

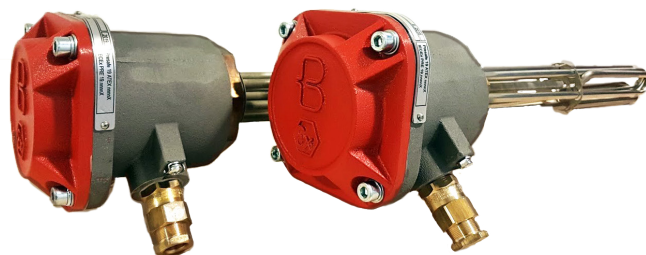
# BACKER Ex ELECTRIC IMMERSION HEATER

## Properties

The Backer Ex electric immersion heater is intended for use within potentially hazardous areas where a risk for exposure to explosive gas atmosphere exists.

The heater must be horizontally mounted into a tank, vessel or a pipe-based flow through system, and the heating elements shall be totally immersed in liquid during operational use. The heating elements submerged in liquid is considered as a non-Ex area.

The heater is controlled by automatically resettable thermostat that regulates the temperature and determines the T-class. Set-point must be agreed with manufacturer when placing order, and cannot be adjusted by end-user. An additional manual resettable thermostat is mounted for the safety (TSHH). T-class for this equipment is based on the TSHH cut-off. TSHH is preset and fixed at its set-point.



## Technical specification

Supply voltage	1x230V/16A, 3x230V/30,2A, 3x400V/17,4A or 3x690V/10,1A
Electrical power	Various steps from 0,75kW to 6kW as standard (ask for VARIANTS)
Surface load	H = Max 7W/cm <sup>2</sup> . M = 2,5W/cm <sup>2</sup> . L = 0,9W/cm <sup>2</sup>
Immersion lengths	200mm to 1350mm depending on power and surface load (ask for VARIANTS)
Mechanical connection	BSP G2" thread
Cable glands	Exd certified M16, M20 or M25
Ingress protection	IP66
Operational temp.	Max 90 °C
T-class	T4 (max 135 °C surface temp).
Ambient temp.	-30 °C to +60 °C.
Ex marking	ATEX: CE0470 II 2 G Ex db IIC T4 Gb IECEX: Ex db IIC T4 Gb
Ex certificates	Presafe 19 ATEX 0712X and IECEx PRE 19.0062X

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# BACKER Ex ELECTRIC IMMERSION HEATER



## Variants

### SIH KLXT...H-...Exd - surface load max 7 W/cm<sup>2</sup>

Intended for use in liquid with high thermal capacity (water, glycol etc.)

TYPE	POWER W	VOLTAGE Specify by order	SURFACE LOAD (max)	IMMERSION LENGTH
SIH KLXT 1,0H-...Exd	1,0kW	230, 400 or 690V	7W/cm <sup>2</sup>	200mm
SIH KLXT 1,5H-...Exd	1,5kW	230, 400 or 690V	7W/cm <sup>2</sup>	210mm
SIH KLXT 2,0H-...Exd	2,0kW	230, 400 or 690V	7W/cm <sup>2</sup>	230mm
SIH KLXT 2,5H-...Exd	2,5kW	230, 400 or 690V	7W/cm <sup>2</sup>	285mm
SIH KLXT 3,0H-...Exd	3,0kW	230, 400 or 690V	7W/cm <sup>2</sup>	300mm
SIH KLXT 3,5H-...Exd	3,5kW	230, 400 or 690V	7W/cm <sup>2</sup>	315mm
SIH KLXT 3,5H-...Exd	4,0kW	230, 400 or 690V	7W/cm <sup>2</sup>	330mm
SIH KLXT 4,0H-...Exd	4,5kW	230, 400 or 690V	7W/cm <sup>2</sup>	350mm
SIH KLXT 5,0H-...Exd	5,0kW	230, 400 or 690V	7W/cm <sup>2</sup>	370mm
SIH KLXT 5,5H-...Exd	5,5kW	230, 400 or 690V	7W/cm <sup>2</sup>	390mm
SIH KLXT 6,0H-...Exd	6,0kW	230, 400 or 690V	7W/cm <sup>2</sup>	410mm

### SIH KLXT...M-...Exd - surface load max 2,5 W/cm<sup>2</sup>

Intended for use in liquid with a lower thermal capacity (light oils, gasol, vegetable oils etc.)

TYPE	POWER W	VOLTAGE Specify by order	SURFACE LOAD (max)	IMMERSION LENGTH
SIH KLXT 1,0M-...Exd	1,0kW	230, 400 or 690V	2,5W/cm <sup>2</sup>	300mm
SIH KLXT 2,0M-...Exd	2,0kW	230, 400 or 690V	2,5W/cm <sup>2</sup>	400mm
SIH KLXT 3,0M-...Exd	3,0kW	230, 400 or 690V	2,5W/cm <sup>2</sup>	550mm
SIH KLXT 4,0M-...Exd	4,0kW	230, 400 or 690V	2,5W/cm <sup>2</sup>	700mm
SIH KLXT 5,0M-...Exd	5,0kW	230, 400 or 690V	2,5W/cm <sup>2</sup>	850mm
SIH KLXT 6,0M-...Exd	6,0kW	230, 400 or 690V	2,5W/cm <sup>2</sup>	1000mm

### SIH KLXT...L-...Exd surface load max 0,9 W/cm<sup>2</sup>

Intended for use in liquid with low thermal capacities (heavy oil, tar, some chemical baths, etc.)

TYPE	POWER W	VOLTAGE Specify by order	SURFACE LOAD (max)	IMMERSION LENGTH
SIH KLXT 0,75L-...Exd	0,75kW	230, 400 or 690V	0,9W/cm <sup>2</sup>	400mm
SIH KLXT 1,0L-...Exd	1,0kW	230, 400 or 690V	0,9W/cm <sup>2</sup>	500mm
SIH KLXT 1,5L-...Exd	1,5kW	230, 400 or 690V	0,9W/cm <sup>2</sup>	700mm
SIH KLXT 2,0L-...Exd	2,0kW	230, 400 or 690V	0,9W/cm <sup>2</sup>	900mm
SIH KLXT 2,5L-...Exd	2,5kW	230, 400 or 690V	0,9W/cm <sup>2</sup>	1100mm
SIH KLXT 3,0L-...Exd	3,0kW	230, 400 or 690V	0,9W/cm <sup>2</sup>	1350mm