### Installation Instruction For Screw Plug Immersion Heater With Thermostat And Safety Limitor Standard And Insulated Type

# 1. Field of Application

For water heating within closed installations up to 10 bar.

ONLY FOR INSULATED TYPE: To avoid corrosion on enameled or coated tanks with sacrificial anode the tubular heaters are insulated against the flange/tank and connected by a defined resistance. This improves lifetime of the heater and the sacrificial anode.

## 2. Function

The sensors for thermostat and safety limitor are in a protective tube between the tubular heaters and measure the water temperature. The set temperature is adjusted via a adjusting knob. In fault the limitor switches off the heater permanently.

## 3. Mechanical Installation

The assembly of the heater needs to be effected directly by a threaded sleeve (G1 ¼, G1 ½, G2 or special thread depending on model) with an appropriate seal. The sleeve socket must be shorter than the unheated length (LU). The unheated length (LU) is indicated on the heater. The water circulation in the tank must not be impeded (for example through a baffle).

## 4. Electric installation

A RCD should be used. Please observe the VDE 0100 standard and local electrical safety standards. Only an electrician should install the electric supply. The wiring should be done according to the wiring scheme. For opening the immersion heater pull the temperature knob forward and loosen the 2 screws behind it.

Wiring should be done according the wiring scheme.

#### 5. Operating

Start operation only after the tank is fully filled. If the safety limitor has switched off the heater the reason for the failure has to be carefully investigated before resetting the limitor. To reset the safety limitor press the red button after removing the upper half of the housing. **ATTENTION:** The safety limitor will protect the installation from high temperatures. It will NOT protect the installation from dry operation (without liquid). Additional protection against dry operation should be used therefore.

#### 6. Additional Features (not part of all heaters)

- Signal lamp glows when the device is heating.

- External reset of the safety limitor allows to reset the safety limitor with an appropriate tool without removing the housing of the heater. Disconnect power supply before!

# 7. Maintenance

#### Disconnect power before any maintenance work!

The heater needs to be checked regularly for deposits on the heater sheath which might deteriorate its function. If inserted in chalky water the lifetime of the heater may be reduced. We recommend to regularly clean/descale the heater sheath.

T+H 06/2019



