

Tank heater ERH 800 WR

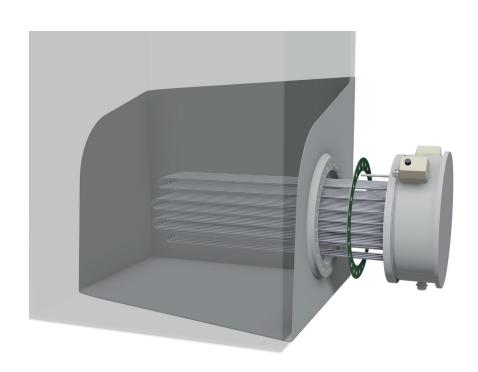
The reference class for water











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The series 800 WR heating inserts feature design characteristics which make these units unrivalled on the market. The high variability of the design allows a perfect adaption to any process conditions. There is no better solution to heat up tanks.

Design

The series 800 WR heaters consist of a flange with bolted in heating elements. The heating elements can be exchanged with standard tools. The design of the heating elements ensure excellent thermal reaction time and control accuracy.

Installation

The series 800 WR heating inserts are normally installed in horizontal position in the lower area of the tank. The counter flanges for welding to the tank wall are supplied with the heaters.

Accessories

In case the tank is not to be heated completely and only the extraction volume is to be heated to the desired process temperature, the 800 WR series can be upgraded with the optional insert vessel Type 400 to become an integrated continuous flow heater.

Electrics

Due to the flexible design, the heating elements can be adapted to any operating voltage between 230 VAC and 690 VAC.

Operating pressure

10 bar in standard design/16 bar in HP design

Operating temperature

Max. 150 °C

Heat transfer

Due to the perfect hydraulic flow around the heating elements, the medium is gently heated to the specified temperature. The surface load (W/cm²) can be precisely adapted to the medium characteristics. Recommended surface loads:

| 3,5 W/cm ² | aggressive media (e.g. chlorinated water, bilge water,) |
|-----------------------|---|
| 6,5 W/cm ² | potable water, cooling water with additives |

Material

All components in contact with the medium can be made of any material to suit the application. By standard and with short delivery times: P265GH (mild steel) and 1.4571 (stainless steel). Other materials are available on request.

Controls (ELWA)

The majority of our heaters are delivered with ELWA control cabinets specially designed for the specific applications. The heating steps can be controlled either with mechanical or electronic temperature controllers. The power is then switched with conventional contactors, solid state relays or thyristor controllers. Please see data sheets for ELWA ETU/ELWA SPC/ELWA STC.

Typical applications

The series 800 WR heaters are the perfect choice for heating water with/without additives, aggressive media or emulsions.

Safety

All heaters are equipped with built in safety temperature limiters (STB). Optional additional safety devices: flow switch, temperature limiter (self reset), PT-100 sensors and safety valves.

Painting

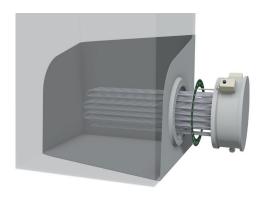
Heavy duty industrial painting with 2K structured PUR paint.

Process connections

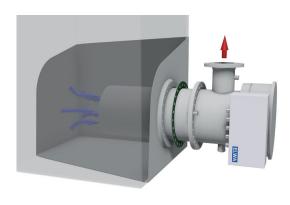
Insertion vessel Type 400: Flanges according to DIN EN 1092-1/11B1/DN15-DN250/PN16 The connection diameter can be adapted on request.

Classifications

ABS, BV, DNV, CCS, GL, LRS, RINA, TÜV, MRS, others on request



Heater 800 WR mounted in tank



Heater 800 WR with optional insertion vessel makes an integrated flow heater



Overview table

| | | | | | Nozzle size optional 400 vessel | | |
|--------------|--------------------|-------|--------------------|-------------|---------------------------------|------|-----|
| Туре | heating power (kW) | | heating steps (kW) | | Min | Norm | Max |
| 803WR-V | 6 | 9 | 1x6 | 1x9 | 25 | 32 | 40 |
| 806WR-V | 12 | 18 | 2x6 | 2x9 | 25 | 32 | 50 |
| 809WR-V | 18 | 27 | 3x6 | 3x9 | 25 | 32 | 50 |
| 812WR-V | | 36 | | 2x18 | 25 | 32 | 80 |
| 820WR-V | 24 | 45 | 2x12 | 2x22,5 | 25 | 32 | 80 |
| 824WR | | 54 | | 3x18 | 25 | 32 | 80 |
| 824WR-V | 36 | 67,5 | 2x18 | 3x22,5 | 25 | 32 | 80 |
| 836WR | | 81 | | 3x27 | 25 | 40 | 80 |
| 836WR-V | 54 | 101 | 3x18 | 3x33,8 | 25 | 40 | 80 |
| 848WR-V | 72 | 135 | 4x18 | 4x33,8 | 25 | 40 | 100 |
| 860WR-V | 90 | 169 | 5x18 | 5x33,8 | 25 | 50 | 100 |
| 872WR-V | 108 | 202,5 | 6x18 | 6x33,8 | 25 | 50 | 125 |
| 896WR-V | 144 | 270 | 8x18 | 8x33,8 | 25 | 65 | 125 |
| 8128WR-V | 192 | 360 | 8x24 | 8x45 | 25 | 65 | 150 |
| 8152WR-V | 228 | 427,5 | 18+7x30 | 33,8+7x56,3 | 25 | 65 | 150 |
| surface load | 3.5 | 6.5 | 3.5 | 6.5 | W/cm ² | | |

Complementary products



smart.power.control

Control box with heating steps and step-less control of a part of the heating power with our intelligent ELWA SPC control unit and solid state relays



smart.thyristor.control

Control box with fully step-less regulation of the heating capacity using ELWA STC control

