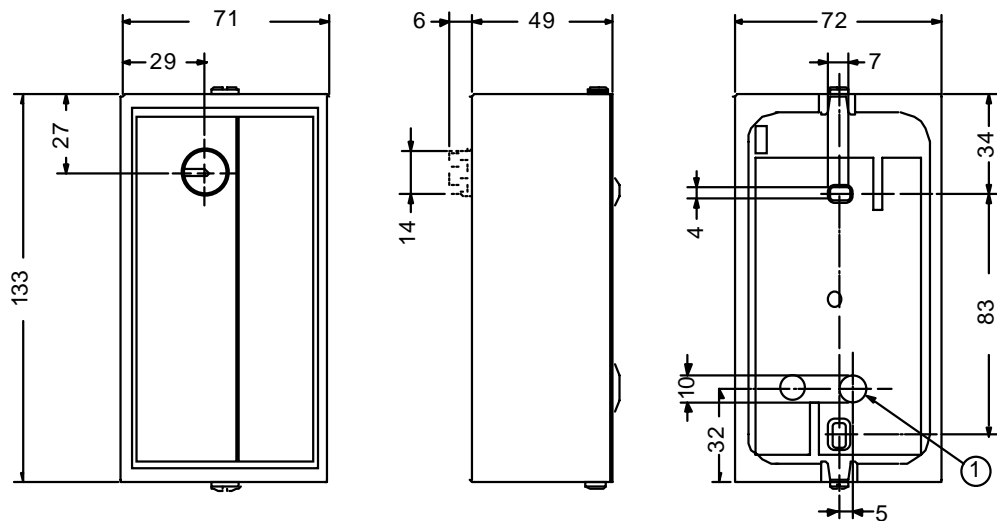
## Type number selection table

Order number	Range in °C	Diff. per stage in K	Dif. between stages in K	Adjustment	Remarks
T22SRX-9100	5 to 32	1	-	Knob	with thermometer
T22SRX-9101	5 to 32	1	-	Knob	
T22SRX-9104	5 to 32	1	-	Concealed	
T25B-9101	5 to 32	1	1/3	Knob	
T25B-9102	5 to 32	1	1/3	Concealed	
T25B-9103	5 to 32	1	1/3	Knob	with ~230 V signal lamp (to be wired separately)

## Dimensions (mm)



**Fig. 4**  
T22SRX (1) Cable inlet hole



**Fig. 5**  
T25B (1) Cable inlet hole

## Specifications

Product type	T22SRX	T25B
Operating range	5 to 32°C	5 to 32°C
Number of stages	1	2
Differential per stage	1 K	1 K
between stages	-	1-3 K adjustable
Adjustment	see selection table	
Electrical rating	~15(3)A, 230V	~15(3)A, 230V
Contact function	SPDT	SPDT
CE Conformity	According to low voltage directive and EMC directive	
Ambient temp. limits	-35 to +55°C	-35 to +55°C
Material	Steel plated case and cover.	
Cover	"tawny silver" finish.	
Faceplates	dark/light brown coloured.	
Enclosure (prot. class)	IP20	IP20
Shipping weight ind. pack	0.465 kg	0.570 kg
overpack (24 pcs.)	11.5 kg	14 kg

*The performance specifications are nominal and conform to acceptable industry standards. For applications at conditions beyond these specifications, consult the local Johnson Controls office or representative. Johnson Controls shall not be liable for damages resulting from misapplication or misuse of its products.*

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