

Field Junction Box

(R100/FJB, R130/FJB, R160/FJB, R200/FJB)

Junction Box for Power Feed and upto three Heat Tracing Circuits.

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 a Exd solution.

This field junction box is used to distribute power throughout the site and to the various heating circuits. It allows a larger single phase feed to be split into three separate single phase feeds, closer to the circuits, to help reduce the amount of power cable used.

The field junction box can be provided in various R100 (100mm Dia), R130 (130mm Dia), R160 (160mm Dia) or R200 (200mm Dia), which can be configured / customised based on your requirements.

The junction box may be installed in safe areas, or Zone 1 or 2 hazardous areas. As standard, the enclosure is made of high grade, cast aluminium and painted with RAL 7035 paint. Other options of material for the construction of the enclosure and paint shade are available on request.



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: 4 off for power cables
Earthing: Internal and external earthing
Number of terminals: 7 off (1 R, 1 Y, 1 B, 2 Neutral & 2 Earth)

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 Din rail, terminal & accessories (terminal, end plate, stopper, shorting link, terminal marker whichever is 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 M8 x 12 stainless steel nut, bolt & washer set for mounting.
- Cable entry marking sticker.
- External earthing stud is fitted with PVC sleeved copper lug.
- Earthing sticker
- Instruction manual

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.

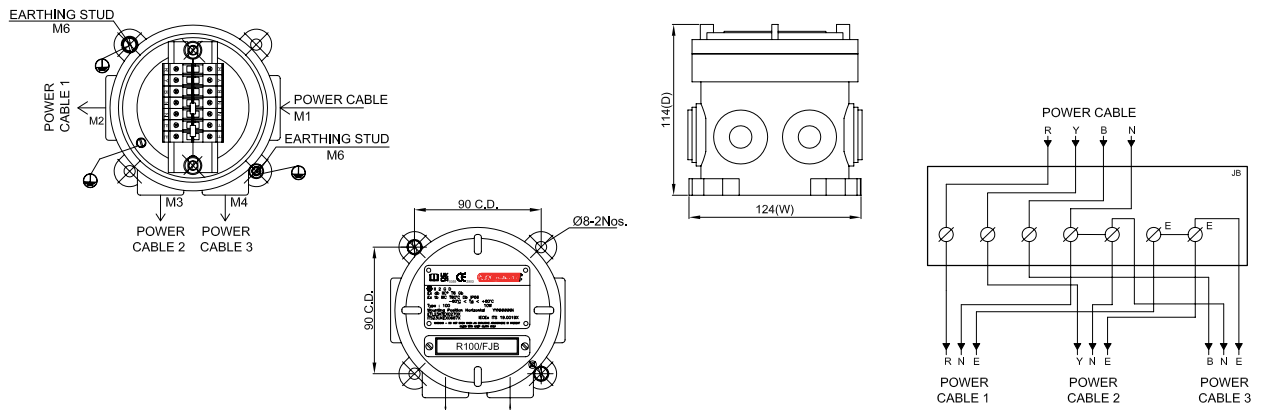
MORE CUSTOMISATION ON REQUEST:

Please ask for price and delivery for the options below:

- Paint shade other than RAL 7035 can be offered on request.
- Alternate terminal make or type.
- Enclosure stainless steel or cast iron.
- Installation accessories, cable gland for power cable, tracer gland, pipe mounting support bracket & pipe straps.

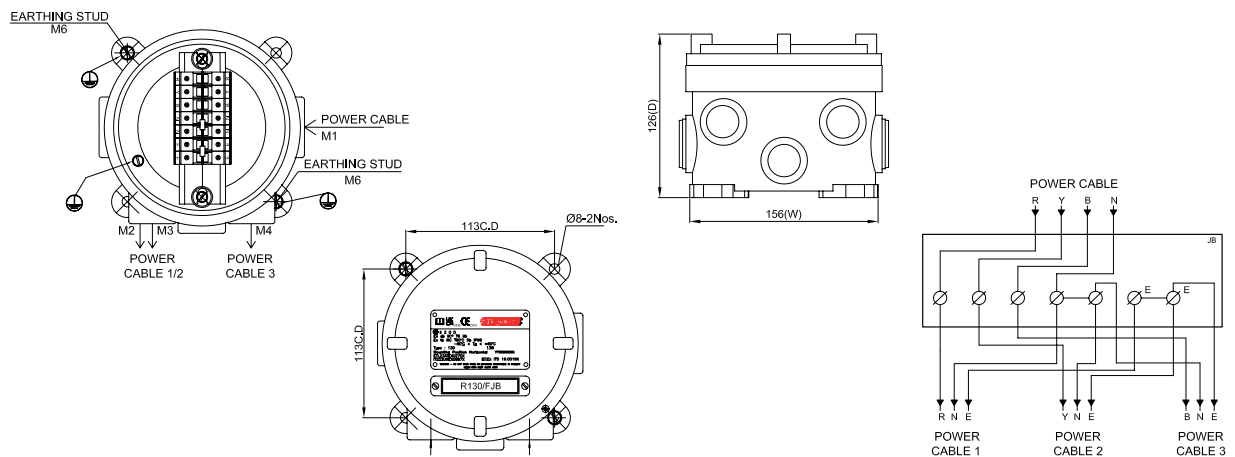
FIELD JUNCTION BOX

PART NO. : R100/FJB*



| S/N | Description | Part number* | Part cable size (mm) | Tightening torque (Nm) | Entry size for** power cable M1 | Entry size for** power cable M2/M3/M4 |
|-----|----------------|----------------|----------------------|------------------------|---------------------------------|---------------------------------------|
| 1 | | R100/FJB/2.5/A | 3C x 2.5 | 0.4 | M20 | M20 |
| 2 | Field junction | R100/FJBB/4/A | 3C x 4 | 0.5 | M20 | M20 |
| 3 | box | R100/FJB/6/A | 3C x 6 | 0.8 | M20 | M20 |

PART NO. : R130/FJB*



| S/N | Description | Part number* | Part cable size (mm) | Tightening torque (Nm) | Entry size for** power cable M1 | Entry size for** power cable M2/M3/M4 |
|-----|--------------------|---------------|----------------------|------------------------|---------------------------------|---------------------------------------|
| 1 | Field junction box | R130/FJB/10/A | 3C x 10 | 1.2 | M25 | M20/M25 |

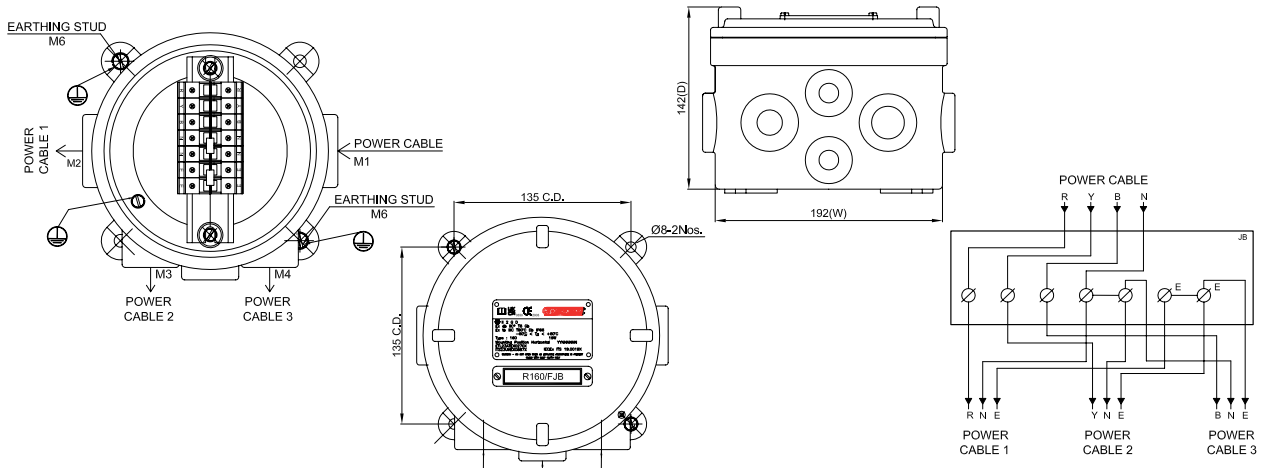
** Equivalent NPT entries can be provided on request.

Note: 1) All dimensions are in mm with tolerance of $\pm 5\%$.

2) External earthing stud is fitted with PVC sleeved copper lug.

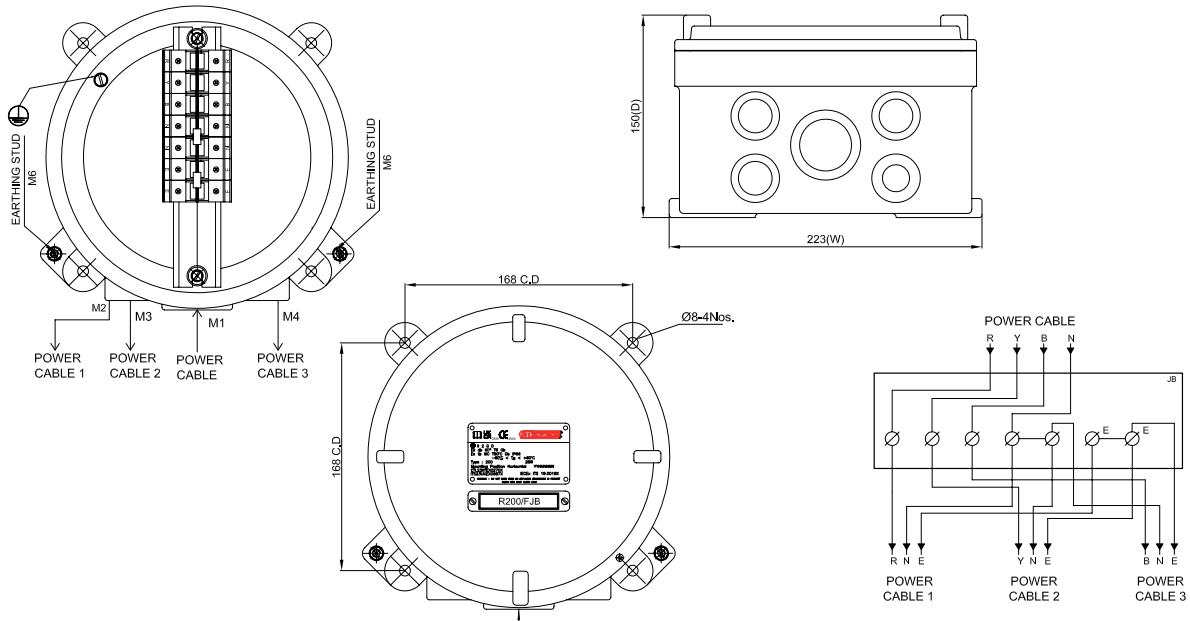
FIELD JUNCTION BOX

PART NO. : R160/FJB*



| S/N | Description | Part number* | Part cable size (mm) | Tightening torque (Nm) | Entry size for** power cable M1 | Entry size for** power cable M2/M3/M4 |
|-----|----------------|---------------|----------------------|------------------------|---------------------------------|---------------------------------------|
| 1 | Field junction | R160/FJB/16/A | 3C x 16 | 1.2 | M25 | M20/M25 |
| 2 | box | R160/FJB/25/A | 3C x 25 | 2 | M32 | M20/M25/M32 |

PART NO. : R200/FJB*



| S/N | Description | Part number* | Part cable size (mm) | Tightening torque (Nm) | Entry size for** power cable M1 | Entry size for** power cable M2/M3/M4 |
|-----|----------------|---------------|----------------------|------------------------|---------------------------------|---------------------------------------|
| 1 | Field junction | R200/FJB/25/A | 3C x 25 | 2 | M32 | M20/M25/M32 |
| 2 | box | R200/FJB/35/A | 3C x 35 | 2.5 | M32 | M20/M25/M32 |

** Equivalent NPT entries can be provided on request.

Note: 1) All dimensions are in mm with tolerance of $\pm 5\%$.

2) External earthing stud is fitted with PVC sleeved copper lug.



Heat Trace Ltd, Mere's Edge, Chester Road, Helsby, Frodsham, Cheshire, WA6 0DJ, England.

Tel: +44 (0)1928 726451

www.heat-trace.com

Email: info@heat-trace.com

The information given herein, including drawings, illustrations and schematics are intended for illustration purposes only. Heat Trace Ltd makes no warranties as to its accuracy or completeness and disclaims any liability in connection with its use. Users of Heat Trace Ltd products should make their own evaluation to determine the suitability of each such product for specific applications. In no way will Heat Trace Ltd be liable for any damages arising out of the misuse, resale or use of the product.