

## Immersion Thermostats

### Features



- Units supplied with a brass / nickel plated pocket
- Single and dual stage versions
- Robust housing

### Specification

Control range	See product codes on page 2 for ranges
Differential:	
ST-IM01	3°C
ST-IM02	5°C
ST-IM03	ST (open low)
ST-IM04	15 to 20°C
ST-IM05	15 to 20°C
ST-IM06	1st = 3°C 2nd = 3°C
ST-IM07	1st = 15-20°C 2nd = 3°C
ST-IM08	1°C
ST-IM09	FT
ST-IM10	2 to 20°C
ST-IM12	3°C
ST-IM13	ST (open high)
ST-IM14	2 to 20°C
ST-IM15	ST (open high)
Switch rating	24 to 250Vac @ 15(8)A
Sensing element	Liquid filled coiled copper bulb
Housing material:	
Cover	ABS
Base	Byblend
Housing dimensions	108 x 70 x 72mm
Pocket thread	½" BSPT
Pocket length	142mm
Pressure rating	8 bar
Ambient range:	
Housing temp.	-35 to +65°C
RH	0 to 95% (non-condensing)
Storage	-20 to +70°C
Protection:	
Manual reset	IP43
ST-IM01, 02, 06	
09 & 12	IP54
ST-IM10 & 14	IP65
Conformity	CE Marked
Country of origin	Italy

### Product Codes

**See page 2**

## Product Codes

### ST-IM01

Immersion thermostat 0 to +90°C, auto reset  
(max. bulb temp. 120°C)

### ST-IM02

Immersion thermostat +50 to +140°C, auto reset  
(max. bulb temp. 150°C)

### ST-IM03

Immersion thermostat 0 to +60°C, manual reset  
(max. bulb temp. 75°C)

### ST-IM04

Immersion thermostat +65 to +85°C, manual reset  
(max. bulb temp. 120°C)

### ST-IM05

Immersion thermostat +90 to +110°C, manual reset  
(max. bulb temp. 120°C)

### ST-IM06

Dual Immersion thermostat 30 to +90°C (stage 1 & 2) , auto reset  
(max. bulb temp. 75°C)

### ST-IM07

Dual Immersion thermostat 65 to 85°C (stage 1)  
30 to +90°C (stage 2) , manual reset (stage 1) auto reset (stage 2)  
(max. bulb temp. 120°C)

### ST-IM08

Immersion thermostat -30 to +30°C, auto reset  
(max. bulb temp. 55°C)

### ST-IM09

Immersion thermostat -30 to +30°C, manual reset  
(max. bulb temp. 55°C)

### ST-IM10

Immersion thermostat 0 to +60°C, auto reset  
(max. bulb temp. 90°C)

### ST-IM12

Immersion thermostat +30 to +90°C, auto reset  
(max. bulb temp. 110°C)

### ST-IM13

Immersion thermostat +20 to +90°C, manual reset  
(max. bulb temp. 110°C)

### ST-IM14

Immersion thermostat +50 to +120°C, auto reset  
(max. bulb temp. 140°C)

### ST-IM15

Immersion thermostat +50 to +120°C, manual reset  
(max. bulb temp. 140°C)

## Accessory

### ST-PO521

Stainless steel pocket (optional)

## Technical Overview

The ST-IM range of immersion thermostats can be used to control the temperature of liquids in pipe work systems. Liquid filled sensing elements ensure rapid response and accurate switching differentials.

They are available in two formats:

Control thermostats which have adjustable setpoint, with adjustable differential and auto reset, to provide a switched output to the heater/cooler or controller.

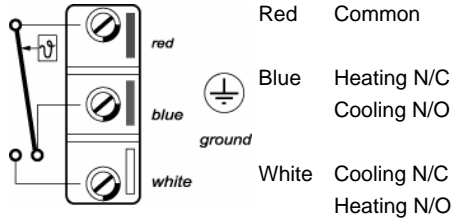
Safety thermostats which have adjustable setpoint, fixed differential and manual reset, to provide high limit cut out on boilers etc.

## Installation

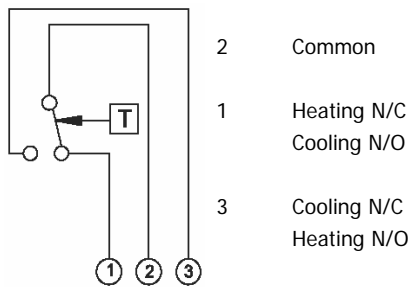
1. The ST-IM should only be installed by a competent, suitably trained technician, experienced in installation with hazardous voltages. (>50Vac & <1000Vac or >75Vdc & 1500Vdc)
2. Ensure that all power is disconnected before carrying out any work on the ST-IM.
3. If the sensor is to be mounted outside, it is recommended that the unit be mounted with the cable entry at the bottom. If the cable is fed from above then into the cable gland at the bottom, it is recommended that a rain loop be placed in the cable before entry into the sensor.
4. Fit a ½" BSPT female threaded boss in a suitable location in the pipe.
5. Screw the pocket into the boss using a thread-seal compound.
6. Slide the capillary into the pocket and tighten the grub screw to secure the housing.
7. Remove the front cover, and separate from the main body.
8. Feed the cable through the waterproof gland and terminate the cores at the terminal block. Leaving some slack inside the unit, tighten the cable gland onto the cable to ensure water tightness.
9. Adjust the setpoint as required and replace the front cover.

Connections

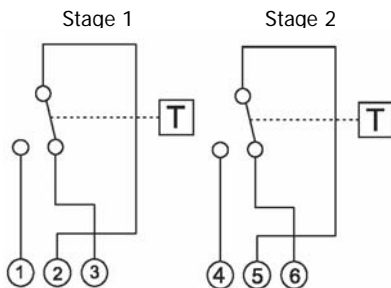
ST-IM03, 08 & 10, 13 to 15:



ST-IM01, 02, 04, 05, 09 & 12:



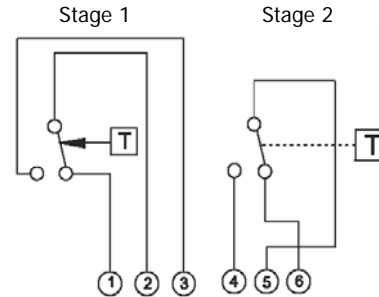
ST-IM06:



2	Common	5	Common
3	Heating N/C Cooling N/O	6	Heating N/C Cooling N/O
1	Cooling N/C Heating N/O	4	Cooling N/C Heating N/O

Connections (continued)

ST-IM07:



2	Common	5	Common
1	Heating N/C Cooling N/O	6	Heating N/C Cooling N/O
3	Cooling N/C	4	Cooling N/C

Dimensions

