# Junction Boxes for Three-Phase Series-Resistance Heating Cables Connection

Boxes JB2221-544-21(60-64) and JB2221-544-2165 allow to connect heating sections based on a three-phase series-resistance heating cable with each other and with a power cable in explosion hazard areas.

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

The box can be mounted onto a nearby metal structure or using a bracket directly onto the pipeline. Depending on the purpose, the boxes are classified into power connecting boxes (for connecting the heating section to a source of power), maintenance boxes (for connecting two strings of the heating section) and terminal boxes (for connecting the heating section at the heating stretch termination).

The cable gland of the box JB2221-544-21(60-64) is intended for connecting armored cable with a diameter of 23.5 to 33.6 mm. The box allows the connection of one section using the star or loop configuration. For conveniently connecting heating sections and power cables and orienting the box at the connection point, the box has an opening on each side sealed by a plug. JB2221-544-2165 is intended for connecting armored cable with a diameter from 17 to 26.3 mm. The box allows connection of one section using the star configuration.

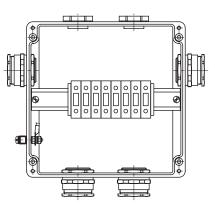
The installed terminal blocks allow the connection of multi-core or single-core wires with a cross-section of 2.5 to 35 mm<sup>2</sup>.

## Features and Application Areas

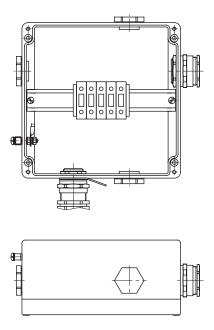
- Efficient solution for power supply to three-phase series-resistance heating cable LLS
- Approved for installation in explosion hazard areas
- Critical component parts are included in the scope of supply. Flexible sealed gland FSG to be ordered separately
- Wide application range
- Quick and easy installation
- High thermal stability
- Non-corrosive

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### Construction



Junction box JB2221-544-21(63,64)



Junction box JB2221-544-21(60-62), JB2221-544-2165

# Power Supply of Three-Phase Series-Resistance Heating Cables

### **Technical Data**

Dust and moisture protection rating	IP66				
Explosion protection marking	Ex eb IIC T6T3 Gb Ex tb IIIC T85°C T165°C Db				
Temperature group of the explosion hazard area	Т6				
Operating ambient temperature range	-60+55 °C				
Operating voltage	max 750 V				
Operating current	max 109 A				
Enclosure dimensions	250×255×120 mm				
Total weight (maximum) JB2221-544-21(60-64) JB2221-544-2165	5.7 kg 4.8 kg				
Material box	Glass fiber reinforced polyester				
Color	Black				

# Accessories (to be ordered separately)

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

Plate PL.JB 1007 and bracket K.JB 10.YYY×ZZZ – for mounting the box onto the pipeline.

Flexible sealed gland FSG – for mechanical protection of cables in open space sets.

# **Delivery Set**

Model	Cable glands and plugs (P=plastic; B=brass)						A D		Earthing	Terminated earthing	Terminal	Type of terminals	Order code
	Side A		Sid	Side B Side C		e C	Side D		tag	wire	block	terminals	
	Cable gland	Screw plug	Cable gland	Screw plug	Cable gland	Screw plug	Cable gland	Screw plug					
JB2221-544-2160		1xM40 P	1xM40 B	1xM40 P		1xM40 P	1xM40 P		V	V	3L,2PE		3210002700
JB2221-544-2161				1xM40 P	1xM40 P				V	V			3210002701
JB2221-544-2162				1xM40 P	1xM40 P		1xM40 P	1xM40 P	V	V			3210002702
JB2221-544-2163		1xM40 P		1xM40 P	2xM40 P				V	V	6L,6PE	screw	3210002703
JB2221-544-2164		2xM40 P		2xM40 P	1xM40 P		1xM40 P		V	V			3210002704
JB2221-544-2165		1xM40 P	1xM32 B	1xM40 P		1xM40 P	1xM40 P		V	V	3L,2PE		3210002705

Additional junction box configurations are available upon request.

### **Approvals**





<sup>\*</sup> Certification is underway

Nº IECEx CCVE 18.0006X