

Junction Boxes for Series-Resistance Heating Cables Connection

Junction boxes are designed for connecting of series-resistance heating cables, such as SNF[®], to power network.

Boxes' models are designed for installation onto a wall, onto a nearby metal structure or using a bracket directly onto the pipeline (brackets supplied separately).

The enclosure properties ensures moisture and dust ingress protection IP66 and high corrosion stability.

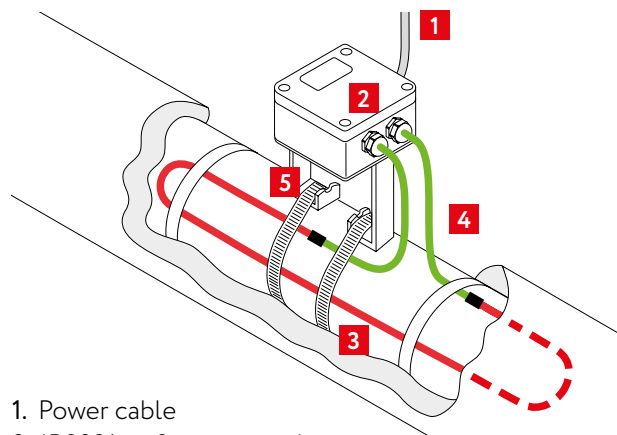
Cable glands of the box are intended for connecting unarmored power cables with a diameter of 7 to 18 mm or armored power cables with a diameter of 12 to 20 mm.

The installed terminal blocks allow the connection of multi-core or single-core wires with a cross-section of 1.5 to 10 mm² (JB2221-223 models) or up to 16 mm² (JB2221-333, JB2221-533 models). Design options with screw or push-in terminals are available to order.

Features and Application Areas

- Efficient solution for power supply and input of SNF series-resistance heating cables
- Designed for loop, star and delta connection
- Excludes the risk of damage to heating cables at connection points
- Critical component parts are included in the scope of supply. Metal pipe strap PFS/3, cable entry unit
- Approved for installation in explosion hazard areas

- Wide application range
- Quick and easy installation
- High thermal stability
- Non-corrosive



1. Power cable
2. JB2221-...-2... junction box
3. Heating cable
4. Connection cable (cold lead)
5. Bracket

Application Types

JB2221-223 – Loop to power connection

JB2221-333 – Star to power connection

JB2221-533 – Delta to power connection

[°] The junction boxes are compatible with all types of series resistance heating cables

Power Supply of Series-Resistance Heating Cables

Technical Data

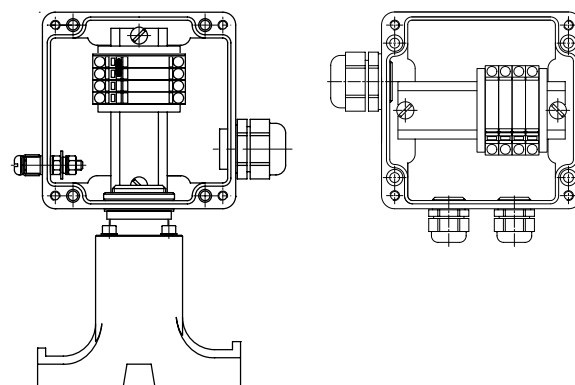
Dust and moisture protection rating	IP66	
Explosion protection marking	Ex eb IIC T6...T3 Gb Ex tb IIIC T85°C... T165°C Db	
Temperature group of the explosion hazard area	T6	
Operating ambient temperature range	-60...+55 °C	
Operating voltage	JB2221-223	max 550 V
	JB2221-333, JB2221-533	max 750 V
Operating current	JB2221-223	max 50 A
	JB2221-333, JB2221-533	max 66 A
Enclosure dimensions	JB2221-223	122×120×91.5 mm
	JB2221-333	160×160×94.5 mm
	JB2221-533	260×160×90 mm
Total weight (maximum)	JB2221-223	1.35 kg
	JB2221-333	2.26 kg
	JB2221-533	2.30 kg
Material Box / Color	Glass fiber reinforced polyester / Black	

Approvals



CETS 23 ATEX 029X
II 2 G Ex eb IIC T6 ... T3 Gb
II 2D Ex tb IIIC T85°C ... T165°C Db

Construction



Quantity of terminals and placement of DIN-rail with terminal block could differ from drawings.

Accessories (to be ordered separately)

Brackets PB, KP, PL.JB0606 – for mounting the box onto the pipeline.

Z-profile – for mounting the box onto a metal structure or onto a wall.

Metal pipe strap PFS/3 – for mounting the pipe support stand or bracket onto the pipeline.

Cable entry unit LEK/U – for penetrating of thermal insulation.

PREMIUM

Delivery Set

Model	Box enclosure	Cable glands and plugs (P=plastic; B=brass)						A C D B		Earthing tag	Terminated earthing wire	Pipe installation support	Terminal block	Type of terminals	Order code
		Side A		Side B		Side C		Side D							
		Cable gland	Screw plug	Cable gland	Screw plug	Cable gland	Screw plug	Cable gland	Screw plug						
JB2221-223-1X18°	V								1xM25 P	V	V	V	2L,1N,2PE / 1L,1N,2PE	screw/spring	3210102400
JB2221-223-1X19	V							1xM25 B		V	V	V			3210102401
JB2221-223-1X20	V							1xM25 P		V	V	V			3210102402
JB2221-333-1X20	V								1xM32 P	V	V	V	2L,1N,2PE/ 3L,2N,3PE		3210102403
JB2221-333-1X21	V							1xM32 B		V	V	V			3210102404
JB2221-333-1X22	V							1xM32 P		V	V	V			3210102405
JB2221-223-2X380	V			2xM20 P		1xM25 P							1L,1N,2PE		3210102406
JB2221-333-2X380	V			3xM20 P		1xM25 P							3L,3N,2PE		3210102407
JB2221-533-2X130	V			6xM20 P		1xM25 P							7L, 6PE		3210102408

Order codes are valid for junction boxes with push-in terminal block.
Additional junction box configurations are available upon request.

° X = 1 for screw type terminal block; X=2 for push-in type terminal block