Technical information

Correct use:

The transmission station "Regudis H-HT" is solely designed for use with water and water and glycol mixtures circulating in local and district heating networks. Acting as link between the supply network and the heating circuits, it serves the supply of heating water according to requirements to radiators, surface heating systems and potable water or buffer storage cylinders. The integrated plate heat exchanger serves the hydronic separation of the supply network and the heating circuit.

Function:

The hot water supplied by the local or district heating network enters the plate heat exchanger (E) (primary side). The station can be connected from the top or from below. This is where the heat is transferred to the heating system (secondary side) according to requirements with the help of an electronic controller. The heat demand of the heating circuits and the potable water is detected by the controller via temperature sensors. Control of the actuator (F) which is mounted onto a volume flow control valve ("Cocon QTZ") is carried out by the controller via a 0-10 V signal. The heat supply to the heating system is directly and variably influenced by the travel movement of the actuator.

Two autonomous heating circuits can be connected to the transmission station via the connections C (supply) and D (return) without further accessories. Additional heating circuits can be connected via a distributor. One external pump is required for each heating circuit. Control of the pump(s) (on/off) and of variable temperature heating circuits (surface heating) is also carried out by the controller

The potable water is heated on the storage cylinder loading principle which requires a potable water storage cylinder with an internal tube heat exchanger (e.g. "Hydrocor WM").

Connections to the pipe network:

- A Local / district heating supply and potable water storage cylinder supply
- B Local / district heating return and potable water storage cylinder return
- C Heating circuit(s) supply
- D Heating circuit(s) return

Controller:

The used electronic heating circuit controller "Regtronic RH" was extended by the functions required for the control of the transmission station "Regudis H-HT".

Functions

Weather guided heating circuit control, return temperature limitation to the supply network, after-heating, hot water preparation with priority function, additional functions such as circulation, thermal disinfection, recording of measured and balance value on an SD card etc.

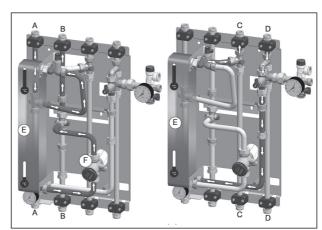
Intuitive parametrization by preloaded system diagrams and functions.

Legend of the installation example

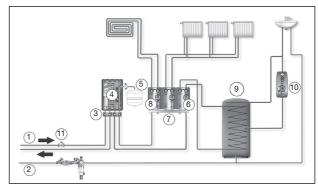
- 1 Local/district heating network
- 2 Potable water connection
- 3 Ball valve connection set (see accessories)
- 4 "Regudis H-HT" Transmission station
- 5 Diaphragm expansion tank
- 6 "Regumat S" Station
- 7 Distributor
- 8 "Regumat M3" Station
- 9 "Hydrocor WM" Storage cylinder
- 10 "Regucirc B" Circulation pump group
- 11 Strainer



"Regudis H-HT"



Primary side Secondary side (example showing connection to the pipework from the top)



Installation example with constant and variable temperature heating circuit and indirect hot potable water preparation

2018 Oventrop

Technical data:

"Regudis H-HT" Item no. 1391025

Hydronic performance data:

Max. performance range:

Nominal size:

90 °C Max. operating temperature: 10 bar (PN 10) Max. operating pressure ps:

Min. operating pressure: 1 bar Safety valve secondary side: 3 bar Max. primary volume flow: 1300 l/h 1.63 m³/h Kvs value primary side: Kvs value secondary side: 1.98 m³/h

> with primary: 75/45 °C with secondary: 65/35 °C

45 kW

30 kW

DN 20

with primary: 90/45 °C with secondary: 80/35 °C

Display range of pressure gauge:

Operating fluids:

0-10 bar

Water / water and glycol

mixtures

Electrical performance data:

Operating voltage of controller: 230 V AC, 50-60 Hz

Operating voltage of actuator: 24V DC,

closed with current "off", control voltage 0-10V

Male thread G ¾ flat sealing according to ISO 228

470 x 680 x 295

(male thread G 1 flat sealing according to

ISO 228)

Dimensions:

Width x height x depth [mm]: Connections to the pipework:

Transmission station:

(when using the ball valve

connection set):

Materials:

Valves: Brass

Seals: PTFE, EPDM Base plate: Steel, galvanised

Insulation: Expanded polypropylene

Accessories:

Ball valve connection set

display range: 0 - 120°C 1399090

Monovalent potable water storage

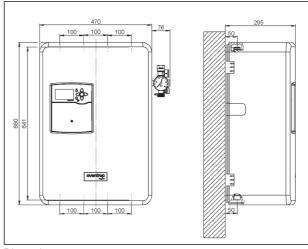
cylinder "Hydrocor WM" type 120 1395010

Diaphragm expansion tanks:

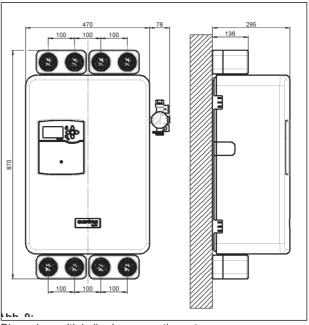
- Nominal volume 35 litres 1399091 - Nominal volume 50 litres 1399092

The complete range of accessories can be found in the catalogue

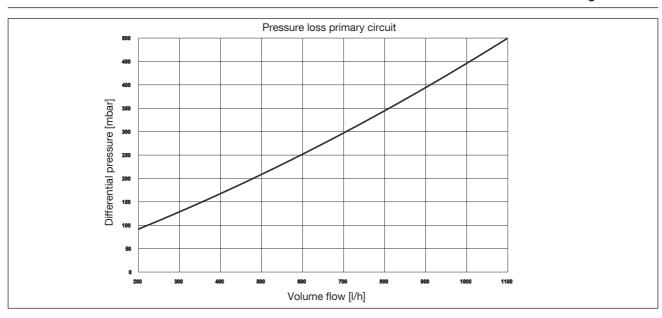
"Products" or on the Internet under www.oventrop.de.

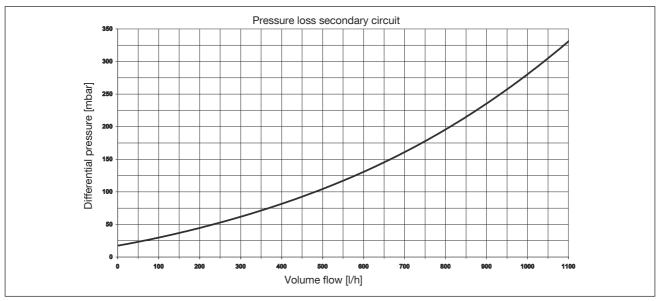


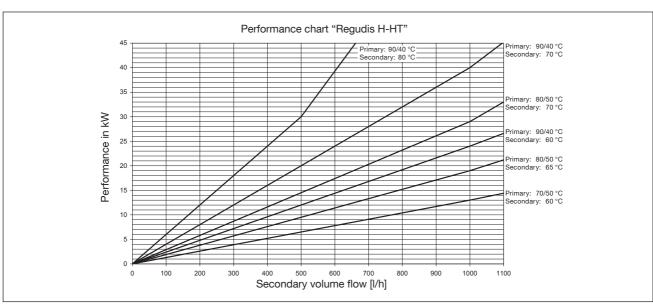
Dimensions



Dimensions with ball valve connection set







Subject to technical modification without notice. Product range 7 ti 355-EN/10/MW Edition 2018

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