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# EXPLOSION PROOF FINNED TUBE HEATERS - TYPE ERB D-8500

The electric finned tube heater type ERB has been designed to heat up rooms where a potentially explosive atmosphere can arise from handling inflammable gases, vapours and liquids. Confined spaces like hazardous material storage containers, paint rooms, on drilling platforms and for chemical and petrochemical plants. It can also be used for heating control cabinets in order to prevent condensation in switchboards, control panels and instrument panels.

### DESIGN

The ERB explosion proof finned tube heater is built up of a flameproof enclosure together with a tube provided with fins and welded to the enclosure. The heating element consists of stacked closed ceramic parts in which the resistance wire is placed. The finned tube heater is finished with a grey epoxy coating.

It does not have a temperature regulator of its own. The finned tube heater has been designed to have stabilized heat-transfer between the heating element and the amibent air while being energized at its rated voltage and with an amibent temperature up to the maximum allowable value of  $40^{\circ}$ C.

The heat density  $(W/cm^2)$  is determined in such a way that during normal operation the surface temperatures of the heater remain below the applicable temperature class T<sub>3</sub>, 200°C or T<sub>4</sub> 135°C.

### **TECHNICAL DATA**

- Steel flameproof construction
- Grey epoxy coating
- IP66
- 230V (other voltages on request)
- Ambient temperature range: -30°C to +40°C

# MARKING

- EN-IEC-60079-1 Ex II 2G Ex db IIC T3/T4 Gb
- EN-IEC-60079-31 Ex II 2D Ex tb IIIC T200°C/T135°C Db

#### **INSTALLATION**

The heater has two supports for horizontal floor or wall mounting. Please note the heater must not be covered when it is heating up. There must be clearance of a minimum of 90 cm above the heater. The ambient temperature must not exceed 40°C in order to maintain temperature class T<sub>3</sub> or T<sub>4</sub> respectively. The electrical connection of the appliance has to be made using cable entries of a certified flameproof type.

#### STANDARD SORTIMENT

Type Item no.		Temperature- class	Lenght (A)*	Power
ERB-5	98300114	Т3	650mm	400W
ERB-7	98300130	Т3	850mm	500W
ERB-10	98300163	Т3	1150mm	750W
ERB-13	98300197	Т3	1450mm	1000W
ERB-19	98300254	Т3	2050mm	1520W
ERB-25	98300312*	Т3	2650mm	2000W
ERB-30	98300361	Т3	3150mm	2400W
Туре	Item no	Temperture-	Lenght	Power

		class	(A)*	
ERB-5	98300395	T4	650mm	230W
ERB-7	98300411	T4	850mm	320W
ERB-10	98300445	T4	1150mm	460W
ERB-13	98300478	T4	1450mm	600W
ERB-19	98300536	T4	2050mm	880W
ERB-25	98300593	T4	2650mm	1160W
ERB-30	98300643	T4	3150mm	1400W

\*See drawing with measurement at page 2

**OPTIONS** 

Thermostat and selection of cable glands - see page 3





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# EXPLOSION PROOF FINNED TUBE HEATERS - TYPE ERB D-8505

We have developed a variant of our standard explosion proof finned tube heater ERB for use in **corrosive** environments such as platforms and chemical, petrochemical and offshore plants.

## **TECHNICAL DATA**

- Completely constructed of stainless steel AISI 316
- Flameproof construction
- IP66
- 23oV (other voltages on request)
- Ambient temperature range: -30°C to +40°C

#### MARKING

- EN-IEC-60079-1 Ex II 2G Ex db IIC T3/T4 Gb
- EN-IEC-60079-31 Ex II 2D Ex tb IIIC T200°C/T135°C Db

## **INSTALLATION**

The heater has two supports for horizontal floor or wall mounting. Please note the heater must not be covered when it is heating up. There must be clearance of a minimum of 90 cm above the heater. The ambient temperature must not exceed  $40^{\circ}$ C in order to maintain temperature class T<sub>3</sub> or T<sub>4</sub> respectively. The electrical connection of the appliance has to be made using cable entries of a certified flameproof type.

#### **STANDARD SORTIMENT**

Туре	ltem no.	Temperature- class	•	
ERB-5	98300668	Т3	650mm	300W
ERB-7	98300684	Т3	850mm	450W
ERB-10	98300718	Т3	1150mm	675W
ERB-13	98300742	Т3	1450mm	930W
ERB-19	98300817	Т3	2050mm	1520W
ERB-25	98300874	Т3	2650mm	2000W
ERB-30	98300924	Т3	3150mm	2400W
Туре	ltem no.	Temperature	Lenght	Power
Туре	ltem no.	Temperature class	Lenght (A)	Power
<b>Type</b> ERB-5	<b>Item no.</b> 98300940		•	Power 150W
		class	(A)	
ERB-5	98300940	class T4	<b>(A)</b> 650mm	150W
ERB-5 ERB-7	98300940 98300965	class T4 T4	<b>(A)</b> 650mm 850mm	150W 230W
ERB-5 ERB-7 ERB-10	98300940 98300965 98300999	class T4 T4 T4	( <b>A</b> ) 650mm 850mm 1150mm	150W 230W 350W
ERB-5 ERB-7 ERB-10 ERB-13	98300940 98300965 98300999 98301252	<b>class</b> T4 T4 T4 T4 T4	(A) 650mm 850mm 1150mm 1450mm	150W 230W 350W 470W
ERB-5 ERB-7 ERB-10 ERB-13 ERB-19	98300940 98300965 98300999 98301252 98301310	<b>class</b> T4 T4 T4 T4 T4 T4	(A) 650mm 850mm 1150mm 1450mm 2050mm	150W 230W 350W 470W 700W

## **OPTIONS**

Thermostat and selection of cable glands - see page 3





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# **CABLE GLANDS**

Standard range of cable glands for ERB explosion proof finned tube heaters:

Item no.	Туре	Size Ref.	Metric	Material	Info
11021252	501-453	0	M20	Ex brass cable gland	for armoured cable
11021393	501-453	0	M20	Ex stainless steel cable gland	for armoured cable
11023004	ICG 653	0	M20	Ex brass cable gland	for armoured cable
11023005	ICG 653	0	M20	Ex stainless steel cable gland	for armoured cable
11023001	501-421	0	M20	Ex brass cable gland	for unarmoured cable
11023003	501-421	0	M20	Ex stainless steel cable gland	for unarmoured cable
11023006	ICG 623	0	M20	Ex brass cable gland	for unarmoured cable
11023007	ICG 623	0	M20	Ex stainless steel cable gland	for unarmoured cable



11023004



11021252





11023006

11023001

For further information and technical datasheet of the cable glands, please see the individually cable gland datasheet.

## EXPLOSION PROOF ROOM THERMOSTAT TYPE ERT-10

Hazardous area thermostat type ERT-10 is suitable for direct control of ERB - explosion proof finned tube heater. The ERT-10 surface mounted thermostat stands for reliable temperature control, even under extreme conditions. A convenient view window enables you to see the adjustable set point of the thermostat without removing the lid. The (outside) construction and enclosure of the thermostat comply with increased safety (Ex 'e') requirements and enable usage of 'simple' (Ex 'e') cable glands. Two cable glands are available for both incoming and outgoing cable. Maximum 16A / 230 VAC load can be switched by the single pole (double throw) potential free thermostat contact. The adjustable temperature range is -20°C up to +40°C and the admissible ambient temperature is  $-40^{\circ}$ C up to  $+40^{\circ}$ C. The (outside) IP65 enclosure is made of reinforced polyester, making it suitable for placement in harsh environments. Its Ex approvals apply to explosive gas atmospheres (zone 1 and 2) or dust atmospheres (zone 21 and 22).

