

# 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 ambient air while being energized at its rated voltage and with an ambient temperature up to the maximum allowable value of 40°C.

The heat density (W/cm<sup>2</sup>) 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 T<sub>3</sub>/T<sub>4</sub> Gb
- EN-IEC-60079-31 Ex II 2D Ex tb IIIC T<sub>200</sub>°C/T<sub>135</sub>°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.

## CABLE GLAND

Cable gland has to be ordered separately. See our range of cable glands on page 5.

## THERMOSTAT

The ERB explosion proof finned tube heater can be regulated by an explosion proof thermostat. We recommend ERT-10. Read more about ERT-10 on page 5.

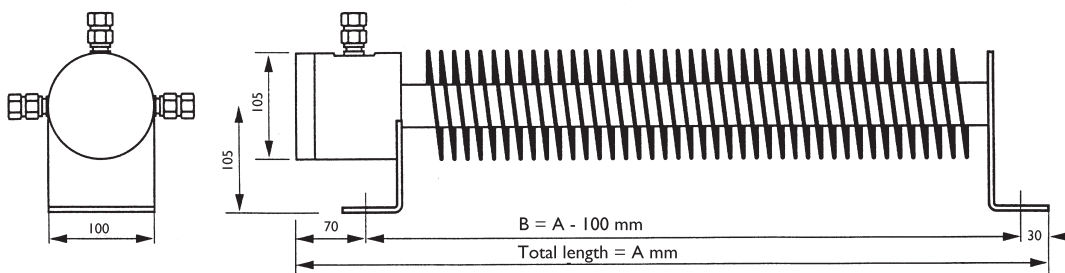




Type ERB D-8500, EN IEC 60079-1/EN IEC 60079-31 Ex II 2 G Ex db IIC T<sub>3</sub>/T<sub>4</sub> Gb / Ex II 2 D Ex tb IIC T<sub>135</sub>°C...T<sub>200</sub>°C Db. IP66

Type	Item no.	Temperature class	Length (A)	Power	Type	Item no.	Temperature class	Length (A)	Power
ERB-3	98300007	T3	450mm	250W	ERB-3	98300379	T4	450mm	140W
ERB-4	98300106	T3	550mm	325W	ERB-4	98300387	T4	550mm	180W
ERB-5	98300114*	T3	650mm	400W	ERB-5	98300395	T4	650mm	230W
ERB-6	98300122	T3	750mm	450W	ERB-6	98300403	T4	750mm	280W
ERB-7	98300130*	T3	850mm	500W	ERB-7	98300411	T4	850mm	320W
ERB-8	98300148	T3	950mm	600W	ERB-8	98300429	T4	950mm	370W
ERB-9	98300155	T3	1,050mm	700W	ERB-9	98300437	T4	1,050mm	420W
ERB-10	98300163*	T3	1,150mm	750W	ERB-10	98300445	T4	1,150mm	460W
ERB-11	98300171	T3	1,250mm	800W	ERB-11	98300452	T4	1,250mm	510W
ERB-12	98300189	T3	1,350mm	900W	ERB-12	98300460	T4	1,350mm	560W
ERB-13	98300197*	T3	1,450mm	1000W	ERB-13	98300478	T4	1,450mm	600W
ERB-14	98300205	T3	1,550mm	1100W	ERB-14	98300486	T4	1,550mm	650W
ERB-15	98300213	T3	1,650mm	1200W	ERB-15	98300494	T4	1,650mm	700W
ERB-16	98300221	T3	1,750mm	1280W	ERB-16	98300502	T4	1,750mm	740W
ERB-17	98300239	T3	1,850mm	1360W	ERB-17	98300510	T4	1,850mm	790W
ERB-18	98300247	T3	1,950mm	1440W	ERB-18	98300528	T4	1,950mm	840W
ERB-19	98300254*	T3	2,050mm	1520W	ERB-19	98300536	T4	2,050mm	880W
ERB-20	98300262	T3	2,150mm	1600W	ERB-20	98300544	T4	2,150mm	930W
ERB-21	98300270	T3	2,250mm	1680W	ERB-21	98300551	T4	2,250mm	980W
ERB-22	98300288	T3	2,350mm	1760W	ERB-22	98300569	T4	2,350mm	1020W
ERB-23	98300296	T3	2,450mm	1840W	ERB-23	98300577	T4	2,450mm	1070W
ERB-24	98300304	T3	2,550mm	1920W	ERB-24	98300585	T4	2,550mm	1120W
ERB-25	98300312*	T3	2,650mm	2000W	ERB-25	98300593	T4	2,650mm	1160W
ERB-26	98300320	T3	2,750mm	2080W	ERB-26	98300601	T4	2,750mm	1210W
ERB-27	98300338	T3	2,850mm	2160W	ERB-27	98300619	T4	2,850mm	1260W
ERB-28	98300346	T3	2,950mm	2240W	ERB-28	98300627	T4	2,950mm	1300W
ERB-29	98300353	T3	3,050mm	2320W	ERB-29	98300635	T4	3,050mm	1350W
ERB-30	98300361	T3	3,150mm	2400W	ERB-30	98300643	T4	3,150mm	1400W

\* Stock items





# 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
- 230V (other voltages on request)
- Ambient temperature range: -30°C to +40°C

## MARKING

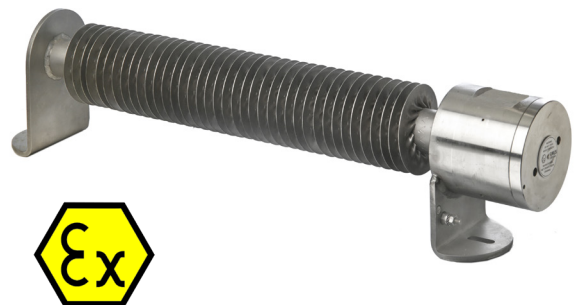
- EN-IEC-60079-1 Ex II 2G Ex db IIC T<sub>3</sub>/T<sub>4</sub> Gb
- EN-IEC-60079-31 Ex II 2D Ex tb IIIC T<sub>200</sub>°C/T<sub>135</sub>°C Db

## 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.

## CABLE GLAND

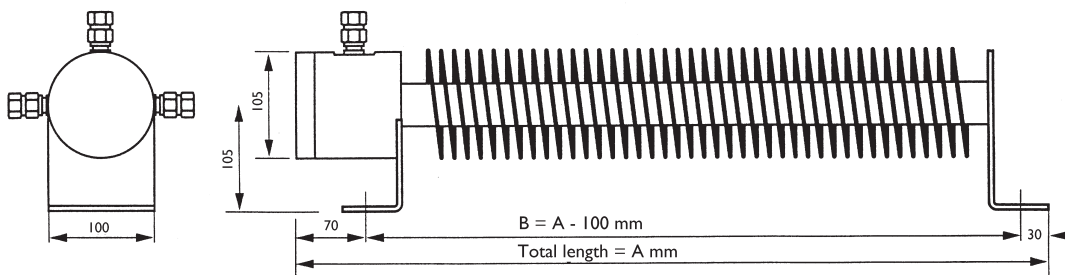
Cable gland has to be ordered separately. See our range of cable glands on page 5.





Type ERB D-8505, EN IEC 60079-1/EN IEC 60079-31 Ex II 2 G Ex db IIC T<sub>3</sub>/T<sub>4</sub> Gb / Ex II 2 D Ex tb IIC T<sub>135</sub>°C...T<sub>200</sub>°C Db. IP66

Type	Item no.	Temperature class	Length (A)	Power	Type	Item no.	Temperature class	Length (A)	Power
ERB-4	98300650	T3	550mm	225W	ERB-4	98300932	T4	550mm	110W
ERB-5	98300668	T3	650mm	300W	ERB-5	98300940	T4	650mm	150W
ERB-6	98300676	T3	750mm	375W	ERB-6	98300957	T4	750mm	190W
ERB-7	98300684	T3	850mm	450W	ERB-7	98300965	T4	850mm	230W
ERB-8	98300692	T3	950mm	525W	ERB-8	98300973	T4	950mm	270W
ERB-9	98300700	T3	1,050mm	600W	ERB-9	98300981	T4	1,050mm	310W
ERB-10	98300718	T3	1,150mm	675W	ERB-10	98300999	T4	1,150mm	350W
ERB-11	98300726	T3	1,250mm	750W	ERB-11	98301005	T4	1,250mm	390W
ERB-12	98300734	T3	1,350mm	840W	ERB-12	98301013	T4	1,350mm	430W
ERB-13	98300742	T3	1,450mm	930W	ERB-13	98301252	T4	1,450mm	470W
ERB-14	98300759	T3	1,550mm	1030W	ERB-14	98301260	T4	1,550mm	510W
ERB-15	98300767	T3	1,650mm	1140W	ERB-15	98301278	T4	1,650mm	540W
ERB-16	98300775	T3	1,750mm	1250W	ERB-16	98301286	T4	1,750mm	580W
ERB-17	98300783	T3	1,850mm	1350W	ERB-17	98301294	T4	1,850mm	620W
ERB-18	98300809	T3	1,950mm	1440W	ERB-18	98301302	T4	1,950mm	660W
ERB-19	98300817	T3	2,050mm	1520W	ERB-19	98301310	T4	2,050mm	700W
ERB-20	98300825	T3	2,150mm	1600W	ERB-20	98301328	T4	2,150mm	750W
ERB-21	98300833	T3	2,250mm	1680W	ERB-21	98301336	T4	2,250mm	790W
ERB-22	98300841	T3	2,350mm	1760W	ERB-22	98301344	T4	2,350mm	830W
ERB-23	98300858	T3	2,450mm	1840W	ERB-23	98301351	T4	2,450mm	870W
ERB-24	98300866	T3	2,550mm	1920W	ERB-24	98301369	T4	2,550mm	910W
ERB-25	98300874	T3	2,650mm	2000W	ERB-25	98301377	T4	2,650mm	950W
ERB-26	98300882	T3	2,750mm	2080W	ERB-26	98301385	T4	2,750mm	990W
ERB-27	98300890	T3	2,850mm	2160W	ERB-27	98301393	T4	2,850mm	1030W
ERB-28	98300908	T3	2,950mm	2240W	ERB-28	98301401	T4	2,950mm	1070W
ERB-29	98300916	T3	3,050mm	2320W	ERB-29	98301419	T4	3,050mm	1110W
ERB-30	98300924	T3	3,150mm	2400W	ERB-30	98301427	T4	3,150mm	1150W





## CABLE GLANDS

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

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

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°C up to +40°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).



Item no. 90900250