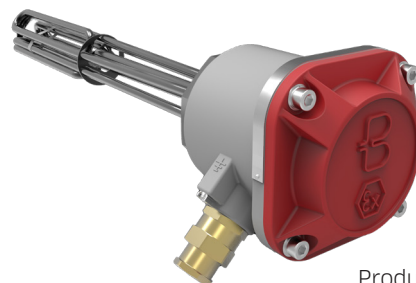


ELECTRIC IMMERSION HEATER

Type: SIH KLXT n,n H/M/L-...Exd

Description

This product is an electric immersion heater intended for use within a potentially hazardous areas where a risk for exposure to explosive gas atmosphere exist. 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.



Product photo

Type designation and design

The immersion heater's type designation is SIH KLXT...H/M/L...Exd. Its main parts are the electric heating elements brazed into aBSP G2" threaded bulb-head manufactured in stainless steel AISI316L, and Exd junction box made of cast aluminum.

Control and limitation of temperature

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.

Electrical, technical and certified specifications

Supply voltages

1x230V/16A 3x230V/30,2A
 3x400V/17,4A 3x690V/10,1A

Electrical power

Various steps from 0,75kW to 6kW as standard (see VARIANTS)

Surface loads

H = Max 7W/cm². M = 2,5W/cm².
 L = 0,9W/cm²

Immersion lengths

200mm to 1350mm depending on power and surface load (see VARIANTS)

Mechanical connection

BSP G2" thread

Cable glands

Exd certified M25

Ingress Protection

IP66

Operational temperature

Max 90 °C

T-class

T4 (max 135 °C surface temp)

Ambient temperature

-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

ELECTRIC IMMERSION HEATER

Type: SIH KLXT n,n H/M/L- nnnExd

Variants

SIH KLXT..H-...EXD - SURFACE LOAD MAX 7 W/CM ² INTENDED FOR USE IN LIQUID WITH HIGH THERMAL CAPACITY (WATER, GLYCOL ETC).				
Type	Power	Voltage (specify by order)	Surface load (max)	Immersion length
SIH KLXT 1,0H-...Exd	1,0kW	230, 400 or 690V	7W/cm ²	200mm
SIH KLXT 1,5H-...Exd	1,5kW	230, 400 or 690V	7W/cm ²	210mm
SIH KLXT 2,0H-...Exd	2,0kW	230, 400 or 690V	7W/cm ²	230mm
SIH KLXT 2,5H-...Exd	2,5kW	230, 400 or 690V	7W/cm ²	285mm
SIH KLXT 3,0H-...Exd	3,0kW	230, 400 or 690V	7W/cm ²	300mm
SIH KLXT 3,5H-...Exd	3,5kW	230, 400 or 690V	7W/cm ²	315mm
SIH KLXT 4,0H-...Exd	4,0kW	230, 400 or 690V	7W/cm ²	330mm
SIH KLXT 4,5H-...Exd	4,5kW	230, 400 or 690V	7W/cm ²	350mm
SIH KLXT 5,0H-...Exd	5,0kW	230, 400 or 690V	7W/cm ²	370mm
SIH KLXT 5,5H-...Exd	5,5kW	230, 400 or 690V	7W/cm ²	390mm
SIH KLXT 6,0H-...Exd	6,0kW	230, 400 or 690V	7W/cm ²	410mm

SIH KLXT..M-...EXD - SURFACE LOAD MAX 2,5 W/CM ² INTENDED FOR USE IN LIQUID WITH A LOWER THERMAL CAPACITY (LIGHT OILS, GASOL, VEGETABLE OILS ETC.)				
Type	Power	Voltage (specify by order)	Surface load (max)	Immersion length
SIH KLXT 1,0M-...Exd	1,0kW	230, 400 or 690V	2,5W/cm ²	300mm
SIH KLXT 2,0M-...Exd	2,0kW	230, 400 or 690V	2,5W/cm ²	400mm
SIH KLXT 3,0M-...Exd	3,0kW	230, 400 or 690V	2,5W/cm ²	550mm
SIH KLXT 4,0M-...Exd	4,0kW	230, 400 or 690V	2,5W/cm ²	700mm
SIH KLXT 5,0M-...Exd	5,0kW	230, 400 or 690V	2,5W/cm ²	850mm
SIH KLXT 6,0M-...Exd	6,0kW	230, 400 or 690V	2,5W/cm ²	1000mm

ELECTRIC IMMERSION HEATER

Type: SIH KLXT n,n H/M/L-*nnn*Exd

Variants

SIH KLXT...L-...EXD SURFACE LOAD MAX 0,9 W/CM ² INTENDED FOR USE IN LIQUID WITH LOW THERMAL CAPACITIES (HEAVY OIL, TAR, SOME CHEMICAL BATHS ETC.)				
Type	Power	Voltage (specify by order)	Surface load (max)	Immersion length
SIH KLXT 0,75L-...Exd	0,75kW	230, 400 or 690V	0,9W/cm ²	400mm
SIH KLXT 1,0L-...Exd	1,0kW	230, 400 or 690V	0,9W/cm ²	500mm
SIH KLXT 1,5L-...Exd	1,5kW	230, 400 or 690V	0,9W/cm ²	700mm
SIH KLXT 2,0L-...Exd	2,0kW	230, 400 or 690V	0,9W/cm ²	900mm
SIH KLXT 2,5L-...Exd	2,5kW	230, 400 or 690V	0,9W/cm ²	1100mm
SIH KLXT 3,0L-...Exd	3,0kW	230, 400 or 690V	0,9W/cm ²	1350mm

Recommended tools

To ensure a proper mounting of the SIH KLXT... heater, we recommend you to order the special tools "Socket wrench SW75" and the "Backer SW92 spanner" in addition to the heater.



Product photo

Following documents

The heaters are delivered with a following technical file, containing an installation manual, a brief description of the heater's manner of operation. Information about maintenance, transport handling, lifting and storage. In the technical file also the Ex certificates and our declaration of conformity (DoC) can be found.

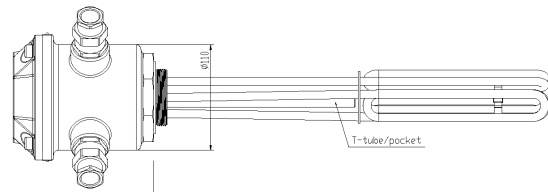
ELECTRIC IMMERSION HEATER

Type: SIH KLXT n,n H/M/L-...Exd

General arrangement sketch

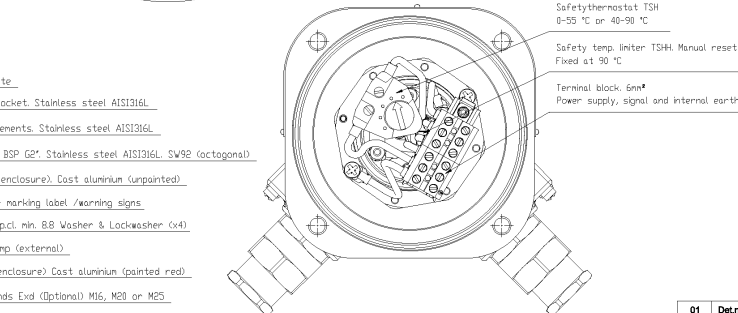
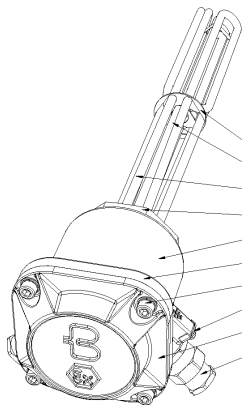
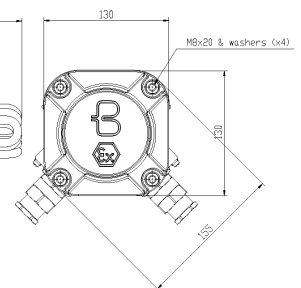
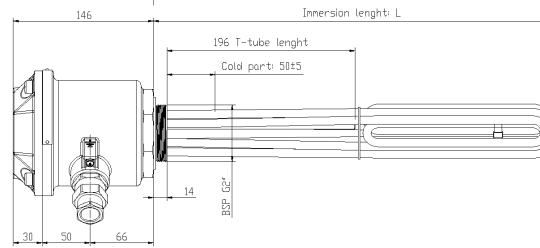
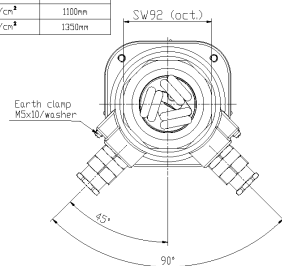
Type designation	Power	Voltage	Surface load (max)	Immersion length
SIH 1,0H-230/400/690 Exd	1,0kW	230/400/690	7W/cm ²	200mm
SIH 1,5H-230/400/690 Exd	1,5kW	230/400/690	7W/cm ²	210mm
SIH 2,0H-230/400/690 Exd	2,0kW	230/400/690	7W/cm ²	230mm
SIH 2,5H-230/400/690 Exd	2,5kW	230/400/690	7W/cm ²	285mm
SIH 3,0H-230/400/690 Exd	3,0kW	230/400/690	7W/cm ²	300mm
SIH 3,5H-230/400/690 Exd	3,5kW	230/400/690	7W/cm ²	315mm
SIH 4,0H-230/400/690 Exd	4,0kW	230/400/690	7W/cm ²	330mm
SIH 4,5H-230/400/690 Exd	4,5kW	230/400/690	7W/cm ²	350mm
SIH 5,0H-230/400/690 Exd	5,0kW	230/400/690	7W/cm ²	370mm
SIH 5,5H-230/400/690 Exd	5,5kW	230/400/690	7W/cm ²	390mm
SIH 6,0H-230/400/690 Exd	6,0kW	230/400/690	7W/cm ²	410mm
SIH 1,0M-230/400/690 Exd	1,0kW	230/400/690	2,5W/cm ²	300mm
SIH 2,0M-230/400/690 Exd	2,0kW	230/400/690	2,5W/cm ²	400mm
SIH 3,0M-230/400/690 Exd	3,0kW	230/400/690	2,5W/cm ²	550mm
SIH 4,0M-230/400/690 Exd	4,0kW	230/400/690	2,5W/cm ²	700mm
SIH 5,0M-230/400/690 Exd	5,0kW	230/400/690	2,5W/cm ²	850mm
SIH 6,0M-230/400/690 Exd	6,0kW	230/400/690	2,5W/cm ²	1000mm
SIH 0,75L-230/400/690 Exd	0,75kW	230/400/690	0,9W/cm ²	400mm
SIH 1,0L-230/400/690 Exd	1,0kW	230/400/690	0,9W/cm ²	500mm
SIH 1,5L-230/400/690 Exd	1,5kW	230/400/690	0,9W/cm ²	700mm
SIH 2,0L-230/400/690 Exd	2,0kW	230/400/690	0,9W/cm ²	900mm
SIH 2,5L-230/400/690 Exd	2,5kW	230/400/690	0,9W/cm ²	1100mm
SIH 3,0L-230/400/690 Exd	3,0kW	230/400/690	0,9W/cm ²	1350mm

Tot. where nothing else is stated		See Table	Smoothness where nothing else is stated		Ra-	
No	Qty	Modification	M. no	Enter	Approved	Date



HAZARDOUS AREA:
POTENTIALLY EXPLOSIVE
GAS ATMOSPHERES

NON POTENTIAL EXPLOSIVE GAS ATMOSPHERES



Certificate no:
Presafe 19 ATEX 0712X
IECEX PRE 19.0062X

Ex code:
CEEx  **II 2 G Ex db IIC T4 Gb,** T_{amb} -30 +60 °C
Ex db IIC T4 Gb, T_{amb} -30 +60 °C

Ingress Protection:
IP66
IP66

01	Det.no	Designation	Part no / Dimension	Material	Note				
Qty	Draw	Design	Contr.	Approved	Scale	Replaces	Cust.ref.no.	Rev	Date
									2020.03.05
		Backer NORSKE BACKER A/S 2200 Kongsvinger	Immersion heater type SIH KLXT...H/M/L-...Exd						GA draft PR

