

# Heat Tracing Junction Box with Thermostat

( R130/JBST/4/320/30A )

Junction Box complete with Thermostat  
for temperature control of pipes and vessels.

## R Series Solution

- Available for use in safe and hazardous areas.
- Enclosures suitable for Gas Group IIA, IIB and IIC.
- Ingress Protection IP66.
- Full range of accessories and termination kits available.

### INTRODUCTION

As part of our commitment to innovation in the industry, Heat Trace Ltd is offering an Exd solution.

The thermostat can measure the surface temperature of systems such as pipes or vessels by securing the sensor to the surface with adhesive aluminium tape.

The junction box is suitable for connection of one power cable and one heating cable, allowing the thermostat to directly control the heating circuit.

The junction boxes maybe used to provide process temperature control in safe areas, or Zone 1 or 2 hazardous areas by switching the heating circuits at the desired temperatures. The thermostat is available in various ranges of temperature control.

The enclosure is made of high grade, cast aluminium and painted with RAL 7035 paint.



The Heat Tracing Authority™

## SPECIFICATION

### ENCLOSURE:

Material: Standard Copper Free Aluminium  
Paint shade: RAL 7035, light grey  
Protection: EX (db) - IP66  
Rated voltage: 1.1kV AC / DC  
Area suitability: Zone 1 / Zone 2, IIA / IIB / IIC  
Cable entries: 2 off (1 off for power cable,  
1 off for heat tracing cable  
or control cable.)

### THERMOSTAT SPECIFICATION:

| Temp. Range (°C) | Setting accuracy (°C) | Switch rating (Amp/Volt) | Sensor diameter (mm) | Sensor length (mm) |
|------------------|-----------------------|--------------------------|----------------------|--------------------|
| 50-320           | ±11                   | 30/250                   | 5                    | 60                 |

Capillary tube material: Stainless steel  
Capillary tube protection: Stainless steel conduit  
Sensor type: Liquid filled  
Sensor material: Stainless steel  
Capillary tube length: 1.5m

Switch type: SPST  
Switch life: 100,000 operations  
Temperature setting adjustment: Internal tamperproof switch  
Earthing: Internal and external earthing  
Number of terminals: 6 off (2 live, 2 Neutral & 2 Earth)  
Size of terminals: 4mm<sup>2</sup>  
(suitable for 2.5 - 4mm<sup>2</sup> conductors)

### APPROVAL DETAILS:

ATEX - CML 23ATEX1502X  
IECEX - IECEX CML 23.0177X  
UKCA - CML 23UKEX1503X

### EQUIPMENT MARKING:

#### IECEX:

Gas: Ex db IIC T6/T5 Gb  
Dust: Ex tb IIIC T85°C/T100°C Db  
-60°C or -20°C < Ta < +45°C / +60°C / +75°C

#### ATEX/UKCA:

Gas: Ⓜ II 2 G D Ex db IIC T6/T5 Gb  
Dust: Ⓜ II 2 G D Ex tb IIIC T85°C/T100°C Db  
-60°C or -20°C < Ta < 45°C / +60°C / +75°C

### STANDARD KIT CONTENT:

- Junction box with specified entries fitted with with mechanical thermostat, thermostat switch bracket.
- Terminal & accessories (terminal, end plate, stopper, shorting link, terminal marker where applicable).
- 2 off stainless steel earthing stud.
- O ring, grub screw, allen key for grub screw.
- Stainless steel certification plate.
- Stainless steel tag plate.
- 2 off M8x12 Stainless nut, bolt and washer set for mounting
- Cable entry marking sticker.
- External earthing stud is fitted with PVC sleeved copper lug.
- Earthing sticker
- Instruction manual
- Wiring diagram

### SAFE USE:

Only certified cable glands & accessories of required Ex protection shall be used.

Each entry shall have no more than one thread adaptor. A stopping plug shall not be used with a thread adaptor.

If holes or unused cable entry are left open, explosion protection can no longer be guaranteed.

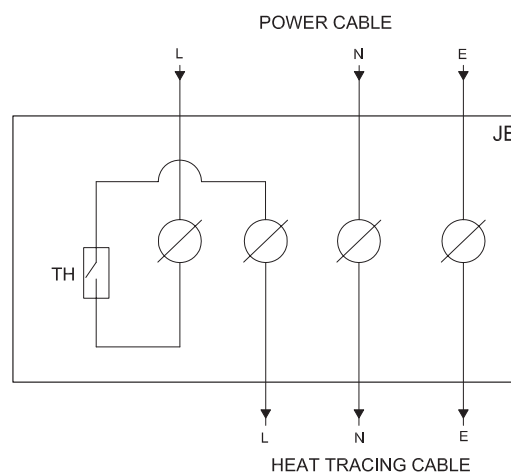
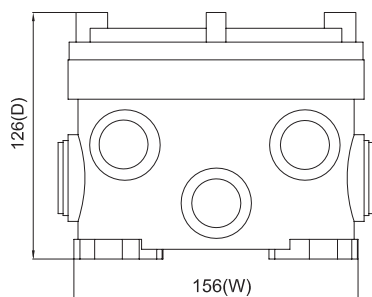
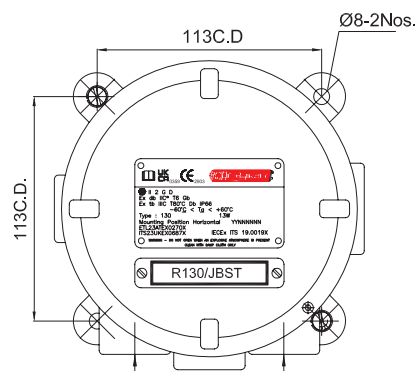
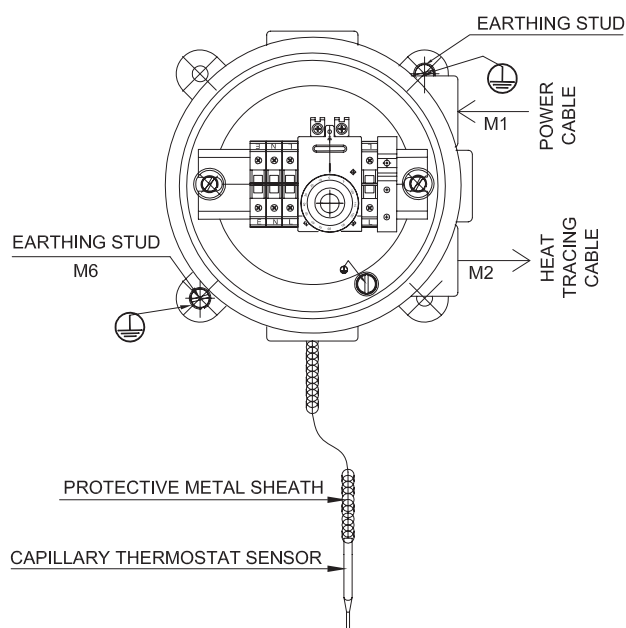
Close open holes using stopping plugs approved for required type of protection.

### ACCESSORIES:

Heat Trace Ltd Supply a complete range of accessories including termination/splice kits, end seals, junction boxes and controls.

# HEAT TRACING JUNCTION BOX WITH THERMOSTAT

PART NO. : R130/JBST



| Description                               | Part number           | Power cable size (mm <sup>2</sup> ) | Tightening torque (Nm) | Entry size for Power cable M1 | Entry size for Heat tracing cable M2 |
|---|-----------------------|-------------------------------------|------------------------|-------------------------------|--------------------------------------|
| Heat tracing junction box with thermostat | R130/JBST/4/320/A/30A | 3C x 4                              | 0.5                    | M20                           | M20                                  |

Note: 1) All dimensions are in mm with tolerance of  $\pm 5\%$ .  
2) External earthing stud is fitted with PVC sleeved copper lug.



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