Gestra[®]



GESTRAheat GH - 200 kW

Heat Transfer Station GESTRAheat

GH

PN 16, nominal output 200 — 1200 kW

Description

GESTRAheat GH heat transfer stations generate hot water for heating and process water applications using 3 barg saturated steam for indoor installation. The system may be operated with saturated steam pressure of 3 barg maximum. The system is regulated by condensate banking control and additional safety temperature limiters according to EN 12828.

If these systems are used outside their admissible pressure and temperature ratings, chemical and corrosive influences must be taken into consideration.

Improper use also includes using a system made of materials that are unsuitable for the fluid in question.

Туре	Nominal output kW	Valve Type
GH-200kW	200	Electric
GH-400kW	400	Electric
GH-600kW	600	Electric
GH-800kW	800	Electric
GH-1000kW	1000	Electric
GH-1200kW	1200	Electric

Fluids

The system is designed for the following fluids (in accordance with the EU Pressure Equipment Directive or Pressure Equipment (Safety) Regulations in the UK):

Group 2 fluids

Chemical and corrosive influences must be taken into consideration.

Use in potentially explosive atmospheres

Do not use the system in potentially explosive atmospheres.

Function

Operating principle: Condensate banking control

The control valve on the condensate side opens and closes as a function of the temperature, and so regulates the required heat exchange area. Systems with condensate banking control can only be used in applications that generate hot water using steam. Depending on the specific design and operating pressures, approximately 50% of the design capacity must be removed as minimum load. Otherwise, the supply temperature rises sharply when the water circuit is turned off, so that the safety temperature limiter reacts and locks the quick-action shut-off valve on the steam side.

Connections

Flange EN 1092-1 B1, PN 16

Electrical connection

■ 240 V, 50 Hz, <6 A, <1000 VA

Materials

Pipes	1.0345/P235GH
Flanges	1.0460/P250GH
Gaskets	Graphite/stainless steel
Screws	Strength class 5.6
Nuts	Strength class 5.2
Electric cables	BiAF1CU/BiJ

Heat Transfer Station GESTRAheat **GH**

Pressure and temperature ratings

Ambient temperature during operation	0 — 55 °C
Relative humidity	5 — 85% (non-condensing)
Atmosphere	Not suitable for use above 2000 m or in potentially explosive or corrosive atmospheres
IP rating	54
Primary steam side characteristics	10 bar/180 °C
Max. saturated steam pressure	3 barg
Secondary water side characteristics	10 bar/105 °C
Min. water pressure	>2.5 barg

System overview

No.	Designation
1	Heat exchanger
2	Quick-action shut-off valve
3	Control cabinet
4	Steam trap
5	Resistance thermometer
6	Check valves
7	Name plate
8	Check valve
9	Name plate
18	Base frame
19	Control valve with electric actuator
22, 20	Vacuum breaker with ball valve
23	Stop valve
24	Thermometer
26	Safety temperature limiter
27	Safety temperature monitor
28, 29	Pressure limiter with stop valve
30.29	Pressure gauge with stop valve

Connections

- N1 Primary steam inlet
- N2 Primary condensate outlet
- N3 Secondary water inlet
- N4 Secondary water outlet



Dimensions and weights



These systems are suitable for heating with 3 barg saturated steam. Their nominal output is based on a water inlet temperature of 60 °C and a water outlet temperature of 80 °C. A minimum water flowrate of 50 % of the nominal value is required.

How to order

Heat transfer station

GESTRAheat GH

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..kW





Туре	Steam inlet/ water outlet	Steam inlet/ condensate outlet	Water inlet/ water outlet	Water inlet	Condensate outlet	Steam inlet/ water outlet	Condensate outlet	Water inlet
	N1, N4 A mm	N1, N2 I mm	N3, N4 C mm	N3 D mm	N2 E mm	N1, N4 G mm	N2 K mm	N3 F mm
GH-200 kW	1329	232	543	294	281	67	11	468
GH-400 kW	1347	223	552	331	309	49	34	449
GH-600 kW	1422	201	574	368	340	50	15	420
GH-800 kW	1495	182	668	413	380	122	229	772
GH-1000 kW	1495	182	668	413	380	122	229	772
GH-1200 kW	1495	182	668	413	380	122	229	772

Туре	W 3/W Water	L DN steam	Z DN condensate	DN water N3, N4	m Length	ww Width	m H Height	by Weight
GH-200 kW	8.6	50	25	50	1500	800	2000	235
GH-400 kW	17.1	65	25	65	1500	800	2000	275
GH-600 kW	25.7	80	25	80	1500	800	2200	300
GH-800 kW	34.3	100	40	100	2000	1000	2300	435
GH-1000 kW	42.9	100	40	100	2000	1000	2300	435
GH-1200 kW	51.7	100	40	100	2000	1000	2300	435

Directives and standards

You can find details on the conformity of the equipment and the applicable standards and directives in the Declaration of Conformity and associated certificates or approvals.

Please note our general terms of business.

GESTRA AG

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