

Junction Boxes for Light Indication and Connection of Heating Cables to Power Supply

Junction boxes for light indication are designed to indicate the availability of power for heating sections based on self-regulating electric heating cables* and is intended for connecting heating cables to power network.

For installation onto a wall, onto a nearby metal structure or using a bracket directly onto the pipeline (brackets supplied separately).

Boxes JB2221-223 – allow connecting of one self-regulating heating cable to the power cable or two cables if the box is used for splicing.

Boxes JB2221-333 – allow connection to the power cable of up to three self-regulating heating cables with screw terminal straps and up to two – with push-in terminals.

The enclosure design 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. Design options with screw or push-in terminals are available to order.

A light indicator with a super bright LED signals voltage at the heating section termination.

The green LED has a long service life and has a 180° angle view, including in direct sunlight.

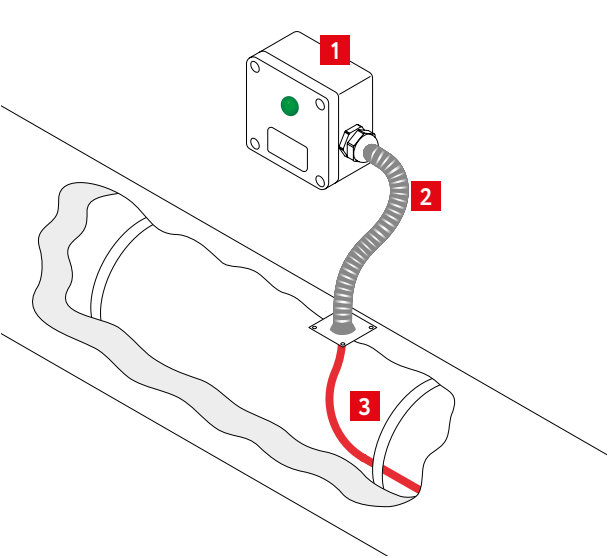
Features and Application

- Provides light indication of power voltage presence at the end of heating cable section and connection of cables to power network
- Compatible with all types of self-regulating electric heating cables
- High mechanical strength
- Critical component parts are included in the scope of supply. Metal pipe strap PFS/3, cable entry unit.
- Wide application range
- Quick and easy installation
- High thermal stability
- Non-corrosive
- Approved for installation in explosion hazard areas

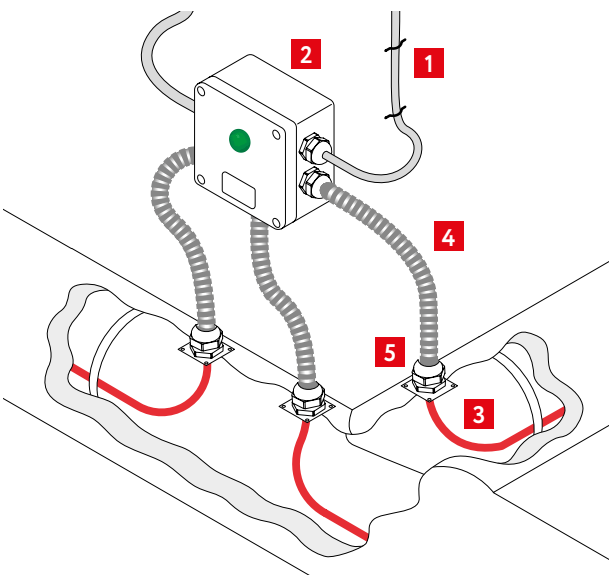


* This junction box is compatible with self-regulating heating cables.

Light Indication of Voltage Presence and Power Supply of Self-Regulating Heating Cables



- 1. Junction box JB2221-223-2X(27-31)
- 2. Mechanical cable protection
- 3. Heating cable



- 1. Power cable
- 2. Junction box JB2221-333-2X(27-33)
- 3. Heating cable
- 4. Mechanical cable protection
- 5. Cable entry unit

Technical Data

Dust and moisture protection rating	IP66
Explosion protection marking	Ex db 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	max 550 V
Operating current	max 50 A
Electric life of the LED	>10 ⁵ hours
LED power intake	<1 W
Light source	green LED
View angle	180°
Enclosure dimensions	JB2221-223 122×120×91.5 mm JB2221-333 160×160×94.5 mm
Total weight (maximum)	JB2221-223 1.55 kg JB2221-333 2.44 kg
Material Box / Color	Glass fiber reinforced polyester / Black

Accessories (to be ordered separately)

Connection kit for self-regulating heating cables is specified depending on the type of cable used.

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

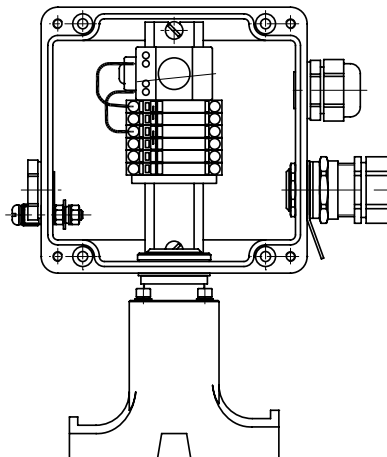
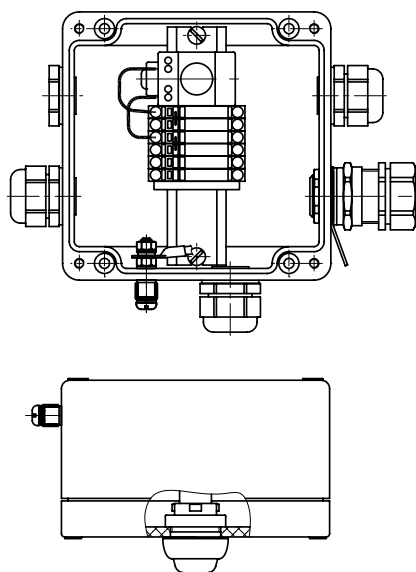
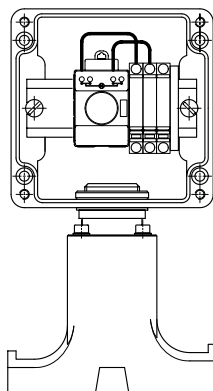
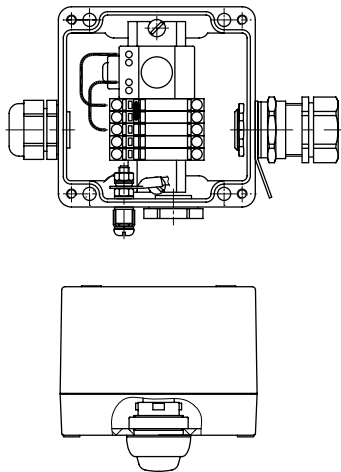
Z-profile – for mounting the box onto a metal structure or onto a wall.

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

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

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Construction



Boxes JB2221-223 (left) and JB2221-333 (right) with push-in terminals. Quantity, type of terminals and placement of DIN-rail with terminal block could differ from drawings.

PREMIUM

Light Indication of Voltage Presence and Power Supply of Self-Regulating Heating Cables

Delivery Set

Model	Box enclosure	Cable glands and plugs (P=plastic; B=brass)								Earth- ing tag	Termi- nated earth- ing wire	Pipe instal- lation support	Terminal block	Type of terminals	Light Indica- tor	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							
JB2221-223-1X320*	V											V	1L,1N,1PE	screw/ spring	V	3210102200
JB2221-223-1X21	V						1xM25 P			V	V	V			V	3210102201
JB2221-223-1X22	V					1xM25 B				V	V	V	1L,1N,1PE / 2L,1N,2PE		V	3210102202
JB2221-223-1X23	V					1xM25 P				V	V	V			V	3210102203
JB2221-223-2X27	V			1xM25 P						V	V				V	3210102204
JB2221-223-2X28	V				1xM25 P	1xM25 P		1xM25 P		V	V		1L,1N,1PE / 2L,1N,2PE		V	3210102205
JB2221-223-2X29	V			1xM25 P		1xM25 P		1xM25 P		V	V				V	3210102206
JB2221-223-2X30	V				1xM25 P	1xM25 B		1xM25 P		V	V				V	3210102207
JB2221-223-2X31	V			1xM25 P		1xM25 B		1xM25 P		V	V				V	3210102208
JB2221-333-1X23	V					1xM25 P			2xM25 P	V	V	V	2L,2N,2PE		V	3210102209
JB2221-333-1X24	V					1xM25 P		1xM25 P	1xM25 P	V	V	V			V	3210102210
JB2221-333-1X25	V					1xM25 P		2xM25 P		V	V	V			V	3210102211
JB2221-333-1X26	V					1xM25 B			2xM25 P	V	V	V			V	3210102212
JB2221-333-1X27	V					1xM25 B		1xM25 B	1xM25 P	V	V	V			V	3210102213
JB2221-333-1X28	V					1xM25 B		1xM25 P	1xM25 P	V	V	V			V	3210102214
JB2221-333-1X29	V					1xM25 B		2xM25 P		V	V	V			V	3210102215
JB2221-333-1X30	V					1xM25 B		1xM25 B 1xM25 P		V	V	V			V	3210102216
JB2221-333-2X27	V				1xM25 P	2xM25 P		2xM25 P		V	V				V	3210102217
JB2221-333-2X28	V			1xM25 P		2xM25 P		2xM25 P		V	V				V	3210102218
JB2221-333-2X29	V			1xM25 P		1xM25 B	1xM25 P	2xM25 P		V	V				V	3210102219
JB2221-333-2X30	V			1xM25 P		1xM25 B 1xM25 P		1xM25 P		V	V				V	3210102220
JB2221-333-2X31	V				1xM25 P	1xM25 B	1xM25 P	1xM25 B 1xM25 P		V	V				V	3210102221
JB2221-333-2X32	V				1xM25 P	1xM25 B 1xM25 P		1xM25 B 1xM25 P		V	V				V	3210102222
JB2221-333-2X33	V			1xM25 P		1xM25 B 1xM25 P		1xM25 B 1xM25 P		V	V				V	3210102223

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

Order codes are valid for junction boxes with push-in terminal block.

Additional junction box configurations are available upon request.

Approvals



CETS 23 ATEX 029X

II 2 G Ex db eb IIC T6 ... T3 Gb

II 2D Ex tb IIIC T85°C ... T165°C Db

