oventrop

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 (8) (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 (6) 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.

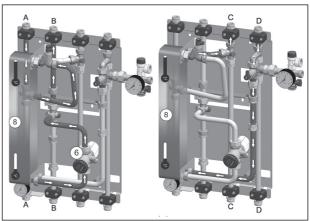
Intuitive parametrization by preloaded system diagrams and functions.

Legend of the installation example

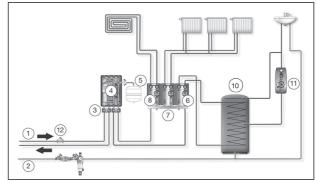
- 1 Local/district heating network
- 2 Potable water connection
- 3 Ball valve connection set (see accessories)
- "Regudis H-HT" Transmission station 4
- Diaphragm expansion tank "Regumat S" Station 5
- 6
- 7 Distributor
- "Regumat M3" Station 8
- 10 "Hydrocor WM" Storage cylinder
- 11 "Regucirc B" Circulation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



"Regudis H-HT"



Primarv 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

Technical data:

"Regudis H-HT"	Item no. 1391025
Hydronic performance data:	
Nominal size:	DN 20
Max. operating temperature:	90 °C
Max. operating pressure p _s :	10 bar (PN 10)
Min. operating pressure:	1 bar
Safety valve secondary side:	3 bar
Max. primary volume flow:	1300 l/h
Kvs value primary side:	1.63 m³/h
Kvs value secondary side:	1.98 m³/h
Max. performance range:	75 kW
(with primary 90/40°C, secondary	70/30°C)
Display range of pressure gauge:	0-10 bar
Operating fluids:	Water / water and glycol mixtures
Electrical performance data:	

Electrical performance data: Operating voltage of controller: Operating voltage of actuator:

Dimensions:

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

(when using the ball valve connection set):

Materials: Valves: Seals: Base plate: Insulation:

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 – Nominal volume 50 litres	1399091 1399092

The complete range of accessories can be found in the catalogue "Products" or on the Internet under www.oventrop.de.

230 V AC, 50-60 Hz

470 x 680 x 295

(male thread G 1

ISO 228)

PTFE, EPDM

Steel, galvanised

Brass

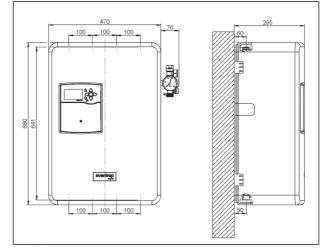
closed with current "off", control voltage 0-10V

Male thread G ³/₄ flat sealing according to ISO 228

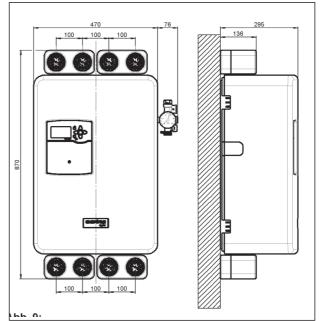
flat sealing according to

Expanded polypropylene

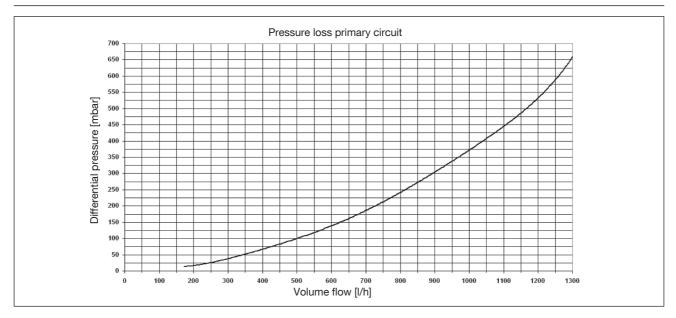
24V DC,

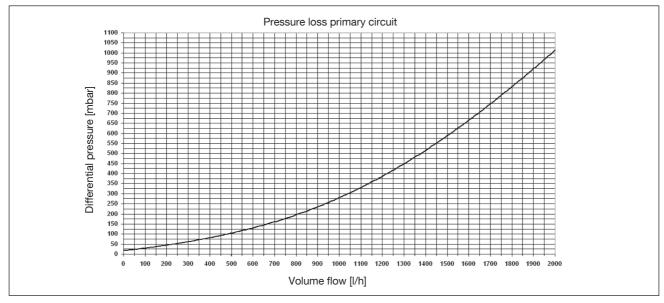


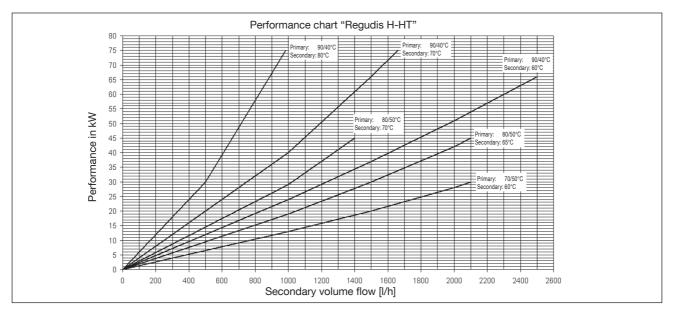
Dimensions



Dimensions with ball valve connection set







Subject to technical modification without notice. Product range 7 ti 355-EN/10/MW Edition 2017