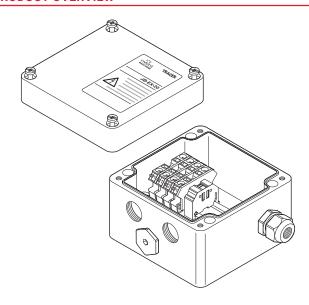
JB-EX-20 and JB-EX-20-EP



CONNECT AND PROTECT

Multi purpose junction box 🕸

PRODUCT OVERVIEW



Industrial junction box for use in hazardous areas with nVent RAYCHEM FMT, FHT and PI heating cables. This box can be used to make connections between power cables, heating cables and cold lead cables. Depending on the configuration of the system, the box can accommodate heating cables, cold leads and a power cable. nVent RAYCHEM M20 connection kits have to be ordered separately depending on the type of heating cable being used.

Cable connection is via DIN rail mounted Spring-type terminals to provide fast installation and safe, reliable, maintenance-free operation.

The box can be either wall or pipe mounted via the four holes moulded in the base of the box. For pipe mounting, use one of the standard support brackets.

Typical use

| JB-EX-20 | JB-EX-20-EP |
|---|-------------|
| Power supply box for series heating cables (PI) and constant wattage parallel heating cables (FMT & FHT) or end box (star) for series heating cables (PI), when using M20 connection kits | |

Entries

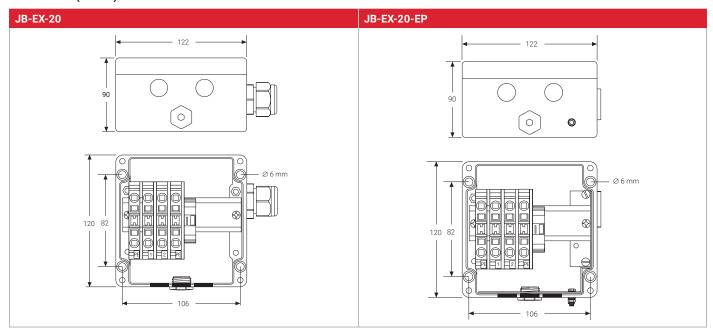
| 3 x M20 | 3 x M20 |
|---------|---------|
| 1 x M25 | 1 x M25 |

Kit contents

| Junction box with spring-type terminals on DIN rail | Junction box with spring-type terminals on DIN rail, earthing plate and an external earth stud |
|--|--|
| 1 x M20 stopping plug | 1 x M20 stopping plug |
| 2 x M20 rain plugs (temporary) | 2 x M20 rain plugs (temporary) |
| 1 x M25 Hazardous area approved cable gland for power cables with Ø of 8-15 mm | 1 x M25 rain plug (temporary) |
| 1 x terminal jumper allowing various wiring configurations (remove terminal plate) | |

RAYCHEM-DS-EU1400-JBEX20EP-EN-2210 nVent.com/RAYCHEM | 1

Dimensions (in mm)



Materials of construction

| | JB-EX-20 | JB-EX-20-EP |
|-------------------|---|---|
| Box & lid | Electrostatic charge-resistant glass- filled engineered polymer, black | Electrostatic charge-resistant glass-filled engineered polymer, black |
| Sealing gasket | Silicone rubber | Silicone rubber |
| Lid fixing screws | Stainless steel (captive) | Stainless steel (captive) |
| Earthing plate | N.A. | Steel, zinc plated and blue chromated |

Technical details

| Ingress protection | IP66 | IP66 |
|---------------------------|---------------------------|---------------------------|
| Ambient temperature range | -55°C to +55°C | −55°C to +55°C |
| Terminals | | |
| Quantity | 4 pcs, spring-type | 4 pcs, spring-type |
| Labeling | 1, 2 + 2 x PE | 1, 2 + 2 x PE |
| Maximum conductor size | 10 mm² (solid & stranded) | 10 mm² (solid & stranded) |
| Maximum operating voltage | 590 Vac | 590 Vac |
| Maximum operating current | 53 A | 53 A |

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APPROVALS

For use in ordinary and hazardous area Zone 1 and Zone 2 (Gas), Zone 21 and Zone 22 (Dust)

Temperature classification

Т6

Product certification











More details about product certification, approvals and conditions of safe use are available in the installation manual at www.nVent.com/RAYCHEM.

ORDERING INFORMATION

| Order reference | JB-EX-20 | JB-EX-20-EP |
|----------------------|----------------------|--------------------|
| Part number (Weight) | 1244-000590 (0.9 kg) | 1244-006384 (1 kg) |

Accessories (to be ordered separately)

| | JB-EX-20 | JB-EX-20-EP |
|---|---|---|
| Support bracket | SB-100, SB-101, SB-110, SB-111 | SB-100, SB-101, SB-110, SB-111 |
| Power cable gland | GL-55-M25 (included) up to -55°C, 8-15 mm | GL-38-M25-METAL (optional) up to -60°C, inner diam. 10-13.5 mm, outer diam. 13.5-21 mm |
| Loose terminals (*) | Phase/neutral terminal: HWA-WAGO-PHA Earth terminal: HWA-WAGO-EAR End plate: HWA-WAGO-END Terminal jumper: HWA-WAGO-JUM | TH PLATE |
| Connection kit for FMT and FHT heating cables | C20-01-F hot applied connection kit with plastic gland | C20-02-F cold applied connection kit with metal gland |
| Insulation entry kit for FMT and FHT heating cables | IEK-25-04 or IEK-25-PIPE | IEK-25-04 or IEK-25-PIPE |
| Gland for PI cold leads | C20-PI-PA-KIT Hazardous area approved gland, PA, up to -40°C | C20-PI-M0-KIT Hazardous area approved gland, Ni plated brass, up to -55°C (to be used with boxes with integral earth plate or with earth lug) |
| Insulation entry kit for PI cold leads | IEK-20-PI | IEK-20-PI |
| Gland for MI cold leads | Contact nVent or refer to DOC-606 | Contact nVent or refer to DOC-606 |
| Stopping plug | HWA-PLUG-M20-EXE-PLASTIC | HWA-PLUG-M20-EXE-PLASTIC |

^(*) in total no more than 6 terminals of this type should be installed.

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