

Heat Tracing Junction Box with Thermostat

(R160/JBST/10/120/30A)

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 may be 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)

THERMOSTAT SPECIFICATION:

Temp. Range (°C)	Setting accuracy (°C)	Switch rating (Amp/Volt)	Sensor diameter (mm)	Sensor length (mm)
0-120	±4	30/250	8	166

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: 10mm²
(suitable for 2.5 - 10mm² 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.

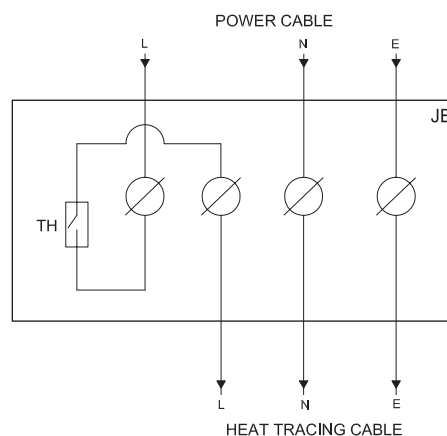
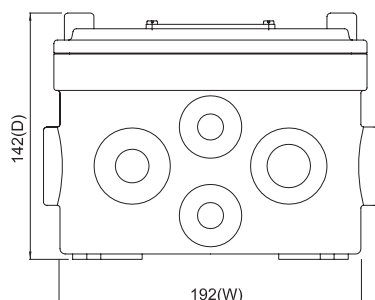
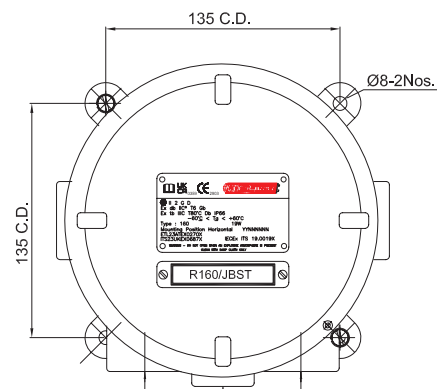
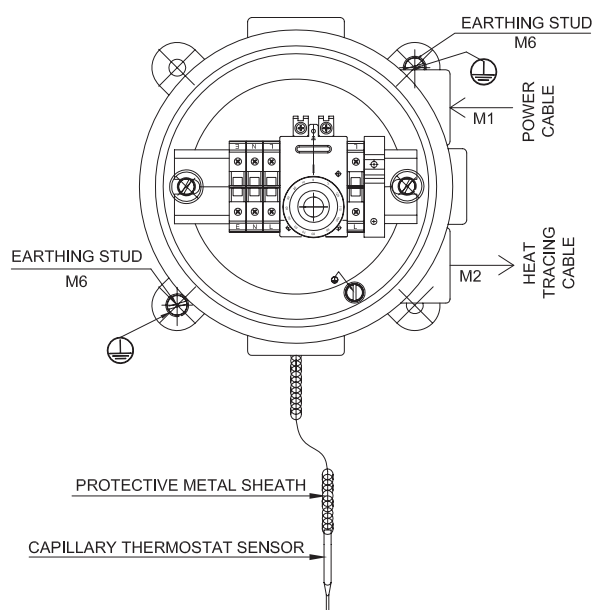
Close open holes using stopping plugs approved for required type of protection.

ACCESSORIES:

Heat Trace Ltd supply a complete range of accessories including termination/splice kits, endseals, junction boxes and controls.

HEAT TRACING JUNCTION BOX WITH THERMOSTAT

PART NO. : R160/JBST



Description	Part number	Power cable size (mm ²)	Tightening torque (Nm)	Entry size for Power cable M1	Entry size for Heat tracing cable M2
Heat tracing junction box with thermostat	R160/JBST/10/120/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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