

# YOUR ONE STOP CONTROL SHOP



Models

## TR2104W/TR2114W/TR4114W

## **SENSOR/SETPOINT UNITS**

#### **DESCRIPTION**

The TR2104, TR2114 and TR4114 units combine a remote setpoint with a temperature sensor. The setpoint range is 18-28°C. This provides the convenience of reduced wiring, and having the setpoint at a suitable location. Both units feature our standard thermistor temperature sensor mounted in specially designed vented enclosure.

The TR2104 has a concealed setpoint, which becomes accessible when the surround is removed. A small screwdriver is required to adjust the setpoint. The TR2114 AND TR4114 have an exposed setpoint with knob located in the centre of the front panel which provides an easy to adjustment for the user. The TR4114 has a 4000 ohm temperature sensor for use in averaging applications.

#### **TECHNICAL DATA**

Sensor - TR2104 and TR2114

Sensor - TR4114

Sensor accuracy

Setpoint Range TR 2104, TR2114 and TR4114

Setpoint Resistance TR 2104, TR2114 and TR4114

Voltage output with 0.5 mA constant current source

Maximum connection cable

NTC Thermistor 2 K ohms @ 25°C

NTC Thermistor 4 K ohms @ 25°C

+/- 0.3°C over 0 - 70°C

18 - 28°C

3.6 K to 5.6 K ohms

1.8 to 2.8 vdc

500 m with 1.00 mm<sup>2</sup>Cu

Use shielded cable if run with power cables. Maximum connection length reduced to 250m. Suitable for all Regulator Controllers except ET4 and SYSTEM 80.

## **INSTALLATION**

To ensure the thermistor is not influenced by any external thermal activity, considerable care should be taken when determining the location to obtain a representative temperature of the area.

The unit should preferably be located on an internal wall, approximately 1.5 metres above the floor. Care should be taken to avoid concealed heater pipes, air ducts, heat sources such as lights, copiers, computers etc, locations that are exposed to direct sunlight or areas directly affected by the supply air stream. Corner locations should be avoided because of reduced air circulation.

## TR2104W/TR2114W/TR4114W

## **SENSOR/SETPOINT UNITS**

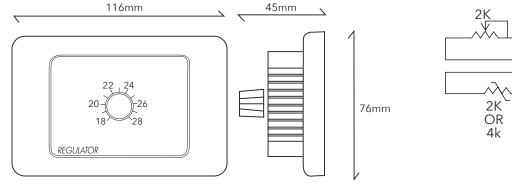
#### **TEMPERATURE RESISTANCE TABLES**

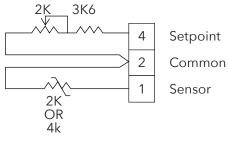
TD24	O 4 /-	TR211	A 00	C F/	100
18/1	114/	I R / I I	4		J - L

Deg	Ohms	Deg	Ohms	Deg	Ohms	Deg	Ohms			
0°C	5.113	14°C	2.970	28°C	1.803	42°C	1.136			
1°C	4.910	15°C	2.862	29°C	1.742	43°C	1.100			
2°C	4.717	16°C	2.759	30°C	1.684	44°C	1.066			
3°C	4.532	17°C	2.660	31°C	1.628	45°C	1.033			
4°C	4.356	18°C	2.565	32°C	1.574	46°C	1.001			
5°C	4.187	19°C	2.474	33°C	1.522	47°C	.9708			
6°C	4.027	20°C	2.387	34°C	1.472	48°C	.9413			
7°C	3.874	21°C	2.303	35°C	1.424	49°C	.9130			
8°C	3.727	22°C	2.222	36°C	1.378	50°C	.8856			
9°C	3.587	23°C	2.145	37°C	1.334					
10°C	3.454	24°C	2.071	38°C	1.291					
11°C	3.324	25°C	2.000	39°C	1.250					
12°C	3.201	26°C	1.932	40°C	1.211					
13°C	3.083	27°C	1.866	41°C	1.173					

## **DIMENSIONS**

## **CONNECTION DIAGRAM**





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