

## PTSI pipe/frost thermostat

### Operating instructions

The Drayton PTSI strap on pipe thermostat is designed for use in domestic and commercial heating applications, as a high or low limit.

It is typically used in conjunction with the Drayton RTS3 Air Frost Thermostat, to provide protection for boilers and exposed pipework that may be susceptible to frost damage.

### Technical data

<b>Setting range</b>	20°C to 90°C
<b>Max ambient temp</b>	120°C
<b>Min ambient temp</b>	-35°C
<b>Switching differential</b>	8°K
<b>Sensitivity</b>	1°K/Min.
<b>Switch type</b>	SPDT (volt free)
<b>Switch rating</b>	15 (2.5)A 230V AC 50HZ
<b>Conduit entry</b>	Supplied with adaptor, threaded M20 x 15mm for 20mm conduit
<b>Knob locking device</b>	Supplied (loose)
<b>Sensing element</b>	Liquid filled
<b>Enclosure protection rating</b>	IP40

### Installation

When the PTSI is being used as a conventional pipe thermostat, site the unit in a convenient position and strap it to the pipework to be sensed, using the fixing wire provided. Ensure that there is good contact between the sensing bulb of the PTSI and the pipe.

If the PTSI is being used in conjunction with an air frost thermostat, it is recommended that the PTSI is fixed onto the return pipework within 0.6m of the boiler (see figure 1).

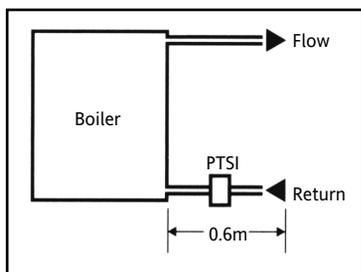


Figure 1

### Electrical connections

**Warning:** Disconnect mains power before attempting any electrical work on the system or PTSI. Any electrical work should be carried out by a competent person, to conform to the current I.E.T. regulations.

To gain access to the electrical connections, grasp the setting knob and pull forward to reveal the cover securing screw. Loosen the screw and remove the cover.

Cable entry is via the conduit adaptor/gland seal. (see figure 2).

Connect the wires to the terminals in accordance with your system requirements, (see figure 3).

**NB: THIS PRODUCT MUST BE EARTHED.**

# Drayton

401 Southway Drive  
Plymouth  
PL6 6QT  
United Kingdom

Technical Helpline Tel: 0333 7000 622

Email: [customer.care@draytoncontrols.co.uk](mailto:customer.care@draytoncontrols.co.uk)

Website: [www.draytoncontrols.co.uk](http://www.draytoncontrols.co.uk)

### Gland housing assembly

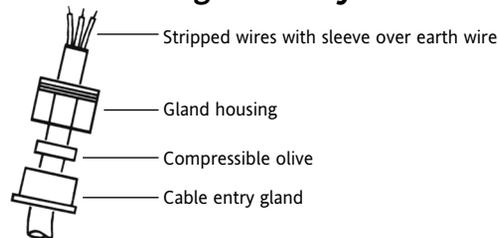


Figure 2

### Terminal details

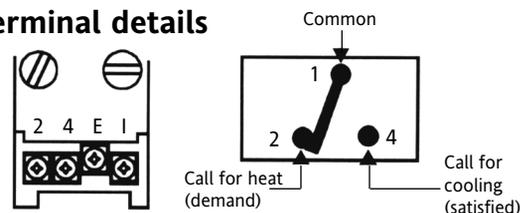


Figure 3

For boiler frost protection using PTSI in conjunction with a standard frost thermostat see figure 4 below.

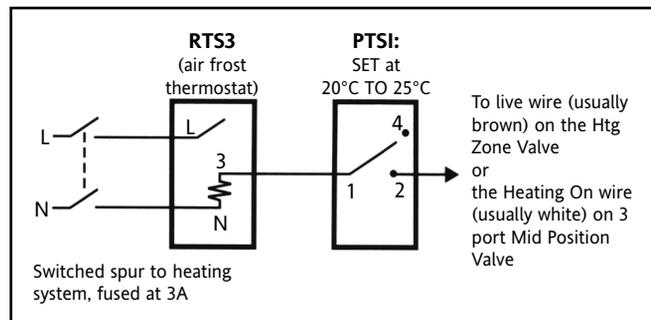


Figure 4

### Always check system wiring for compatibility

Once the wiring is complete, refit and secure the cover and conduit adaptor/gland seal. If you wish to lock the settings knob on a particular temperature, use the locking "FIX" device which is supplied. This is achieved by setting the unit to the desired temperature, pulling off the setting knob and placing the FIX device onto the PTSI, with FIX showing in the top right hand corner. Replace setting knob.

When the PTSI is used for boiler frost protection in association with the RTS3 air frost thermostat, we recommend that the temperature setting knob is locked between 20°C and 25°C, depending on requirements.

### Maintenance

No user maintenance should be attempted.

### Spare parts

No replacement parts are available for this low cost thermostat. In the unlikely event of failure, the complete unit should be replaced.

### Conforms to the essential requirements of the following directives:

2014/30/EU Electromagnetic compatibility

2014/35/EU Electrical equipment designed for use within certain voltage limits

Schneider Electric continuously seek to improve products and reserve the right to make changes without notice.