



reventon
INDUSTRIAL SOLUTIONS

Technical documentation
DTR



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1. INTRODUCTION

Thank you very much for purchasing Reventon Group device. We would like to congratulate you on good choice.

1.1 PRECAUTIONS

The buyer and the user of the device should read carefully the following instructions and proceed to the content recommendations. Proceeding due to the following instruction guarantees the correct usage and safety. In case of any doubts please contact the producer. The producer reserves the rights to make changes to the technical documentation without previous notice. The producer is not responsible for the damages which occur due to improper installation, not keeping the device in repair or using the device out of line. The installation should be carried out by the professional installers, who possess the qualifications to install these types of devices. The installers are responsible for making the installation as instructed in the technical data. Regulations and safety rules must be followed. During the installation, use, service and periodical inspections all regulations and safety rules must be followed. In case of unserviceable please plug out the device and contact with the authorized person or the producer.

1.2 TRANSPORT

During the acceptance of goods it is needed to check the device in order to exclude any damages. During the transport it is needed to use the proper equipment, it is necessary to carry the device by two people. In case of any damages please fill in the damage report in presence of the supplier.

1.3 PACKAGE CONTENT

- Heater
- Operation and maintenance manual and warranty card

1.4 USE AND PRINCIPLE OF OPERATION

Devices Reventon Group HC20, HC35, HC50 and HC70 are used to heat spaces such as: production halls, warehouses, commercial room, service spaces, garages, workshops, greenhouses, tents, shops, malls, shopping malls and churches. Air water heaters have to be connected to central heating system. Application of new technologies in Reventon Group devices guarantees high effectiveness and comfort of the consumption. Original colors of the devices match to every interior. The device is made very precisely and will work smoothly for many years.

*The product has got the three years of warranty.

*Lifetime warranty for EPP casing.

2. DEVICE CONSTRUCTION, DIMENSIONS, TECHNICAL DATA

2.1 DEVICE CONSTRUCTION

- Casing
- Air stators
- Heating coil
- Axial blowing fan
- Rotating mounting bracket

Casing: made of foamed polypropylene EPP, resistant, light and reliable. The material is capable of carrying considerable loads without deforming. It does not degrade under the influence of a lubricant, oil, crude oil and the majority of chemicals. It has an excellent sound insulation properties, that is why it is used as casings, material is environmentally friendly and "green", i.e. 100% recyclable. Aesthetic design gives new nature to the device.

Air stators: made of polypropylene PP. It is possible to adjust manually the air stators to achieve the needed direction of the air flow.

Heating coil: made of aluminum and copper. The temperature of the heating factor is 120°C; maximum pressure 1,6 MPa; headers diameter 3/4". Depending on the water heater model we offer 1, 2 and 3 heating coils.

Axial blowing fan: protective grid made of steel wire galvanized, metal blades. The motor has got the safety degree IP 54. Rate current 0,82A-1,2A. 1-phase device. Depending on the water heater model we offer fans with a diameter 400-450 mm.

Rotating mounting bracket: made of steel, element for mounting the device on the wall or ceiling. Solid and durable construction, possible to assemble device in parallel on the angle 60° and 45°. Possible rotation horizontally.

2.2 DIMENSIONS

SMALL CASING HC20, HC35

- height: 598mm (a)
- width: 636mm (b)
- depth: 320 mm (c)



BIG CASING HC50, HC70

- height: 698mm (a)
- width: 739mm (b)
- depth: 340 mm (c)



2.3 TECHNICAL DATA

| Technical data | Unit of measure | HC20 | HC35 | HC50 | HC70 |
|--|-----------------|--------|-----------|-----------|---------|
| Nominal heating capacity water 90/70°C and inlet air temperature 0°C | kW | 22,4 | 33,9 | 46,7 | 68,5 |
| Heating power range | kW | 8-22,4 | 12,9-33,9 | 20,1-46,7 | 30-68,5 |
| Maximum air flow | m³/h | 4100 | 4000 | 4600 | 4400 |
| Maximum range of air stream | m | 25 | 25 | 25 | 25 |
| Number of rows | pcs | 1 | 2 | 2 | 3 |
| Capacity of water | dm³ | 0,65 | 1,35 | 1,95 | 2,85 |
| Air temperature rise* | °C | 17,8 | 28,6 | 29,6 | 46,5 |
| Maximum temperature of heating agent | °C | 120 | 120 | 120 | 120 |
| Maximum operating pressure | MPa | 1,6 | 1,6 | 1,6 | 1,6 |
| Rated current | A | 0,82 | 0,82 | 1,2 | 1,2 |
| Power supply voltage | V/Hz | 230/50 | 230/50 | 230/50 | 230/50 |
| Motor power | W | 180 | 180 | 250 | 250 |
| Motor speed | rev/min | 1380 | 1380 | 1350 | 1350 |
| Motor IP | - | 54 | 54 | 54 | 54 |
| Connection diameter | " | 3/4 | 3/4 | 3/4 | 3/4 |
| Weight | kg | 11,5 | 12,5 | 17,5 | 19,5 |
| Noise** | dB | 50 | 50 | 50 | 50 |

*Temperature rise according to parameters: water 90/70°C and inlet air temperature 0°C

** The measurement at a distance of 5 m from the unit

| Parameters | HC20-5 stage 4100 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 110/80 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 26,1 | 24,3 | 22,5 | 20,7 | 19 |
| Outlet air temperature [°C] | 20,8 | 24,7 | 28,5 | 32,4 | 36,2 |
| Water flow[m³/h] | 0,77 | 0,72 | 0,66 | 0,61 | 0,56 |
| Pressure drop in the heat exchanger [kPa] | 4 | 3 | 3 | 2 | 2 |

| Parameters | HC20-5 stage 4100 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 90/70 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 22,4 | 20,6 | 18,8 | 17,1 | 15,4 |
| Outlet air temperature [°C] | 17,8 | 21,7 | 25,5 | 29,4 | 33,2 |
| Water flow[m³/h] | 0,99 | 0,91 | 0,83 | 0,75 | 0,68 |
| Pressure drop in the heat exchanger [kPa] | 6 | 5 | 4 | 4 | 3 |

| Parameters | HC20-5 stage 4100 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 80/70 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 22,5 | 20,7 | 18,9 | 17,1 | 15,4 |
| Outlet air temperature [°C] | 17,9 | 21,7 | 25,5 | 29,4 | 33,1 |
| Water flow[m³/h] | 1,98 | 1,82 | 1,66 | 1,51 | 1,36 |
| Pressure drop in the heat exchanger [kPa] | 23 | 19 | 16 | 14 | 11 |

| Parameters | HC20-5 stage 4100 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 80/60 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 18,9 | 17,1 | 15,4 | 13,7 | 12,1 |
| Outlet air temperature [°C] | 15 | 18,9 | 22,7 | 26,5 | 30,3 |
| Water flow[m³/h] | 0,83 | 0,75 | 0,68 | 0,6 | 0,53 |
| Pressure drop in the heat exchanger [kPa] | 5 | 4 | 3 | 2 | 2 |

| Parameters | HC20-5 stage 4100 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 70/50 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 15,3 | 13,6 | 12 | 10,3 | 8,74 |
| Outlet air temperature [°C] | 12,2 | 16 | 19,9 | 23,7 | 27,5 |
| Water flow[m³/h] | 0,67 | 0,6 | 0,52 | 0,45 | 0,38 |
| Pressure drop in the heat exchanger [kPa] | 3 | 3 | 2 | 1 | 1 |

| Parameters | HC20-5 stage 4100 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 70/40 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 11,8 | 10,1 | 8,51 | 6,64 | 5,43 |
| Outlet air temperature [°C] | 9,3 | 13,2 | 17 | 20,8 | 24,6 |
| Water flow[m³/h] | 0,34 | 0,29 | 0,25 | 0,2 | 0,16 |
| Pressure drop in the heat exchanger [kPa] | 1 | 1 | 0 | 0 | 0 |

| Parameters | HC20-5 stage 4100 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 60/40 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 11,8 | 10,2 | 8,54 | 6,97 | 5,43 |
| Outlet air temperature [°C] | 9,4 | 13,2 | 17 | 20,8 | 24,6 |
| Water flow[m³/h] | 0,52 | 0,44 | 0,37 | 0,3 | 0,24 |
| Pressure drop in the heat exchanger [kPa] | 2 | 1 | 1 | 1 | 0 |

| Parameters | HC20-5 stage 4100 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 60/30 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 8,15 | 6,6 | 5,08 | 3,62 | 2,22 |
| Outlet air temperature [°C] | 6,5 | 10,3 | 14,2 | 18 | 21,9 |
| Water flow[m³/h] | 0,24 | 0,19 | 0,15 | 0,1 | 0,06 |
| Pressure drop in the heat exchanger [kPa] | 0 | 0 | 0 | 0 | 0 |

| Parameters | HC20-5 stage 4100 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 55/35 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 10,1 | 8,42 | 6,85 | 5,32 | 3,81 |
| Outlet air temperature [°C] | 8 | 11,8 | 15,6 | 19,5 | 23,3 |
| Water flow[m³/h] | 0,44 | 0,37 | 0,3 | 0,23 | 0,17 |
| Pressure drop in the heat exchanger [kPa] | 1 | 1 | 1 | 0 | 0 |

| Parameters | HC20-5 stage 4100 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 50/40 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 12,1 | 10,4 | 8,79 | 7,18 | 5,61 |
| Outlet air temperature [°C] | 9,36 | 13,4 | 17,2 | 21 | 24,8 |
| Water flow[m³/h] | 1,06 | 0,91 | 0,77 | 0,62 | 0,49 |
| Pressure drop in the heat exchanger [kPa] | 7 | 6 | 4 | 3 | 2 |

| Parameters | HC20-5 stage 4100 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 50/30 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 8,3 | 6,71 | 5,18 | 3,69 | 2,26 |
| Outlet air temperature [°C] | 6,6 | 10,4 | 14,3 | 18,1 | 21,9 |
| Water flow[m³/h] | 0,36 | 0,29 | 0,22 | 0,16 | 0,1 |
| Pressure drop in the heat exchanger [kPa] | 1 | 1 | 0 | 0 | 0 |

| Parameters | HC20-5 stage 4100 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 40/30 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 8,68 | 7,06 | 5,48 | 3,94 | 2,45 |
| Outlet air temperature [°C] | 6,9 | 10,7 | 14,5 | 18,3 | 22,1 |
| Water flow[m³/h] | 0,75 | 0,61 | 0,47 | 0,34 | 0,21 |
| Pressure drop in the heat exchanger [kPa] | 4 | 3 | 2 | 1 | 0 |

| Parameters | HC20-4 stage 2585 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 110/80 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 20,6 | 19,1 | 17,7 | 16,3 | 15 |
| Outlet air temperature [°C] | 25,9 | 29,5 | 33,1 | 36,7 | 40,2 |
| Water flow[m³/h] | 0,61 | 0,56 | 0,52 | 0,48 | 0,44 |
| Pressure drop in the heat exchanger [kPa] | 2 | 2 | 2 | 2 | 1 |

| Parameters | HC20-4 stage 2585 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 90/70 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 17,6 | 16,2 | 14,8 | 13,4 | 12,1 |
| Outlet air temperature [°C] | 22,2 | 25,8 | 29,3 | 32,9 | 36,4 |
| Water flow[m³/h] | 0,78 | 0,71 | 0,65 | 0,59 | 0,53 |
| Pressure drop in the heat exchanger [kPa] | 4 | 3 | 3 | 2 | 2 |

| Parameters | HC20-4 stage 2585 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 80/70 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 17,6 | 16,1 | 14,7 | 13,4 | 12 |
| Outlet air temperature [°C] | 22,1 | 25,7 | 29,2 | 32,8 | 36,3 |
| Water flow[m³/h] | 1,54 | 1,42 | 1,3 | 1,18 | 1,06 |
| Pressure drop in the heat exchanger [kPa] | 14 | 12 | 10 | 9 | 7 |

| Parameters | HC20-4 stage 2585 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 80/60 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 14,9 | 13,5 | 12,1 | 10,8 | 9,52 |
| Outlet air temperature [°C] | 18,7 | 22,3 | 25,9 | 29,4 | 32,9 |
| Water flow[m³/h] | 0,65 | 0,59 | 0,53 | 0,47 | 0,42 |
| Pressure drop in the heat exchanger [kPa] | 3 | 2 | 2 | 2 | 1 |

| Parameters | HC20-4 stage 2585 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 70/50 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 12,1 | 10,8 | 9,47 | 8,19 | 6,93 |
| Outlet air temperature [°C] | 15,3 | 18,8 | 22,4 | 25,9 | 29,4 |
| Water flow[m³/h] | 0,53 | 0,47 | 0,41 | 0,36 | 0,3 |
| Pressure drop in the heat exchanger [kPa] | 2 | 2 | 1 | 1 | 1 |

| Parameters | HC20-4 stage 2585 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 70/40 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 9,39 | 8,09 | 6,84 | 5,6 | 4,41 |
| Outlet air temperature [°C] | 11,8 | 15,4 | 18,9 | 22,5 | 26 |
| Water flow[m³/h] | 0,27 | 0,24 | 0,2 | 0,16 | 0,13 |
| Pressure drop in the heat exchanger [kPa] | 1 | 0 | 0 | 0 | 0 |

| Parameters | HC20-4 stage 2585 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 60/40 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 9,39 | 8,07 | 6,82 | 5,57 | 4,37 |
| Outlet air temperature [°C] | 11,8 | 15,4 | 18,9 | 22,4 | 25,9 |
| Water flow[m³/h] | 0,41 | 0,35 | 0,3 | 0,24 | 0,19 |
| Pressure drop in the heat exchanger [kPa] | 1 | 1 | 1 | 0 | 0 |

| Parameters | HC20-4 stage 2585 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 60/30 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 6,6 | 5,36 | 4,15 | 3 | 1,87 |
| Outlet air temperature [°C] | 8,3 | 11,9 | 15,4 | 19 | 22,5 |
| Water flow[m³/h] | 0,19 | 0,16 | 0,12 | 0,09 | 0,05 |
| Pressure drop in the heat exchanger [kPa] | 0 | 0 | 0 | 0 | 0 |

| Parameters | HC20-4 stage 2585 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 55/35 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 8,01 | 6,74 | 5,49 | 4,29 | 3,11 |
| Outlet air temperature [°C] | 10,1 | 13,6 | 17,2 | 20,7 | 24,2 |
| Water flow[m³/h] | 0,35 | 0,29 | 0,24 | 0,19 | 0,14 |
| Pressure drop in the heat exchanger [kPa] | 1 | 1 | 0 | 0 | 0 |

| Parameters | HC20-4 stage 2585 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 50/40 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 9,54 | 8,22 | 6,93 | 5,67 | 4,45 |
| Outlet air temperature [°C] | 12 | 15,6 | 19,1 | 22,5 | 26 |
| Water flow[m³/h] | 0,83 | 0,72 | 0,6 | 0,49 | 0,39 |
| Pressure drop in the heat exchanger [kPa] | 5 | 4 | 3 | 2 | 1 |

| Parameters | HC20-4 stage 2585 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 50/30 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 6,64 | 5,4 | 4,19 | 3,01 | 1,88 |
| Outlet air temperature [°C] | 8,4 | 11,9 | 15,5 | 19 | 22,2 |
| Water flow[m³/h] | 0,29 | 0,23 | 0,18 | 0,13 | 0,08 |
| Pressure drop in the heat exchanger [kPa] | 1 | 0 | 0 | 0 | 0 |

| Parameters | HC20-4 stage 2585 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 40/30 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 6,87 | 5,6 | 4,35 | 3,15 | 1,99 |
| Outlet air temperature [°C] | 8,7 | 12,2 | 15,7 | 19,2 | 22,7 |
| Water flow[m³/h] | 0,6 | 0,49 | 0,38 | 0,27 | 0,17 |
| Pressure drop in the heat exchanger [kPa] | 3 | 2 | 1 | 1 | 0 |

| Parameters | HC20-3 stage 1872 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 110/80 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 17,1 | 15,9 | 14,7 | 13,6 | 12,4 |
| Outlet air temperature [°C] | 29,9 | 33,3 | 36,7 | 40 | 43,4 |
| Water flow [m³/h] | 0,5 | 0,47 | 0,43 | 0,4 | 0,37 |
| Pressure drop in the heat exchanger [kPa] | 2 | 1 | 1 | 1 | 1 |

| Parameters | HC20-3 stage 1872 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 90/70 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 14,7 | 13,5 | 12,3 | 11,2 | 10,1 |
| Outlet air temperature [°C] | 25,5 | 28,9 | 32,3 | 35,6 | 38,9 |
| Water flow [m³/h] | 0,65 | 0,59 | 0,54 | 0,49 | 0,44 |
| Pressure drop in the heat exchanger [kPa] | 3 | 2 | 2 | 2 | 1 |

| Parameters | HC20-3 stage 1872 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 80/70 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 14,6 | 13,4 | 12,2 | 11,1 | 9,97 |
| Outlet air temperature [°C] | 25,4 | 28,7 | 32,1 | 35,4 | 38,6 |
| Water flow [m³/h] | 1,28 | 1,18 | 1,08 | 0,98 | 0,88 |
| Pressure drop in the heat exchanger [kPa] | 10 | 9 | 7 | 6 | 5 |

| Parameters | HC20-3 stage 1872 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 80/60 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 12,4 | 11,3 | 10,1 | 9,04 | 7,97 |
| Outlet air temperature [°C] | 21,6 | 25 | 28,3 | 31,6 | 34,9 |
| Water flow [m³/h] | 0,55 | 0,49 | 0,45 | 0,4 | 0,35 |
| Pressure drop in the heat exchanger [kPa] | 2 | 2 | 1 | 1 | 1 |

| Parameters | HC20-3 stage 1872 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 70/50 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 10,2 | 9,02 | 7,94 | 6,87 | 5,83 |
| Outlet air temperature [°C] | 17,7 | 21 | 24,3 | 27,6 | 30,9 |
| Water flow [m³/h] | 0,44 | 0,4 | 0,35 | 0,3 | 0,26 |
| Pressure drop in the heat exchanger [kPa] | 1 | 1 | 1 | 1 | 0 |

| Parameters | HC20-3 stage 1872 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 70/40 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 7,94 | 6,86 | 5,81 | 4,77 | 3,6 |
| Outlet air temperature [°C] | 13,8 | 17,2 | 20,5 | 23,8 | 27 |
| Water flow [m³/h] | 0,23 | 0,2 | 0,17 | 0,14 | 0,11 |
| Pressure drop in the heat exchanger [kPa] | 0 | 0 | 0 | 0 | 0 |

| Parameters | HC20-3 stage 1872 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 60/40 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 7,88 | 6,8 | 5,74 | 4,71 | 3,7 |
| Outlet air temperature [°C] | 13,7 | 17,1 | 20,4 | 23,7 | 26,9 |
| Water flow [m³/h] | 0,34 | 0,3 | 0,25 | 0,21 | 0,16 |
| Pressure drop in the heat exchanger [kPa] | 1 | 1 | 0 | 0 | 0 |

| Parameters | HC20-3 stage 1872 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 60/30 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 5,61 | 4,57 | 3,58 | 2,59 | 1,64 |
| Outlet air temperature [°C] | 9,8 | 13,1 | 16,5 | 19,8 | 23,1 |
| Water flow [m³/h] | 0,16 | 0,13 | 0,1 | 0,08 | 0,05 |
| Pressure drop in the heat exchanger [kPa] | 0 | 0 | 0 | 0 | 0 |

| Parameters | HC20-3 stage 1872 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 55/35 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 6,74 | 5,68 | 4,65 | 3,64 | 2,66 |
| Outlet air temperature [°C] | 11,7 | 15,1 | 18,4 | 21,7 | 25 |
| Water flow [m³/h] | 0,29 | 0,25 | 0,2 | 0,16 | 0,12 |
| Pressure drop in the heat exchanger [kPa] | 1 | 0 | 0 | 0 | 0 |

| Parameters | HC20-3 stage 1872 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 50/40 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 7,96 | 6,86 | 5,79 | 4,74 | 3,73 |
| Outlet air temperature [°C] | 13,9 | 17,2 | 20,5 | 23,7 | 27 |
| Water flow [m³/h] | 0,69 | 0,6 | 0,5 | 0,41 | 0,32 |
| Pressure drop in the heat exchanger [kPa] | 3 | 3 | 2 | 1 | 1 |

| Parameters | HC20-3 stage 1872 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 50/30 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 5,62 | 4,57 | 3,57 | 2,58 | 1,63 |
| Outlet air temperature [°C] | 9,8 | 13,1 | 16,4 | 19,7 | 23,1 |
| Water flow [m³/h] | 0,24 | 0,2 | 0,15 | 0,11 | 0,07 |
| Pressure drop in the heat exchanger [kPa] | 0 | 0 | 0 | 0 | 0 |

| Parameters | HC20-3 stage 1872 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 40/30 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 5,76 | 4,7 | 3,67 | 2,66 | 1,69 |
| Outlet air temperature [°C] | 10 | 13,3 | 16,6 | 19,9 | 23,2 |
| Water flow [m³/h] | 0,5 | 0,41 | 0,32 | 0,23 | 0,15 |
| Pressure drop in the heat exchanger [kPa] | 2 | 1 | 1 | 0 | 0 |

| Parameters | HC20-2 stage 1515 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 110/80 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 15,1 | 14,1 | 13 | 12 | 11 |
| Outlet air temperature [°C] | 32,6 | 35,9 | 39,1 | 42,3 | 45,5 |
| Water flow[m³/h] | 0,45 | 0,42 | 0,38 | 0,35 | 0,33 |
| Pressure drop in the heat exchanger [kPa] | 1 | 1 | 1 | 1 | 1 |

| Parameters | HC20-2 stage 1515 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 90/70 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 12,9 | 11,9 | 10,9 | 9,89 | 8,91 |
| Outlet air temperature [°C] | 27,8 | 31,1 | 34,2 | 37,4 | 40,6 |
| Water flow[m³/h] | 0,57 | 0,52 | 0,48 | 0,44 | 0,39 |
| Pressure drop in the heat exchanger [kPa] | 2 | 2 | 2 | 1 | 1 |

| Parameters | HC20-2 stage 1515 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 80/70 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 12,8 | 11,8 | 10,8 | 9,75 | 8,77 |
| Outlet air temperature [°C] | 27,6 | 30,8 | 34 | 37,1 | 40,3 |
| Water flow[m³/h] | 1,13 | 1,04 | 0,95 | 0,86 | 0,77 |
| Pressure drop in the heat exchanger [kPa] | 8 | 7 | 6 | 5 | 4 |

| Parameters | HC20-2 stage 1515 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 80/60 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 11 | 9,95 | 8,95 | 7,99 | 7,08 |
| Outlet air temperature [°C] | 23,6 | 26,8 | 30 | 33,1 | 36,3 |
| Water flow[m³/h] | 0,48 | 0,44 | 0,39 | 0,35 | 0,31 |
| Pressure drop in the heat exchanger [kPa] | 2 | 1 | 1 | 1 | 1 |

| Parameters | HC20-2 stage 1515 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 70/50 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 8,98 | 7,99 | 7,04 | 6,1 | 5,18 |
| Outlet air temperature [°C] | 19,3 | 22,5 | 25,7 | 28,8 | 32 |
| Water flow[m³/h] | 0,39 | 0,35 | 0,31 | 0,27 | 0,23 |
| Pressure drop in the heat exchanger [kPa] | 1 | 1 | 1 | 1 | 0 |

| Parameters | HC20-2 stage 1515 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 70/40 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 7,05 | 6,11 | 5,18 | 4,28 | 3,38 |
| Outlet air temperature [°C] | 15,2 | 18,4 | 21,5 | 24,7 | 27,8 |
| Water flow[m³/h] | 0,21 | 0,18 | 0,15 | 0,12 | 0,1 |
| Pressure drop in the heat exchanger [kPa] | 0 | 0 | 0 | 0 | 0 |

| Parameters | HC20-2 stage 1515 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 60/40 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 6,99 | 6,04 | 5,11 | 4,2 | 3,31 |
| Outlet air temperature [°C] | 15 | 18,2 | 21,4 | 24,5 | 27,6 |
| Water flow[m³/h] | 0,3 | 0,26 | 0,22 | 0,18 | 0,14 |
| Pressure drop in the heat exchanger [kPa] | 1 | 1 | 0 | 0 | 0 |

| Parameters | HC20-2 stage 1515 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 60/30 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 5,03 | 4,11 | 3,21 | 2,35 | 1,5 |
| Outlet air temperature [°C] | 10,8 | 14 | 17,2 | 20,3 | 23,5 |
| Water flow[m³/h] | 0,15 | 0,12 | 0,09 | 0,07 | 0,04 |
| Pressure drop in the heat exchanger [kPa] | 0 | 0 | 0 | 0 | 0 |

| Parameters | HC20-2 stage 1515 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 55/35 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 6 | 5,06 | 4,15 | 3,25 | 2,39 |
| Outlet air temperature [°C] | 12,9 | 16,1 | 19,3 | 22,4 | 25,5 |
| Water flow[m³/h] | 0,26 | 0,22 | 0,18 | 0,14 | 0,1 |
| Pressure drop in the heat exchanger [kPa] | 1 | 0 | 0 | 0 | 0 |

| Parameters | HC20-2 stage 1515 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 50/40 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 7,03 | 6,07 | 5,12 | 4,2 | 3,3 |
| Outlet air temperature [°C] | 15,1 | 18,3 | 21,4 | 24,5 | 27,6 |
| Water flow[m³/h] | 0,61 | 0,53 | 0,45 | 0,37 | 0,29 |
| Pressure drop in the heat exchanger [kPa] | 3 | 2 | 1 | 1 | 1 |

| Parameters | HC20-2 stage 1515 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 50/30 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 5 | 4,09 | 3,19 | 2,32 | 1,48 |
| Outlet air temperature [°C] | 10,8 | 14 | 17,1 | 20 | 23,4 |
| Water flow[m³/h] | 0,22 | 0,18 | 0,14 | 0,1 | 0,06 |
| Pressure drop in the heat exchanger [kPa] | 0 | 0 | 0 | 0 | 0 |

| Parameters | HC20-2 stage 1515 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 40/30 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 5,1 | 4,17 | 3,26 | 2,37 | 1,52 |
| Outlet air temperature [°C] | 11 | 14,1 | 17,3 | 20,4 | 23,5 |
| Water flow[m³/h] | 0,44 | 0,36 | 0,28 | 0,21 | 0,13 |
| Pressure drop in the heat exchanger [kPa] | 2 | 1 | 1 | 0 | 0 |

| Parameters | HC20-1 stage1248 m3/h | | | | |
|--|-----------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 110/80 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 13,5 | 12,5 | 11,6 | 10,7 | 9,81 |
| Outlet air temperature [°C] | 35,2 | 38,3 | 41,4 | 44,5 | 47,5 |
| Water flow[m³/h] | 0,4 | 0,37 | 0,34 | 0,32 | 0,29 |
| Pressure drop in the heat exchanger [kP] | 1 | 1 | 1 | 1 | 1 |

| Parameters | HC20-1 stage 1248 m3/h | | | | |
|--|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 90/70 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 11,5 | 10,6 | 9,66 | 8,79 | 7,92 |
| Outlet air temperature [°C] | 30 | 33,1 | 36,2 | 39,2 | 42,2 |
| Water flow[m³/h] | 0,51 | 0,47 | 0,43 | 0,39 | 0,35 |
| Pressure drop in the heat exchanger [kP] | 2 | 1 | 1 | 1 | 1 |

| Parameters | HC20-1 stage1248 m3/h | | | | |
|--|-----------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 80/70 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 11,4 | 10,4 | 9,53 | 8,64 | 7,77 |
| Outlet air temperature [°C] | 29,7 | 32,7 | 35,8 | 38,8 | 41,8 |
| Water flow[m³/h] | 1 | 0,92 | 0,84 | 0,76 | 0,68 |
| Pressure drop in the heat exchanger [kP] | 6 | 5 | 5 | 4 | 3 |

| Parameters | HC20-1 stage 1248 m3/h | | | | |
|--|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 80/60 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 9,74 | 8,85 | 7,97 | 7,12 | 6,27 |
| Outlet air temperature [°C] | 25,5 | 28,5 | 31,6 | 34,6 | 37,6 |
| Water flow[m³/h] | 0,43 | 0,39 | 0,35 | 0,31 | 0,28 |
| Pressure drop in the heat exchanger [kP] | 1 | 1 | 1 | 1 | 1 |

| Parameters | HC20-1 stage1248 m3/h | | | | |
|--|-----------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 70/50 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 7,99 | 7,13 | 6,28 | 5,43 | 4,63 |
| Outlet air temperature [°C] | 20,9 | 24 | 27 | 30 | 33 |
| Water flow[m³/h] | 0,35 | 0,31 | 0,27 | 0,24 | 0,2 |
| Pressure drop in the heat exchanger [kP] | 1 | 1 | 1 | 0 | 0 |

| Parameters | HC20-1 stage 1248 m3/h | | | | |
|--|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 70/40 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 6,33 | 5,48 | 4,65 | 3,84 | 3,05 |
| Outlet air temperature [°C] | 16,5 | 19,6 | 22,6 | 25,6 | 28,5 |
| Water flow[m³/h] | 0,18 | 0,16 | 0,14 | 0,11 | 0,09 |
| Pressure drop in the heat exchanger [kP] | 0 | 0 | 0 | 0 | 0 |

| Parameters | HC20-1 stage1248 m3/h | | | | |
|--|-----------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 60/40 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 6,25 | 5,4 | 4,57 | 3,76 | 2,98 |
| Outlet air temperature [°C] | 16,3 | 19,4 | 22,4 | 25,4 | 28,3 |
| Water flow[m³/h] | 0,27 | 0,24 | 0,2 | 0,16 | 0,13 |
| Pressure drop in the heat exchanger [kP] | 1 | 0 | 0 | 0 | 0 |

| Parameters | HC20-1 stage 1248 m3/h | | | | |
|--|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 60/30 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 4,52 | 3,71 | 2,91 | 2,13 | 1,37 |
| Outlet air temperature [°C] | 11,8 | 14,9 | 17,9 | 20,9 | 23,9 |
| Water flow[m³/h] | 0,13 | 0,11 | 0,08 | 0,06 | 0,04 |
| Pressure drop in the heat exchanger [kP] | 0 | 0 | 0 | 0 | 0 |

| Parameters | HC20-1 stage1248 m3/h | | | | |
|--|-----------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 55/35 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 5,37 | 4,53 | 3,72 | 2,93 | 2,15 |
| Outlet air temperature [°C] | 14 | 17,1 | 20,1 | 23,1 | 26 |
| Water flow[m³/h] | 0,23 | 0,2 | 0,16 | 0,13 | 0,09 |
| Pressure drop in the heat exchanger [kP] | 0 | 0 | 0 | 0 | 0 |

| Parameters | HC20-1 stage 1248 m3/h | | | | |
|--|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 50/40 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 6,25 | 5,4 | 4,56 | 3,74 | 2,95 |
| Outlet air temperature [°C] | 16,3 | 19,4 | 22,3 | 25,3 | 28,3 |
| Water flow[m³/h] | 0,54 | 0,47 | 0,4 | 0,33 | 0,26 |
| Pressure drop in the heat exchanger [kP] | 2 | 2 | 1 | 1 | 1 |

| Parameters | HC20-1 stage1248 m3/h | | | | |
|--|-----------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 50/30 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 4,49 | 3,67 | 2,87 | 2,1 | 1,34 |
| Outlet air temperature [°C] | 11,7 | 14,8 | 17,8 | 20,8 | 23,8 |
| Water flow[m³/h] | 0,19 | 0,16 | 0,12 | 0,09 | 0,06 |
| Pressure drop in the heat exchanger [kP] | 0 | 0 | 0 | 0 | 0 |

| Parameters | HC20-1 stage 1248 m3/h | | | | |
|--|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 40/30 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 4,54 | 3,71 | 2,91 | 2,13 | 1,37 |
| Outlet air temperature [°C] | 11,9 | 14,9 | 17,9 | 20,9 | 23,8 |
| Water flow[m³/h] | 0,39 | 0,32 | 0,25 | 0,18 | 0,12 |
| Pressure drop in the heat exchanger [kP] | 1 | 1 | 1 | 0 | 0 |

| Parameters | HC35-5 stage -4000 m3/h | | | | |
|---|-------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 110/80 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 39,6 | 36,9 | 34,2 | 31,5 | 28,9 |
| Outlet air temperature [°C] | 33,4 | 36,6 | 39,9 | 43 | 46,2 |
| Water flow[m³/h] | 1,17 | 1,09 | 1,01 | 0,93 | 0,85 |
| Pressure drop in the heat exchanger [kPa] | 3 | 4 | 3 | 3 | 2 |

| Parameters | HC35-5 stage -4000 m3/h | | | | |
|---|-------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 90/70 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 33,9 | 31,2 | 28,5 | 25,9 | 23,4 |
| Outlet air temperature [°C] | 28,6 | 31,8 | 34,9 | 38,1 | 41,2 |
| Water flow[m³/h] | 1,49 | 1,37 | 1,26 | 1,14 | 1,03 |
| Pressure drop in the heat exchanger [kPa] | 5 | 4 | 4 | 3 | 4 |

| Parameters | HC35-5 stage -4000 m3/h | | | | |
|---|-------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 80/70 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 33,7 | 31 | 28,3 | 25,7 | 23,1 |
| Outlet air temperature [°C] | 28,4 | 31,6 | 34,7 | 37,8 | 40,9 |
| Water flow[m³/h] | 2,97 | 2,72 | 2,49 | 2,26 | 2,03 |
| Pressure drop in the heat exchanger [kPa] | 10 | 8 | 8 | 7 | 6 |

| Parameters | HC35-5 stage -4000 m3/h | | | | |
|---|-------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 80/60 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 28,7 | 26 | 23,4 | 20,9 | 18,4 |
| Outlet air temperature [°C] | 24,2 | 27,3 | 30,5 | 33,6 | 36,7 |
| Water flow[m³/h] | 1,26 | 1,14 | 1,03 | 0,92 | 0,81 |
| Pressure drop in the heat exchanger [kPa] | 4 | 3 | 4 | 3 | 2 |

| Parameters | HC35-5 stage -4000 m3/h | | | | |
|---|-------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 70/50 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 23,4 | 20,8 | 18,3 | 15,9 | 13,5 |
| Outlet air temperature [°C] | 19,7 | 22,9 | 26 | 29,1 | 32,2 |
| Water flow[m³/h] | 1,02 | 0,91 | 0,8 | 0,69 | 0,59 |
| Pressure drop in the heat exchanger [kPa] | 4 | 3 | 2 | 3 | 2 |

| Parameters | HC35-5 stage -4000 m3/h | | | | |
|---|-------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 70/40 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 18,3 | 15,8 | 13,3 | 10,9 | 8,62 |
| Outlet air temperature [°C] | 15,4 | 18,5 | 21,6 | 24,7 | 27,8 |
| Water flow[m³/h] | 0,53 | 0,46 | 0,39 | 0,32 | 0,25 |
| Pressure drop in the heat exchanger [kPa] | 2 | 4 | 3 | 2 | 1 |

| Parameters | HC35-5 stage -4000 m3/h | | | | |
|---|-------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 60/40 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 18,2 | 15,7 | 13,2 | 10,8 | 8,52 |
| Outlet air temperature [°C] | 15,3 | 18,4 | 21,5 | 24,6 | 27,7 |
| Water flow[m³/h] | 0,79 | 0,68 | 0,58 | 0,47 | 0,37 |
| Pressure drop in the heat exchanger [kPa] | 2 | 3 | 2 | 2 | 3 |

| Parameters | HC35-5 stage -4000 m3/h | | | | |
|---|-------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 60/30 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 12,8 | 10,5 | 8,15 | 5,89 | 3,69 |
| Outlet air temperature [°C] | 10,8 | 14 | 17,1 | 20,2 | 23,3 |
| Water flow[m³/h] | 0,37 | 0,3 | 0,24 | 0,17 | 0,11 |
| Pressure drop in the heat exchanger [kPa] | 3 | 2 | 4 | 4 | 2 |

| Parameters | HC35-5 stage -4000 m3/h | | | | |
|---|-------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 55/35 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 15,5 | 13,1 | 10,7 | 8,35 | 6,08 |
| Outlet air temperature [°C] | 13,1 | 16,2 | 19,3 | 22,4 | 25,5 |
| Water flow[m³/h] | 0,68 | 0,57 | 0,46 | 0,36 | 0,26 |
| Pressure drop in the heat exchanger [kPa] | 3 | 2 | 4 | 2 | 1 |

| Parameters | HC35-5 stage -4000 m3/h | | | | |
|---|-------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 50/40 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 18,4 | 15,9 | 13,4 | 11 | 8,59 |
| Outlet air temperature [°C] | 15,5 | 18,6 | 21,7 | 24,7 | 27,8 |
| Water flow[m³/h] | 1,6 | 1,38 | 1,16 | 0,95 | 0,75 |
| Pressure drop in the heat exchanger [kPa] | 4 | 5 | 3 | 3 | 4 |

| Parameters | HC35-5 stage -4000 m3/h | | | | |
|---|-------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 50/30 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 12,9 | 10,5 | 8,16 | 5,89 | 3,69 |
| Outlet air temperature [°C] | 10,9 | 14 | 17,1 | 20,2 | 23,3 |
| Water flow[m³/h] | 0,56 | 0,46 | 0,35 | 0,26 | 0,16 |
| Pressure drop in the heat exchanger [kPa] | 2 | 4 | 2 | 1 | 4 |

| Parameters | HC35-5 stage -4000 m3/h | | | | |
|---|-------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 40/30 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 13,3 | 10,8 | 8,44 | 6,12 | 3,87 |
| Outlet air temperature [°C] | 11,2 | 14,3 | 17,4 | 20,4 | 23,5 |
| Water flow[m³/h] | 1,15 | 0,94 | 0,73 | 0,53 | 0,34 |
| Pressure drop in the heat exchanger [kPa] | 3 | 3 | 4 | 2 | 2 |

| Parameters | HC35-4 stage 2522 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 110/80 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 30,4 | 28,3 | 26,2 | 24,2 | 22,2 |
| Outlet air temperature [°C] | 40,7 | 43,5 | 46,3 | 49,1 | 51,8 |
| Water flow[m³/h] | 0,9 | 0,83 | 0,77 | 0,71 | 0,65 |
| Pressure drop in the heat exchanger [kPa] | 3 | 2 | 2 | 3 | 3 |

| Parameters | HC35-4 stage 2522 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 90/70 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 25,9 | 23,9 | 21,8 | 19,8 | 17,9 |
| Outlet air temperature [°C] | 34,7 | 37,5 | 40,3 | 43 | 45,4 |
| Water flow[m³/h] | 1,14 | 1,05 | 0,96 | 0,87 | 0,79 |
| Pressure drop in the heat exchanger [kPa] | 3 | 4 | 3 | 3 | 2 |

| Parameters | HC35-4 stage 2522 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 80/70 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 25,6 | 23,5 | 21,5 | 19,5 | 17,6 |
| Outlet air temperature [°C] | 34,3 | 37,1 | 39,8 | 42,5 | 45,2 |
| Water flow[m³/h] | 2,26 | 2,07 | 1,89 | 1,72 | 1,55 |
| Pressure drop in the heat exchanger [kPa] | 7 | 6 | 5 | 4 | 5 |

| Parameters | HC35-4 stage 2522 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 80/60 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 22 | 20 | 18 | 16,1 | 14,2 |
| Outlet air temperature [°C] | 29,4 | 32,2 | 35 | 37,7 | 40,4 |
| Water flow[m³/h] | 0,97 | 0,88 | 0,79 | 0,71 | 0,62 |
| Pressure drop in the heat exchanger [kPa] | 3 | 3 | 2 | 3 | 3 |

| Parameters | HC35-4 stage 2522 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 70/50 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 18,1 | 16,1 | 14,2 | 12,3 | 10,4 |
| Outlet air temperature [°C] | 24,1 | 26,9 | 29,6 | 32,3 | 35 |
| Water flow[m³/h] | 0,79 | 0,7 | 0,62 | 0,54 | 0,46 |
| Pressure drop in the heat exchanger [kPa] | 2 | 3 | 3 | 2 | 4 |

| Parameters | HC35-4 stage 2522 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 70/40 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 14 | 12,4 | 10,5 | 8,66 | 6,86 |
| Outlet air temperature [°C] | 19,1 | 21,8 | 24,5 | 27,2 | 29,8 |
| Water flow[m³/h] | 0,42 | 0,36 | 0,31 | 0,25 | 0,2 |
| Pressure drop in the heat exchanger [kPa] | 3 | 2 | 2 | 1 | 3 |

| Parameters | HC35-4 stage 2522 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 60/40 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 14,1 | 12,2 | 10,3 | 8,47 | 6,7 |
| Outlet air temperature [°C] | 18,8 | 21,6 | 24,3 | 27 | 29,6 |
| Water flow[m³/h] | 0,61 | 0,53 | 0,45 | 0,37 | 0,29 |
| Pressure drop in the heat exchanger [kPa] | 3 | 2 | 4 | 3 | 2 |

| Parameters | HC35-4 stage 2522 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 60/30 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 10,2 | 8,32 | 6,53 | 4,76 | 3,05 |
| Outlet air temperature [°C] | 13,6 | 16,3 | 19,1 | 21,7 | 24,4 |
| Water flow[m³/h] | 0,3 | 0,24 | 0,19 | 0,14 | 0,09 |
| Pressure drop in the heat exchanger [kPa] | 2 | 4 | 5 | 3 | 1 |

| Parameters | HC35-4 stage 2522 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 55/35 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 12,1 | 10,2 | 8,38 | 6,59 | 4,84 |
| Outlet air temperature [°C] | 16,2 | 18,9 | 21,6 | 24,3 | 26,9 |
| Water flow[m³/h] | 0,53 | 0,44 | 0,36 | 0,29 | 0,21 |
| Pressure drop in the heat exchanger [kPa] | 2 | 4 | 3 | 2 | 3 |

| Parameters | HC35-4 stage 2522 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 50/40 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 14,1 | 12,2 | 10,3 | 8,45 | 6,66 |
| Outlet air temperature [°C] | 18,9 | 21,6 | 24,3 | 26,9 | 29,6 |
| Water flow[m³/h] | 1,23 | 1,06 | 0,9 | 0,74 | 0,58 |
| Pressure drop in the heat exchanger [kPa] | 4 | 4 | 3 | 4 | 2 |

| Parameters | HC35-4 stage 2522 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 50/30 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 10,1 | 8,26 | 6,46 | 4,71 | 3,01 |
| Outlet air temperature [°C] | 13,5 | 16,3 | 19 | 21,6 | 24,3 |
| Water flow[m³/h] | 0,44 | 0,36 | 0,28 | 0,2 | 0,13 |
| Pressure drop in the heat exchanger [kPa] | 4 | 2 | 2 | 3 | 3 |

| Parameters | HC35-4 stage 2522 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 40/30 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 10,2 | 8,37 | 6,55 | 4,78 | 3,07 |
| Outlet air temperature [°C] | 13,7 | 16,4 | 19,1 | 21,7 | 24,4 |
| Water flow[m³/h] | 0,89 | 0,73 | 0,57 | 0,41 | 0,27 |
| Pressure drop in the heat exchanger [kPa] | 3 | 4 | 2 | 3 | 1 |

| Parameters | HC35-3 stage 1826 m3/h | | | | |
|--|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 110/80 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 24,9 | 23,2 | 19,8 | 21 | 18,2 |
| Outlet air temperature [°C] | 46 | 48,6 | 53,6 | 51,1 | 56 |
| Water flow[m³/h] | 0,73 | 0,68 | 0,58 | 0,63 | 0,54 |
| Pressure drop in the heat exchanger [kP] | 3 | 3 | 2 | 3 | 2 |

| Parameters | HC35-3 stage 1826 m3/h | | | | |
|--|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 90/70 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 21,2 | 19,5 | 16,2 | 17,9 | 14,7 |
| Outlet air temperature [°C] | 39,2 | 41,7 | 46,6 | 44,2 | 49,1 |
| Water flow[m³/h] | 0,93 | 0,86 | 0,72 | 0,79 | 0,65 |
| Pressure drop in the heat exchanger [kP] | 3 | 3 | 3 | 2 | 3 |

| Parameters | HC35-3 stage 1826 m3/h | | | | |
|--|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 80/70 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 20,9 | 19,2 | 17,5 | 15,9 | 14,3 |
| Outlet air temperature [°C] | 38,5 | 41 | 43,5 | 45,9 | 48,3 |
| Water flow[m³/h] | 1,84 | 1,69 | 1,54 | 1,4 | 1,26 |
| Pressure drop in the heat exchanger [kP] | 5 | 4 | 5 | 4 | 4 |

| Parameters | HC35-3 stage 1826 m3/h | | | | |
|--|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 80/60 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 18 | 16,4 | 14,8 | 13,2 | 11,7 |
| Outlet air temperature [°C] | 33,3 | 35,8 | 38,3 | 40,7 | 43,1 |
| Water flow[m³/h] | 0,79 | 0,72 | 0,65 | 0,58 | 0,51 |
| Pressure drop in the heat exchanger [kP] | 2 | 3 | 3 | 2 | 2 |

| Parameters | HC35-3 stage 1826 m3/h | | | | |
|--|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 70/50 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 14,9 | 13,2 | 11,7 | 10,1 | 8,63 |
| Outlet air temperature [°C] | 27,4 | 29,9 | 32,3 | 34,7 | 37,1 |
| Water flow[m³/h] | 0,65 | 0,58 | 0,51 | 0,44 | 0,38 |
| Pressure drop in the heat exchanger [kP] | 3 | 2 | 2 | 4 | 3 |

| Parameters | HC35-3 stage 1826 m3/h | | | | |
|--|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 70/40 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 11,9 | 10,3 | 8,75 | 7,25 | 5,77 |
| Outlet air temperature [°C] | 21,9 | 24,3 | 26,8 | 29,1 | 31,4 |
| Water flow[m³/h] | 0,35 | 0,3 | 0,25 | 0,21 | 0,17 |
| Pressure drop in the heat exchanger [kP] | 2 | 2 | 1 | 3 | 4 |

| Parameters | HC35-3 stage 1826 m3/h | | | | |
|--|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 60/40 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 11,6 | 10,1 | 8,53 | 7,05 | 5,59 |
| Outlet air temperature [°C] | 21,5 | 23,9 | 26 | 28,7 | 31,1 |
| Water flow[m³/h] | 0,51 | 0,44 | 0,37 | 0,31 | 0,24 |
| Pressure drop in the heat exchanger [kP] | 2 | 4 | 3 | 2 | 4 |

| Parameters | HC35-3 stage 1826 m3/h | | | | |
|--|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 60/30 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 8,52 | 7,01 | 5,52 | 4,06 | 2,64 |
| Outlet air temperature [°C] | 15,7 | 18,2 | 20,6 | 22,9 | 25,2 |
| Water flow[m³/h] | 0,25 | 0,2 | 0,16 | 0,12 | 0,08 |
| Pressure drop in the heat exchanger [kP] | 5 | 3 | 4 | 2 | 1 |

| Parameters | HC35-3 stage 1826 m3/h | | | | |
|--|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 55/35 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 10 | 8,48 | 6,97 | 5,52 | 4,07 |
| Outlet air temperature [°C] | 18,5 | 20,9 | 23,3 | 25,7 | 28,1 |
| Water flow[m³/h] | 0,44 | 0,37 | 0,3 | 0,24 | 0,18 |
| Pressure drop in the heat exchanger [kP] | 4 | 3 | 2 | 4 | 4 |

| Parameters | HC35-3 stage 1826 m3/h | | | | |
|--|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 50/40 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 11,5 | 9,97 | 8,44 | 6,94 | 5,49 |
| Outlet air temperature [°C] | 21,3 | 23,7 | 26,2 | 28,5 | 30,9 |
| Water flow[m³/h] | 1 | 0,87 | 0,73 | 0,6 | 0,48 |
| Pressure drop in the heat exchanger [kP] | 4 | 3 | 4 | 3 | 2 |

| Parameters | HC35-3 stage 1826 m3/h | | | | |
|--|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 50/30 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 8,4 | 6,88 | 5,42 | 3,98 | 2,57 |
| Outlet air temperature [°C] | 15,5 | 17,9 | 20,4 | 22,8 | 25,1 |
| Water flow[m³/h] | 0,36 | 0,3 | 0,24 | 0,17 | 0,11 |
| Pressure drop in the heat exchanger [kP] | 3 | 2 | 4 | 4 | 2 |

| Parameters | HC35-3 stage 1826 m3/h | | | | |
|--|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 40/30 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 8,43 | 6,91 | 5,42 | 3,98 | 2,58 |
| Outlet air temperature [°C] | 15,6 | 18 | 20,4 | 22,8 | 25,1 |
| Water flow[m³/h] | 0,73 | 0,6 | 0,47 | 0,34 | 0,34 |
| Pressure drop in the heat exchanger [kP] | 4 | 3 | 4 | 2 | 4 |

| Parameters | HC35-2 stage 1478 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 110/80 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 21,7 | 20,2 | 17,3 | 18,7 | 15,9 |
| Outlet air temperature [°C] | 49,6 | 52 | 56,6 | 54,3 | 58,9 |
| Water flow[m³/h] | 0,64 | 0,6 | 0,51 | 0,55 | 0,47 |
| Pressure drop in the heat exchanger [kPa] | 3 | 2 | 2 | 2 | 4 |

| Parameters | HC35-2 stage 1478 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 90/70 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 18,5 | 17 | 14,2 | 15,6 | 12,8 |
| Outlet air temperature [°C] | 42,2 | 44,5 | 49,1 | 46,8 | 51,3 |
| Water flow[m³/h] | 0,81 | 0,75 | 0,62 | 0,69 | 0,56 |
| Pressure drop in the heat exchanger [kPa] | 2 | 4 | 3 | 3 | 2 |

| Parameters | HC35-2 stage 1478 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 80/70 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 18,1 | 16,6 | 15,2 | 13,8 | 12,4 |
| Outlet air temperature [°C] | 41,3 | 43,6 | 45,9 | 48,1 | 50,3 |
| Water flow[m³/h] | 1,59 | 1,46 | 1,34 | 1,21 | 1,09 |
| Pressure drop in the heat exchanger [kPa] | 4 | 5 | 4 | 3 | 4 |

| Parameters | HC35-2 stage 1478 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 80/60 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 15,7 | 14,3 | 12,9 | 11,5 | 10,2 |
| Outlet air temperature [°C] | 35,9 | 38,2 | 40,5 | 42,7 | 44,9 |
| Water flow[m³/h] | 0,69 | 0,63 | 0,57 | 0,51 | 0,45 |
| Pressure drop in the heat exchanger [kPa] | 3 | 3 | 2 | 2 | 4 |

| Parameters | HC35-2 stage 1478 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 70/50 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 13 | 11,6 | 10,2 | 8,88 | 7,57 |
| Outlet air temperature [°C] | 29,6 | 31,9 | 34,1 | 36,4 | 38,5 |
| Water flow[m³/h] | 0,57 | 0,51 | 0,45 | 0,39 | 0,33 |
| Pressure drop in the heat exchanger [kPa] | 2 | 2 | 4 | 3 | 2 |

| Parameters | HC35-2 stage 1478 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 70/40 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 10,4 | 9,07 | 7,72 | 6,42 | 5,13 |
| Outlet air temperature [°C] | 23,8 | 26,1 | 28,2 | 30,5 | 32,6 |
| Water flow[m³/h] | 0,3 | 0,26 | 0,22 | 0,19 | 0,15 |
| Pressure drop in the heat exchanger [kPa] | 2 | 1 | 4 | 5 | 3 |

| Parameters | HC35-2 stage 1478 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 60/40 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 10,2 | 8,84 | 7,51 | 6,21 | 4,94 |
| Outlet air temperature [°C] | 23,2 | 25,5 | 27,7 | 29,9 | 32,1 |
| Water flow[m³/h] | 0,44 | 0,39 | 0,33 | 0,27 | 0,22 |
| Pressure drop in the heat exchanger [kPa] | 4 | 3 | 2 | 1 | 4 |

| Parameters | HC35-2 stage 1478 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 60/30 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 7,55 | 6,22 | 4,93 | 3,64 | 2,38 |
| Outlet air temperature [°C] | 17,2 | 19,4 | 21,6 | 23,8 | 25,8 |
| Water flow[m³/h] | 0,22 | 0,18 | 0,14 | 0,11 | 0,07 |
| Pressure drop in the heat exchanger [kPa] | 4 | 5 | 3 | 2 | 1 |

| Parameters | HC35-2 stage 1478 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 55/35 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 8,8 | 7,45 | 6,15 | 4,87 | 3,62 |
| Outlet air temperature [°C] | 20,1 | 22,3 | 24,5 | 26,7 | 28,9 |
| Water flow[m³/h] | 0,38 | 0,32 | 0,27 | 0,21 | 0,16 |
| Pressure drop in the heat exchanger [kPa] | 3 | 2 | 1 | 3 | 4 |

| Parameters | HC35-2 stage 1478 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 50/40 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 10,1 | 8,7 | 7,36 | 6,07 | 4,8 |
| Outlet air temperature [°C] | 22,9 | 25,2 | 27,4 | 29,6 | 31,8 |
| Water flow[m³/h] | 0,88 | 0,76 | 0,64 | 0,53 | 0,42 |
| Pressure drop in the heat exchanger [kPa] | 3 | 4 | 3 | 2 | 3 |

| Parameters | HC35-2 stage 1478 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 50/30 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 7,39 | 6,08 | 4,79 | 3,54 | 2,3 |
| Outlet air temperature [°C] | 16,9 | 19,1 | 21,3 | 23,5 | 25,6 |
| Water flow[m³/h] | 0,32 | 0,26 | 0,21 | 0,15 | 0,1 |
| Pressure drop in the heat exchanger [kPa] | 2 | 1 | 2 | 3 | 2 |

| Parameters | HC35-2 stage 1478 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 40/30 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 7,37 | 6,05 | 4,76 | 3,51 | 2,28 |
| Outlet air temperature [°C] | 16,8 | 19,1 | 21,3 | 23,4 | 25,6 |
| Water flow[m³/h] | 0,64 | 0,52 | 0,41 | 0,3 | 0,2 |
| Pressure drop in the heat exchanger [kPa] | 3 | 2 | 3 | 2 | 3 |

| Parameters | HC35-1 stage 1217 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 110/80 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 19,1 | 17,7 | 16,5 | 15,2 | 14 |
| Outlet air temperature [°C] | 52,9 | 55,1 | 57,3 | 59,4 | 61,5 |
| Water flow[m³/h] | 0,56 | 0,52 | 0,49 | 0,45 | 0,41 |
| Pressure drop in the heat exchanger [kPa] | 2 | 2 | 2 | 3 | 3 |

| Parameters | HC35-1 stage 1217 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 90/70 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 16,2 | 14,9 | 13,7 | 12,4 | 11,2 |
| Outlet air temperature [°C] | 44,9 | 47,1 | 49,2 | 51,3 | 53,4 |
| Water flow[m³/h] | 0,71 | 0,66 | 0,6 | 0,55 | 0,49 |
| Pressure drop in the heat exchanger [kPa] | 3 | 3 | 2 | 2 | 2 |

| Parameters | HC35-1 stage 1217 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 80/70 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 15,8 | 14,5 | 13,3 | 12 | 10,8 |
| Outlet air temperature [°C] | 43,9 | 46 | 48,1 | 50,2 | 52,2 |
| Water flow[m³/h] | 1,39 | 1,28 | 1,17 | 1,06 | 0,95 |
| Pressure drop in the heat exchanger [kPa] | 4 | 4 | 3 | 4 | 3 |

| Parameters | HC35-1 stage 1217 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 80/60 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 13,8 | 12,6 | 11,3 | 10,1 | 8,95 |
| Outlet air temperature [°C] | 38,3 | 40,4 | 42,5 | 44,6 | 46,6 |
| Water flow[m³/h] | 0,61 | 0,55 | 0,5 | 0,45 | 0,39 |
| Pressure drop in the heat exchanger [kPa] | 3 | 2 | 2 | 3 | 3 |

| Parameters | HC35-1 stage 1217 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 70/50 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 11,4 | 10,2 | 9 | 7,83 | 6,69 |
| Outlet air temperature [°C] | 31,6 | 33,8 | 35,8 | 37,9 | 39,9 |
| Water flow[m³/h] | 0,5 | 0,45 | 0,39 | 0,34 | 0,29 |
| Pressure drop in the heat exchanger [kPa] | 2 | 4 | 3 | 2 | 2 |

| Parameters | HC35-1 stage 1217 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 70/40 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 9,24 | 8,05 | 6,86 | 5,71 | 4,59 |
| Outlet air temperature [°C] | 25,6 | 27,7 | 29,7 | 31,7 | 33,6 |
| Water flow[m³/h] | 0,27 | 0,23 | 0,2 | 0,17 | 0,13 |
| Pressure drop in the heat exchanger [kPa] | 1 | 4 | 3 | 4 | 3 |

| Parameters | HC35-1 stage 1217 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 60/40 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 9 | 7,81 | 6,64 | 5,5 | 4,39 |
| Outlet air temperature [°C] | 24,9 | 27 | 29,1 | 31,1 | 33,1 |
| Water flow[m³/h] | 0,9 | 0,34 | 0,29 | 0,24 | 0,19 |
| Pressure drop in the heat exchanger [kPa] | 3 | 2 | 2 | 4 | 3 |

| Parameters | HC35-1 stage 1217 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 60/30 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 6,72 | 5,55 | 4,4 | 3,28 | 2,16 |
| Outlet air temperature [°C] | 18,6 | 20,7 | 22,7 | 24,6 | 26,4 |
| Water flow[m³/h] | 0,2 | 0,16 | 0,13 | 0,1 | 0,06 |
| Pressure drop in the heat exchanger [kPa] | 3 | 4 | 2 | 1 | 1 |

| Parameters | HC35-1 stage 1217 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 55/35 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 7,78 | 6,6 | 5,46 | 4,34 | 3,23 |
| Outlet air temperature [°C] | 21,6 | 23,6 | 25,7 | 27,7 | 29,6 |
| Water flow[m³/h] | 0,34 | 0,29 | 0,24 | 0,19 | 0,14 |
| Pressure drop in the heat exchanger [kPa] | 2 | 2 | 4 | 5 | 3 |

| Parameters | HC35-1 stage 1217 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 50/40 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 8,83 | 7,64 | 6,47 | 5,34 | 4,24 |
| Outlet air temperature [°C] | 24,5 | 26,6 | 28,6 | 30,6 | 32,6 |
| Water flow[m³/h] | 0,77 | 0,67 | 0,56 | 0,46 | 0,37 |
| Pressure drop in the heat exchanger [kPa] | 2 | 3 | 2 | 4 | 3 |

| Parameters | HC35-1 stage 1217 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 50/30 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 6,55 | 5,4 | 4,27 | 3,17 | 2,08 |
| Outlet air temperature [°C] | 18,2 | 20,2 | 22,3 | 24,3 | 26,2 |
| Water flow[m³/h] | 0,28 | 0,23 | 0,19 | 0,14 | 0,09 |
| Pressure drop in the heat exchanger [kPa] | 2 | 4 | 5 | 3 | 1 |

| Parameters | HC35-1 stage 1217 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 40/30 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 6,48 | 5,33 | 4,21 | 3,11 | 2,03 |
| Outlet air temperature [°C] | 18 | 20 | 22,1 | 24,1 | 26 |
| Water flow[m³/h] | 0,56 | 0,46 | 0,36 | 0,27 | 0,18 |
| Pressure drop in the heat exchanger [kPa] | 2 | 4 | 3 | 1 | 5 |

| Parameters | HC50-5 stage -4600 m3/h | | | | |
|---|-------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 110/80 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 55,1 | 51,4 | 47,8 | 44,3 | 40,8 |
| Outlet air temperature [°C] | 34,8 | 38,1 | 41,3 | 44,5 | 47,7 |
| Water flow[m³/h] | 1,62 | 1,52 | 1,41 | 1,31 | 1,2 |
| Pressure drop in the heat exchanger [kPa] | 9 | 8 | 7 | 6 | 5 |

| Parameters | HC50-5 stage -4600 m3/h | | | | |
|---|-------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 90/70 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 46,7 | 43,2 | 39,7 | 36,2 | 32,9 |
| Outlet air temperature [°C] | 29,6 | 32,8 | 36 | 39,2 | 42,3 |
| Water flow[m³/h] | 2,06 | 1,9 | 1,75 | 1,6 | 1,45 |
| Pressure drop in the heat exchanger [kPa] | 14 | 12 | 10 | 9 | 7 |

| Parameters | HC50-5 stage -4600 m3/h | | | | |
|---|-------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 80/70 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 45,3 | 41,7 | 38,2 | 34,8 | 31,4 |
| Outlet air temperature [°C] | 28,6 | 31,8 | 35 | 38,2 | 41,3 |
| Water flow[m³/h] | 3,98 | 3,67 | 3,36 | 3,06 | 2,76 |
| Pressure drop in the heat exchanger [kPa] | 48 | 41 | 35 | 29 | 24 |

| Parameters | HC50-5 stage -4600 m3/h | | | | |
|---|-------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 80/60 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 40,1 | 36,6 | 33,2 | 29,8 | 26,5 |
| Outlet air temperature [°C] | 25,4 | 28,6 | 31,8 | 34,9 | 38 |
| Water flow[m³/h] | 1,76 | 1,61 | 1,46 | 1,31 | 1,17 |
| Pressure drop in the heat exchanger [kPa] | 11 | 9 | 8 | 6 | 5 |

| Parameters | HC50-5 stage -4600 m3/h | | | | |
|---|-------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 70/50 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 33,5 | 30,1 | 26,7 | 23,4 | 20,2 |
| Outlet air temperature [°C] | 21,2 | 24,4 | 27,5 | 30,6 | 33,7 |
| Water flow[m³/h] | 1,47 | 1,32 | 1,17 | 1,02 | 0,88 |
| Pressure drop in the heat exchanger [kPa] | 8 | 6 | 5 | 4 | 3 |

| Parameters | HC50-5 stage -4600 m3/h | | | | |
|---|-------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 70/40 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 28 | 24,7 | 21,3 | 18,1 | 14,8 |
| Outlet air temperature [°C] | 17,7 | 20,9 | 24 | 27 | 30 |
| Water flow[m³/h] | 0,82 | 0,72 | 0,62 | 0,53 | 0,43 |
| Pressure drop in the heat exchanger [kPa] | 3 | 2 | 2 | 1 | 1 |

| Parameters | HC50-5 stage -4600 m3/h | | | | |
|---|-------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 60/40 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 26,8 | 23,5 | 20,2 | 17 | 13,8 |
| Outlet air temperature [°C] | 16,9 | 20,1 | 23,2 | 26,3 | 29,3 |
| Water flow[m³/h] | 1,17 | 1,02 | 0,88 | 0,74 | 0,6 |
| Pressure drop in the heat exchanger [kPa] | 5 | 4 | 3 | 2 | 2 |

| Parameters | HC50-5 stage -4600 m3/h | | | | |
|---|-------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 60/30 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 21,1 | 17,8 | 14,5 | 11,3 | 7,96 |
| Outlet air temperature [°C] | 13,4 | 16,5 | 19,5 | 22,5 | 25,4 |
| Water flow[m³/h] | 0,61 | 0,52 | 0,42 | 0,33 | 0,23 |
| Pressure drop in the heat exchanger [kPa] | 2 | 1 | 1 | 0 | 0 |

| Parameters | HC50-5 stage -4600 m3/h | | | | |
|---|-------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 55/35 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 23,5 | 20,1 | 16,9 | 13,7 | 10,5 |
| Outlet air temperature [°C] | 14,8 | 18 | 21,1 | 24,1 | 27,1 |
| Water flow[m³/h] | 1,02 | 0,88 | 0,74 | 0,6 | 0,46 |
| Pressure drop in the heat exchanger [kPa] | 4 | 3 | 2 | 2 | 1 |

| Parameters | HC50-5 stage -4600 m3/h | | | | |
|---|-------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 50/40 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 25,7 | 22,4 | 19,1 | 15,9 | 12,8 |
| Outlet air temperature [°C] | 16,3 | 19,4 | 22,5 | 25,6 | 28,7 |
| Water flow[m³/h] | 2,24 | 1,95 | 1,66 | 1,38 | 1,11 |
| Pressure drop in the heat exchanger [kPa] | 18 | 14 | 10 | 7 | 5 |

| Parameters | HC50-5 stage -4600 m3/h | | | | |
|---|-------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 50/30 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 20,1 | 16,8 | 13,6 | 10,4 | 7,25 |
| Outlet air temperature [°C] | 12,7 | 15,8 | 18,9 | 21,9 | 24,9 |
| Water flow[m³/h] | 0,87 | 0,73 | 0,59 | 0,45 | 0,31 |
| Pressure drop in the heat exchanger [kPa] | 3 | 2 | 2 | 1 | 0 |

| Parameters | HC50-5 stage -4600 m3/h | | | | |
|---|-------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 40/30 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 19,2 | 16 | 12,8 | 9,64 | 6,56 |
| Outlet air temperature [°C] | 12,2 | 15,3 | 18,4 | 21,4 | 24,5 |
| Water flow[m³/h] | 1,67 | 1,38 | 1,11 | 0,84 | 0,57 |
| Pressure drop in the heat exchanger [kPa] | 11 | 7 | 5 | 3 | 1 |

| Parameters | HC50-4 stage 2900 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 110/80 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 42 | 39,2 | 36,5 | 33,8 | 31,2 |
| Outlet air temperature [°C] | 42,1 | 45,1 | 47,9 | 50,7 | 53,5 |
| Water flow[m³/h] | 1,24 | 1,16 | 1,08 | 1 | 0,92 |
| Pressure drop in the heat exchanger [kPa] | 5 | 5 | 4 | 4 | 3 |

| Parameters | HC50-4 stage 2900 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 90/70 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 35,6 | 32,9 | 30,2 | 27,6 | 25 |
| Outlet air temperature [°C] | 35,7 | 38,6 | 41,4 | 44,2 | 46,9 |
| Water flow[m³/h] | 1,57 | 1,45 | 1,33 | 1,22 | 1,1 |
| Pressure drop in the heat exchanger [kPa] | 8 | 7 | 6 | 5 | 4 |

| Parameters | HC50-4 stage 2900 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 80/70 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 34,3 | 31,6 | 28,9 | 26,3 | 23,8 |
| Outlet air temperature [°C] | 34,4 | 37,3 | 40,1 | 42,8 | 45,6 |
| Water flow[m³/h] | 3,02 | 2,78 | 2,55 | 2,32 | 2,09 |
| Pressure drop in the heat exchanger [kPa] | 29 | 25 | 21 | 18 | 15 |

| Parameters | HC50-4 stage 2900 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 80/60 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 30,6 | 28 | 25,4 | 22,8 | 20,3 |
| Outlet air temperature [°C] | 30,7 | 33,6 | 36,4 | 39,1 | 41,8 |
| Water flow[m³/h] | 1,35 | 1,23 | 1,11 | 1 | 0,89 |
| Pressure drop in the heat exchanger [kPa] | 6 | 5 | 5 | 4 | 3 |

| Parameters | HC50-4 stage 2900 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 70/50 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 25,6 | 23 | 20,5 | 18 | 15,5 |
| Outlet air temperature [°C] | 25,7 | 28,5 | 31,3 | 34 | 36,7 |
| Water flow[m³/h] | 1,12 | 1,01 | 0,9 | 0,79 | 0,68 |
| Pressure drop in the heat exchanger [kPa] | 5 | 4 | 3 | 2 | 2 |

| Parameters | HC50-4 stage 2900 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 70/40 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 21,6 | 19,1 | 16,5 | 14 | 11,6 |
| Outlet air temperature [°C] | 21,7 | 24,5 | 27,2 | 29,8 | 32,4 |
| Water flow[m³/h] | 0,63 | 0,56 | 0,48 | 0,41 | 0,34 |
| Pressure drop in the heat exchanger [kPa] | 2 | 1 | 1 | 1 | 0 |

| Parameters | HC50-4 stage 2900 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 60/40 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 20,6 | 18 | 15,5 | 13,1 | 10,7 |
| Outlet air temperature [°C] | 20,7 | 23,4 | 26,2 | 28,8 | 31,5 |
| Water flow[m³/h] | 0,9 | 0,79 | 0,68 | 0,57 | 0,47 |
| Pressure drop in the heat exchanger [kPa] | 3 | 3 | 2 | 1 | 1 |

| Parameters | HC50-4 stage 2900 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 60/30 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 16,4 | 13,9 | 11,4 | 8,87 | 6,34 |
| Outlet air temperature [°C] | 16,5 | 19,2 | 21,8 | 24,4 | 26,8 |
| Water flow[m³/h] | 0,48 | 0,4 | 0,33 | 0,26 | 0,18 |
| Pressure drop in the heat exchanger [kPa] | 1 | 1 | 0 | 0 | 0 |

| Parameters | HC50-4 stage 2900 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 55/35 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 18,1 | 15,5 | 13,1 | 10,6 | 8,21 |
| Outlet air temperature [°C] | 18,1 | 20,9 | 23,6 | 26,2 | 28,8 |
| Water flow[m³/h] | 0,79 | 0,68 | 0,57 | 0,46 | 0,36 |
| Pressure drop in the heat exchanger [kPa] | 3 | 2 | 1 | 1 | 1 |

| Parameters | HC50-4 stage 2900 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 50/40 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 19,6 | 17,1 | 14,6 | 12,2 | 9,78 |
| Outlet air temperature [°C] | 19,7 | 22,5 | 25,2 | 27,9 | 30,5 |
| Water flow[m³/h] | 1,71 | 1,49 | 1,27 | 1,06 | 0,85 |
| Pressure drop in the heat exchanger [kPa] | 11 | 8 | 6 | 4 | 3 |

| Parameters | HC50-4 stage 2900 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 50/30 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 15,5 | 13 | 10,6 | 8,13 | 5,71 |
| Outlet air temperature [°C] | 15,6 | 18,3 | 21 | 23,6 | 26,2 |
| Water flow[m³/h] | 0,67 | 0,57 | 0,46 | 0,35 | 0,25 |
| Pressure drop in the heat exchanger [kPa] | 2 | 1 | 1 | 1 | 0 |

| Parameters | HC50-4 stage 2900 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 40/30 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 14,7 | 12,2 | 9,8 | 7,42 | 5,09 |
| Outlet air temperature [°C] | 14,7 | 17,5 | 20,2 | 22,9 | 25,5 |
| Water flow[m³/h] | 1,27 | 1,06 | 0,85 | 0,64 | 0,44 |
| Pressure drop in the heat exchanger [kPa] | 6 | 5 | 3 | 2 | 1 |

| Parameters | HC50-3 stage 2100 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 110/80 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 34,3 | 32 | 29,8 | 27,6 | 25,4 |
| Outlet air temperature [°C] | 47,5 | 50,1 | 52,7 | 55,3 | 57,8 |
| Water flow [m³/h] | 1,01 | 0,94 | 0,88 | 0,81 | 0,75 |
| Pressure drop in the heat exchanger [kPa] | 4 | 3 | 3 | 2 | 2 |

| Parameters | HC50-3 stage 2100 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 90/70 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 29 | 26,8 | 24,6 | 22,5 | 20,4 |
| Outlet air temperature [°C] | 40,2 | 42,8 | 45,3 | 47,9 | 50,3 |
| Water flow [m³/h] | 1,28 | 1,18 | 1,08 | 0,99 | 0,9 |
| Pressure drop in the heat exchanger [kPa] | 6 | 5 | 4 | 4 | 3 |

| Parameters | HC50-3 stage 2100 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 80/70 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 27,9 | 25,7 | 23,5 | 21,4 | 19,3 |
| Outlet air temperature [°C] | 38,6 | 41,2 | 43,7 | 46,2 | 48,4 |
| Water flow [m³/h] | 2,45 | 2,26 | 2,07 | 1,88 | 1,7 |
| Pressure drop in the heat exchanger [kPa] | 20 | 17 | 14 | 12 | 10 |

| Parameters | HC50-3 stage 2100 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 80/60 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 25 | 22,8 | 20,7 | 18,6 | 16,6 |
| Outlet air temperature [°C] | 34,6 | 37,2 | 39,7 | 42,2 | 44,6 |
| Water flow [m³/h] | 1,1 | 1 | 0,91 | 0,82 | 0,73 |
| Pressure drop in the heat exchanger [kPa] | 5 | 4 | 3 | 3 | 2 |

| Parameters | HC50-3 stage 2100 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 70/50 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 21 | 18,8 | 16,8 | 14,7 | 12,7 |
| Outlet air temperature [°C] | 29 | 31,6 | 34,1 | 36,5 | 38,9 |
| Water flow [m³/h] | 0,92 | 0,82 | 0,73 | 0,64 | 0,56 |
| Pressure drop in the heat exchanger [kPa] | 3 | 3 | 2 | 2 | 1 |

| Parameters | HC50-3 stage 2100 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 70/40 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 17,8 | 15,7 | 13,7 | 11,6 | 9,58 |
| Outlet air temperature [°C] | 24,7 | 27,2 | 29,6 | 31,9 | 34,2 |
| Water flow [m³/h] | 0,52 | 0,46 | 0,4 | 0,34 | 0,28 |
| Pressure drop in the heat exchanger [kPa] | 1 | 1 | 1 | 0 | 0 |

| Parameters | HC50-3 stage 2100 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 60/40 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 16,9 | 14,8 | 12,8 | 10,8 | 8,79 |
| Outlet air temperature [°C] | 23,4 | 25,9 | 28,3 | 30,7 | 33,1 |
| Water flow [m³/h] | 0,74 | 0,65 | 0,56 | 0,47 | 0,38 |
| Pressure drop in the heat exchanger [kPa] | 2 | 2 | 1 | 1 | 1 |

| Parameters | HC50-3 stage 2100 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 60/30 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 13,6 | 11,5 | 9,45 | 7,4 | 5,33 |
| Outlet air temperature [°C] | 18,8 | 21,2 | 23,6 | 25,8 | 27,9 |
| Water flow [m³/h] | 0,39 | 0,33 | 0,27 | 0,21 | 0,15 |
| Pressure drop in the heat exchanger [kPa] | 1 | 0 | 0 | 0 | 0 |

| Parameters | HC50-3 stage 2100 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 55/35 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 14,9 | 12,8 | 10,8 | 8,77 | 6,81 |
| Outlet air temperature [°C] | 20,6 | 23 | 25,4 | 27,8 | 30,1 |
| Water flow [m³/h] | 0,65 | 0,56 | 0,47 | 0,38 | 0,3 |
| Pressure drop in the heat exchanger [kPa] | 2 | 1 | 1 | 1 | 0 |

| Parameters | HC50-3 stage 2100 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 50/40 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 16 | 13,9 | 11,9 | 9,95 | 8,01 |
| Outlet air temperature [°C] | 22,2 | 24,7 | 27,1 | 29,5 | 31,9 |
| Water flow [m³/h] | 1,39 | 1,21 | 1,04 | 0,87 | 0,7 |
| Pressure drop in the heat exchanger [kPa] | 7 | 6 | 4 | 3 | 2 |

| Parameters | HC50-3 stage 2100 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 50/30 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 12,8 | 10,7 | 8,73 | 6,76 | 4,79 |
| Outlet air temperature [°C] | 17,7 | 20,1 | 22,5 | 24,9 | 27,1 |
| Water flow [m³/h] | 0,56 | 0,47 | 0,38 | 0,29 | 0,21 |
| Pressure drop in the heat exchanger [kPa] | 1 | 1 | 1 | 0 | 0 |

| Parameters | HC50-3 stage 2100 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 40/30 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 12 | 10 | 8,04 | 6,11 | 4,22 |
| Outlet air temperature [°C] | 16,7 | 19,1 | 21,5 | 23,9 | 26,3 |
| Water flow [m³/h] | 1,04 | 0,87 | 0,7 | 0,53 | 0,37 |
| Pressure drop in the heat exchanger [kPa] | 4 | 3 | 2 | 1 | 1 |

| Parameters | HC50-2 stage 1700 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 110/80 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 29,9 | 27,8 | 25,9 | 24 | 22,1 |
| Outlet air temperature [°C] | 51,1 | 53,5 | 56 | 58,3 | 60,6 |
| Water flow[m³/h] | 0,88 | 0,82 | 0,76 | 0,71 | 0,65 |
| Pressure drop in the heat exchanger [kPa] | 3 | 2 | 2 | 2 | 2 |

| Parameters | HC50-2 stage 1700 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 90/70 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 25,2 | 23,3 | 21,4 | 19,6 | 17,7 |
| Outlet air temperature [°C] | 43,2 | 45,6 | 48 | 50,3 | 52,6 |
| Water flow[m³/h] | 1,11 | 1,03 | 0,94 | 0,86 | 0,78 |
| Pressure drop in the heat exchanger [kPa] | 5 | 4 | 3 | 3 | 2 |

| Parameters | HC50-2 stage 1700 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 80/70 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 24,2 | 22,2 | 20,4 | 18,5 | 16,7 |
| Outlet air temperature [°C] | 41,4 | 43,7 | 46,1 | 48,4 | 50,7 |
| Water flow[m³/h] | 2,13 | 1,96 | 1,79 | 1,63 | 1,47 |
| Pressure drop in the heat exchanger [kPa] | 15 | 13 | 11 | 9 | 8 |

| Parameters | HC50-2 stage 1700 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 80/60 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 21,8 | 19,9 | 18 | 16,2 | 14,4 |
| Outlet air temperature [°C] | 37,2 | 39,6 | 41,9 | 44,3 | 46,5 |
| Water flow[m³/h] | 0,96 | 0,87 | 0,79 | 0,71 | 0,63 |
| Pressure drop in the heat exchanger [kPa] | 3 | 3 | 2 | 2 | 2 |

| Parameters | HC50-2 stage 1700 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 70/50 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 18,3 | 16,4 | 14,6 | 12,8 | 11,1 |
| Outlet air temperature [°C] | 31,3 | 33,6 | 35,9 | 38,2 | 40,4 |
| Water flow[m³/h] | 0,8 | 0,72 | 0,64 | 0,56 | 0,49 |
| Pressure drop in the heat exchanger [kPa] | 3 | 2 | 2 | 1 | 1 |

| Parameters | HC50-2 stage 1700 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 70/40 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 15,6 | 13,8 | 12 | 10,2 | 8,43 |
| Outlet air temperature [°C] | 26,7 | 29 | 31,2 | 33,4 | 35,5 |
| Water flow[m³/h] | 0,45 | 0,4 | 0,35 | 0,3 | 0,25 |
| Pressure drop in the heat exchanger [kPa] | 1 | 1 | 1 | 0 | 0 |

| Parameters | HC50-2 stage 1700 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 60/40 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 14,7 | 12,9 | 11,2 | 9,43 | 7,72 |
| Outlet air temperature [°C] | 25,2 | 27,5 | 29,8 | 32 | 34,2 |
| Water flow[m³/h] | 0,64 | 0,56 | 0,49 | 0,41 | 0,34 |
| Pressure drop in the heat exchanger [kPa] | 2 | 1 | 1 | 1 | 0 |

| Parameters | HC50-2 stage 1700 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 60/30 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 12 | 10,1 | 8,34 | 6,55 | 4,75 |
| Outlet air temperature [°C] | 20,5 | 22,7 | 24,8 | 26,8 | 28,4 |
| Water flow[m³/h] | 0,35 | 0,29 | 0,24 | 0,19 | 0,14 |
| Pressure drop in the heat exchanger [kPa] | 1 | 0 | 0 | 0 | 0 |

| Parameters | HC50-2 stage 1700 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 55/35 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 13 | 11,2 | 9,43 | 7,7 | 5,99 |
| Outlet air temperature [°C] | 22,2 | 24,5 | 26,7 | 28,9 | 31 |
| Water flow[m³/h] | 0,56 | 0,49 | 0,41 | 0,34 | 0,26 |
| Pressure drop in the heat exchanger [kPa] | 1 | 1 | 1 | 1 | 0 |

| Parameters | HC50-2 stage 1700 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 50/40 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 13,9 | 12,1 | 10,4 | 8,66 | 6,99 |
| Outlet air temperature [°C] | 23,8 | 26,1 | 28,4 | 30,6 | 32,8 |
| Water flow[m³/h] | 1,21 | 1,05 | 0,9 | 0,75 | 0,61 |
| Pressure drop in the heat exchanger [kPa] | 6 | 4 | 3 | 2 | 2 |

| Parameters | HC50-2 stage 1700 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 50/30 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 11,2 | 9,42 | 7,68 | 5,96 | 4,23 |
| Outlet air temperature [°C] | 19,2 | 21,4 | 23,6 | 25,8 | 27,8 |
| Water flow[m³/h] | 0,49 | 0,41 | 0,33 | 0,26 | 0,18 |
| Pressure drop in the heat exchanger [kPa] | 1 | 1 | 1 | 0 | 0 |

| Parameters | HC50-2 stage 1700 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 40/30 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 10,5 | 8,74 | 7,02 | 5,35 | 3,7 |
| Outlet air temperature [°C] | 17,9 | 20,2 | 22,5 | 24,7 | 26,8 |
| Water flow[m³/h] | 0,91 | 0,76 | 0,61 | 0,46 | 0,32 |
| Pressure drop in the heat exchanger [kPa] | 3 | 2 | 2 | 1 | 0 |

| Parameters | HC50-1 stage 1400 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 110/80 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 26,2 | 24,4 | 22,7 | 21 | 19,4 |
| Outlet air temperature [°C] | 54,4 | 56,7 | 58,9 | 61,1 | 63,3 |
| Water flow [m³/h] | 0,77 | 0,72 | 0,67 | 0,62 | 0,57 |
| Pressure drop in the heat exchanger [kPa] | 2 | 2 | 2 | 1 | 1 |

| Parameters | HC50-1 stage 1400 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 90/70 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 22,1 | 20,4 | 18,8 | 17,1 | 15,6 |
| Outlet air temperature [°C] | 45,9 | 48,2 | 50,4 | 52,5 | 54,7 |
| Water flow [m³/h] | 0,97 | 0,9 | 0,83 | 0,75 | 0,69 |
| Pressure drop in the heat exchanger [kPa] | 4 | 3 | 3 | 2 | 2 |

| Parameters | HC50-1 stage 1400 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 80/70 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 21,1 | 19,4 | 17,8 | 16,2 | 14,6 |
| Outlet air temperature [°C] | 43,9 | 46,1 | 48,3 | 50,5 | 52,6 |
| Water flow [m³/h] | 1,86 | 1,71 | 1,56 | 1,42 | 1,29 |
| Pressure drop in the heat exchanger [kPa] | 12 | 10 | 9 | 7 | 6 |

| Parameters | HC50-1 stage 1400 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 80/60 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 19,1 | 17,4 | 15,8 | 14,2 | 12,7 |
| Outlet air temperature [°C] | 39,7 | 41,9 | 44 | 46,1 | 48,3 |
| Water flow [m³/h] | 0,84 | 0,77 | 0,69 | 0,62 | 0,56 |
| Pressure drop in the heat exchanger [kPa] | 3 | 2 | 2 | 2 | 1 |

| Parameters | HC50-1 stage 1400 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 70/50 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 16 | 14,4 | 12,8 | 11,3 | 9,76 |
| Outlet air temperature [°C] | 33,3 | 35,5 | 37,6 | 39,7 | 41,8 |
| Water flow [m³/h] | 0,7 | 0,63 | 0,56 | 0,49 | 0,43 |
| Pressure drop in the heat exchanger [kPa] | 2 | 2 | 1 | 1 | 1 |

| Parameters | HC50-1 stage 1400 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 70/40 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 13,8 | 12,2 | 10,6 | 9 | 7,46 |
| Outlet air temperature [°C] | 28,6 | 30,7 | 32,8 | 34,7 | 36,6 |
| Water flow [m³/h] | 0,4 | 0,35 | 0,31 | 0,26 | 0,22 |
| Pressure drop in the heat exchanger [kPa] | 1 | 1 | 0 | 0 | 0 |

| Parameters | HC50-1 stage 1400 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 60/40 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 13 | 11,4 | 9,83 | 8,32 | 6,82 |
| Outlet air temperature [°C] | 26,9 | 29,1 | 31,2 | 33,2 | 35,2 |
| Water flow [m³/h] | 0,57 | 0,5 | 0,43 | 0,36 | 0,3 |
| Pressure drop in the heat exchanger [kPa] | 1 | 1 | 1 | 1 | 0 |

| Parameters | HC50-1 stage 1400 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 60/30 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 10,6 | 8,98 | 7,41 | 5,84 | 4,24 |
| Outlet air temperature [°C] | 21,9 | 24 | 26 | 27,8 | 29,5 |
| Water flow [m³/h] | 0,31 | 0,26 | 0,21 | 0,17 | 0,12 |
| Pressure drop in the heat exchanger [kPa] | 0 | 0 | 0 | 0 | 0 |

| Parameters | HC50-1 stage 1400 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 55/35 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 11,4 | 9,85 | 8,32 | 6,81 | 5,31 |
| Outlet air temperature [°C] | 23,7 | 25,9 | 27,9 | 29,9 | 31,8 |
| Water flow [m³/h] | 0,5 | 0,43 | 0,36 | 0,3 | 0,23 |
| Pressure drop in the heat exchanger [kPa] | 1 | 1 | 1 | 0 | 0 |

| Parameters | HC50-1 stage 1400 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 50/40 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 12,2 | 10,6 | 9,1 | 7,6 | 6,14 |
| Outlet air temperature [°C] | 25,4 | 27,5 | 29,6 | 31,7 | 33,7 |
| Water flow [m³/h] | 1,06 | 0,92 | 0,79 | 0,66 | 0,53 |
| Pressure drop in the heat exchanger [kPa] | 5 | 3 | 3 | 2 | 1 |

| Parameters | HC50-1 stage 1400 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 50/30 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 9,87 | 8,32 | 6,79 | 5,28 | 3,77 |
| Outlet air temperature [°C] | 20,5 | 22,6 | 24,6 | 26,6 | 28,4 |
| Water flow [m³/h] | 0,43 | 0,36 | 0,29 | 0,23 | 0,16 |
| Pressure drop in the heat exchanger [kPa] | 1 | 1 | 0 | 0 | 0 |

| Parameters | HC50-1 stage 1400 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 40/30 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 9,21 | 7,68 | 6,18 | 4,72 | 3,27 |
| Outlet air temperature [°C] | 19,1 | 21,2 | 23,3 | 25,3 | 27,3 |
| Water flow [m³/h] | 0,8 | 0,67 | 0,54 | 0,41 | 0,28 |
| Pressure drop in the heat exchanger [kPa] | 3 | 2 | 1 | 1 | 0 |

| Parameters | HC70-5 stage -4400 m3/h | | | | |
|---|-------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 110/80 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 81,1 | 75,6 | 70,3 | 65,1 | 60 |
| Outlet air temperature [°C] | 55 | 57,2 | 59,5 | 61,6 | 63,7 |
| Water flow[m³/h] | 2,39 | 2,23 | 2,07 | 1,92 | 1,77 |
| Pressure drop in the heat exchanger [kPa] | 12 | 10 | 9 | 8 | 7 |

| Parameters | HC70-5 stage -4400 m3/h | | | | |
|---|-------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 90/70 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 68,5 | 63,3 | 58,1 | 53,1 | 48,2 |
| Outlet air temperature [°C] | 46,5 | 48,7 | 50,9 | 53 | 55,1 |
| Water flow[m³/h] | 3,02 | 2,79 | 2,56 | 2,34 | 2,12 |
| Pressure drop in the heat exchanger [kPa] | 19 | 16 | 14 | 12 | 10 |

| Parameters | HC70-5 stage -4400 m3/h | | | | |
|---|-------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 80/70 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 65,8 | 60,5 | 55,4 | 50,4 | 45,5 |
| Outlet air temperature [°C] | 44,6 | 46,8 | 49 | 51,1 | 53,2 |
| Water flow[m³/h] | 5,79 | 5,33 | 4,88 | 4,43 | 4,01 |
| Pressure drop in the heat exchanger [kPa] | 65 | 56 | 47 | 39 | 33 |

| Parameters | HC70-5 stage -4400 m3/h | | | | |
|---|-------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 80/60 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 59 | 53,8 | 48,8 | 43,9 | 39,1 |
| Outlet air temperature [°C] | 40 | 42,2 | 44,3 | 46,4 | 48,5 |
| Water flow[m³/h] | 2,59 | 2,36 | 2,14 | 1,93 | 1,72 |
| Pressure drop in the heat exchanger [kPa] | 14 | 12 | 10 | 8 | 7 |

| Parameters | HC70-5 stage -4400 m3/h | | | | |
|---|-------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 70/50 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 49,4 | 44,4 | 39,4 | 34,6 | 29,9 |
| Outlet air temperature [°C] | 33,5 | 35,7 | 37,7 | 39,8 | 41,8 |
| Water flow[m³/h] | 2,16 | 1,94 | 1,73 | 1,52 | 1,31 |
| Pressure drop in the heat exchanger [kPa] | 11 | 9 | 7 | 5 | 4 |

| Parameters | HC70-5 stage -4400 m3/h | | | | |
|---|-------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 70/40 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 41,9 | 36,9 | 32 | 27,2 | 22,4 |
| Outlet air temperature [°C] | 28,4 | 30,5 | 32,5 | 34,5 | 36,3 |
| Water flow[m³/h] | 1,22 | 1,07 | 0,93 | 0,79 | 0,65 |
| Pressure drop in the heat exchanger [kPa] | 4 | 3 | 2 | 2 | 1 |

| Parameters | HC70-5 stage -4400 m3/h | | | | |
|---|-------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 60/40 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 39,8 | 34,8 | 30 | 25,3 | 20,6 |
| Outlet air temperature [°C] | 27 | 29 | 31,1 | 33,1 | 35 |
| Water flow[m³/h] | 1,73 | 1,52 | 1,31 | 1,1 | 0,9 |
| Pressure drop in the heat exchanger [kPa] | 7 | 5 | 4 | 3 | 2 |

| Parameters | HC70-5 stage -4400 m3/h | | | | |
|---|-------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 60/30 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 31,7 | 26,9 | 22 | 17,1 | 12,2 |
| Outlet air temperature [°C] | 21,5 | 23,6 | 25,5 | 27,3 | 28,9 |
| Water flow[m³/h] | 0,92 | 0,78 | 0,64 | 0,5 | 0,36 |
| Pressure drop in the heat exchanger [kPa] | 2 | 2 | 1 | 1 | 0 |

| Parameters | HC70-5 stage -4400 m3/h | | | | |
|---|-------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 55/35 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 34,9 | 30 | 25,2 | 20,5 | 15,9 |
| Outlet air temperature [°C] | 23,7 | 25,7 | 27,7 | 29,7 | 31,6 |
| Water flow[m³/h] | 1,52 | 1,31 | 1,1 | 0,89 | 0,69 |
| Pressure drop in the heat exchanger [kPa] | 6 | 4 | 3 | 2 | 1 |

| Parameters | HC70-5 stage -4400 m3/h | | | | |
|---|-------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 50/40 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 37,7 | 32,8 | 28,1 | 23,4 | 18,8 |
| Outlet air temperature [°C] | 25,6 | 27,7 | 29,7 | 31,8 | 33,7 |
| Water flow[m³/h] | 3,28 | 2,86 | 2,44 | 2,04 | 1,64 |
| Pressure drop in the heat exchanger [kPa] | 24 | 18 | 14 | 10 | 6 |

| Parameters | HC70-5 stage -4400 m3/h | | | | |
|---|-------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 50/30 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 30 | 25,1 | 20,4 | 15,7 | 11 |
| Outlet air temperature [°C] | 20,3 | 22,4 | 24,4 | 26,3 | 28 |
| Water flow[m³/h] | 1,3 | 1,09 | 0,89 | 0,68 | 0,48 |
| Pressure drop in the heat exchanger [kPa] | 4 | 3 | 2 | 1 | 1 |

| Parameters | HC70-5 stage -4400 m3/h | | | | |
|---|-------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 40/30 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 28,3 | 23,5 | 18,9 | 14,3 | 9,82 |
| Outlet air temperature [°C] | 19,2 | 21,3 | 23,3 | 25,2 | 27,2 |
| Water flow[m³/h] | 2,45 | 2,04 | 1,64 | 1,24 | 0,85 |
| Pressure drop in the heat exchanger [kPa] | 14 | 10 | 7 | 4 | 2 |

| Parameters | HC70-4 stage 2774 m3/h | | | | |
|--|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 110/80 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 59,5 | 55,5 | 51,6 | 47,8 | 44,1 |
| Outlet air temperature [°C] | 64 | 65,8 | 67,6 | 69,3 | 71 |
| Water flow[m³/h] | 1,75 | 1,64 | 1,52 | 1,41 | 1,3 |
| Pressure drop in the heat exchanger [kP] | 7 | 6 | 5 | 4 | 4 |

| Parameters | HC70-4 stage 2774 m3/h | | | | |
|--|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 90/70 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 50,2 | 46,3 | 42,5 | 38,9 | 35,3 |
| Outlet air temperature [°C] | 54 | 55,7 | 57,5 | 59,1 | 60,7 |
| Water flow[m³/h] | 2,21 | 2,04 | 1,87 | 1,71 | 1,55 |
| Pressure drop in the heat exchanger [kP] | 11 | 9 | 8 | 6 | 5 |

| Parameters | HC70-4 stage 2774 m3/h | | | | |
|--|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 80/70 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 47,8 | 44 | 40,2 | 36,6 | 33,1 |
| Outlet air temperature [°C] | 51,5 | 53,2 | 54,9 | 56,6 | 58,2 |
| Water flow[m³/h] | 4,21 | 3,87 | 3,54 | 3,22 | 2,91 |
| Pressure drop in the heat exchanger [kP] | 36 | 30 | 26 | 22 | 18 |

| Parameters | HC70-4 stage 2774 m3/h | | | | |
|--|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 80/60 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 43,3 | 39,5 | 35,9 | 32,3 | 28,8 |
| Outlet air temperature [°C] | 46,6 | 48,3 | 50 | 51,6 | 53,2 |
| Water flow[m³/h] | 1,9 | 1,74 | 1,58 | 1,42 | 1,26 |
| Pressure drop in the heat exchanger [kP] | 8 | 7 | 6 | 5 | 4 |

| Parameters | HC70-4 stage 2774 m3/h | | | | |
|--|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 70/50 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 36,4 | 32,7 | 29,1 | 25,6 | 22,2 |
| Outlet air temperature [°C] | 39,2 | 40,8 | 42,5 | 44,1 | 45,6 |
| Water flow[m³/h] | 1,59 | 1,43 | 1,27 | 1,12 | 0,97 |
| Pressure drop in the heat exchanger [kP] | 6 | 5 | 4 | 3 | 2 |

| Parameters | HC70-4 stage 2774 m3/h | | | | |
|--|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 70/40 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 31,3 | 27,6 | 24 | 20,4 | 16,9 |
| Outlet air temperature [°C] | 33,7 | 35,2 | 36,7 | 38,2 | 39,5 |
| Water flow[m³/h] | 0,91 | 0,8 | 0,7 | 0,6 | 0,49 |
| Pressure drop in the heat exchanger [kP] | 2 | 2 | 1 | 1 | 1 |

| Parameters | HC70-4 stage 2774 m3/h | | | | |
|--|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 60/40 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 29,4 | 25,8 | 22,3 | 18,9 | 15,4 |
| Outlet air temperature [°C] | 31,7 | 33,3 | 34,9 | 36,4 | 37,8 |
| Water flow[m³/h] | 1,28 | 1,13 | 0,97 | 0,82 | 0,67 |
| Pressure drop in the heat exchanger [kP] | 4 | 3 | 2 | 2 | 1 |

| Parameters | HC70-4 stage 2774 m3/h | | | | |
|--|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 60/30 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 23,9 | 20,3 | 16,7 | 13,1 | 9,47 |
| Outlet air temperature [°C] | 25,8 | 27,2 | 28,6 | 29,9 | 30,9 |
| Water flow[m³/h] | 0,69 | 0,59 | 0,48 | 0,38 | 0,27 |
| Pressure drop in the heat exchanger [kP] | 1 | 1 | 1 | 0 | 0 |

| Parameters | HC70-4 stage 2774 m3/h | | | | |
|--|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 55/35 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 25,9 | 22,3 | 18,9 | 15,4 | 12 |
| Outlet air temperature [°C] | 27,9 | 29,5 | 31 | 32,5 | 33,9 |
| Water flow[m³/h] | 1,13 | 0,97 | 0,82 | 0,67 | 0,52 |
| Pressure drop in the heat exchanger [kP] | 3 | 2 | 2 | 1 | 1 |

| Parameters | HC70-4 stage 2774 m3/h | | | | |
|--|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 50/40 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 27,6 | 24,1 | 20,6 | 17,2 | 13,9 |
| Outlet air temperature [°C] | 29,7 | 31,4 | 33 | 34,5 | 36,1 |
| Water flow[m³/h] | 2,4 | 2,09 | 1,79 | 1,5 | 1,21 |
| Pressure drop in the heat exchanger [kP] | 13 | 10 | 8 | 5 | 4 |

| Parameters | HC70-4 stage 2774 m3/h | | | | |
|--|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 50/30 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 22,4 | 18,8 | 15,4 | 11,9 | 8,46 |
| Outlet air temperature [°C] | 24,1 | 25,6 | 27,1 | 28,5 | 29,8 |
| Water flow[m³/h] | 0,97 | 0,82 | 0,67 | 0,52 | 0,37 |
| Pressure drop in the heat exchanger [kP] | 2 | 2 | 1 | 1 | 0 |

| Parameters | HC70-4 stage 2774 m3/h | | | | |
|--|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 40/30 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 20,8 | 17,4 | 14 | 10,7 | 7,38 |
| Outlet air temperature [°C] | 22,4 | 24 | 25,6 | 27,1 | 28,5 |
| Water flow[m³/h] | 1,81 | 1,5 | 1,21 | 0,92 | 0,64 |
| Pressure drop in the heat exchanger [kP] | 8 | 6 | 4 | 2 | 1 |

| Parameters | HC70-3 stage 2009 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 110/80 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 47,2 | 44 | 40,9 | 37,9 | 35 |
| Outlet air temperature [°C] | 70,1 | 71,6 | 73,1 | 74,5 | 75,9 |
| Water flow [m³/h] | 1,39 | 1,3 | 1,21 | 1,12 | 1,03 |
| Pressure drop in the heat exchanger [kPa] | 4 | 4 | 3 | 3 | 2 |

| Parameters | HC70-3 stage 2009 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 90/70 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 39,7 | 36,6 | 33,7 | 30,8 | 28 |
| Outlet air temperature [°C] | 59 | 60,5 | 61,9 | 63,3 | 64,6 |
| Water flow [m³/h] | 1,75 | 1,61 | 1,48 | 1,36 | 1,23 |
| Pressure drop in the heat exchanger [kPa] | 7 | 6 | 5 | 4 | 4 |

| Parameters | HC70-3 stage 2009 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 80/70 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 37,6 | 34,6 | 31,7 | 28,8 | 26 |
| Outlet air temperature [°C] | 55,9 | 57,4 | 58,8 | 60,2 | 61,5 |
| Water flow [m³/h] | 3,31 | 3,05 | 2,79 | 2,54 | 2,29 |
| Pressure drop in the heat exchanger [kPa] | 23 | 19 | 16 | 14 | 11 |

| Parameters | HC70-3 stage 2009 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 80/60 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 34,3 | 31,4 | 28,5 | 25,6 | 22,8 |
| Outlet air temperature [°C] | 51 | 52,5 | 53,8 | 55,2 | 56,4 |
| Water flow [m³/h] | 1,51 | 1,38 | 1,25 | 1,13 | 1 |
| Pressure drop in the heat exchanger [kPa] | 5 | 4 | 4 | 3 | 2 |

| Parameters | HC70-3 stage 2009 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 70/50 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 28,9 | 26 | 23,2 | 20,4 | 17,7 |
| Outlet air temperature [°C] | 43 | 44,4 | 45,7 | 47 | 48,3 |
| Water flow [m³/h] | 1,27 | 1,14 | 1,02 | 0,89 | 0,78 |
| Pressure drop in the heat exchanger [kPa] | 4 | 3 | 3 | 2 | 2 |

| Parameters | HC70-3 stage 2009 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 70/40 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 25,1 | 22,2 | 19,3 | 16,5 | 13,7 |
| Outlet air temperature [°C] | 37,3 | 38,5 | 39,8 | 40,9 | 41,9 |
| Water flow [m³/h] | 0,73 | 0,65 | 0,56 | 0,48 | 0,4 |
| Pressure drop in the heat exchanger [kPa] | 1 | 1 | 1 | 1 | 0 |

| Parameters | HC70-3 stage 2009 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 60/40 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 23,5 | 20,7 | 17,9 | 15,1 | 12,4 |
| Outlet air temperature [°C] | 34,9 | 36,2 | 37,5 | 38,7 | 39,8 |
| Water flow [m³/h] | 1,02 | 0,9 | 0,78 | 0,66 | 0,54 |
| Pressure drop in the heat exchanger [kPa] | 3 | 2 | 2 | 1 | 1 |

| Parameters | HC70-3 stage 2009 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 60/30 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 19,3 | 16,4 | 13,6 | 10,7 | 7,83 |
| Outlet air temperature [°C] | 28,7 | 29,9 | 31 | 31,8 | 32,5 |
| Water flow [m³/h] | 0,56 | 0,48 | 0,39 | 0,31 | 0,23 |
| Pressure drop in the heat exchanger [kPa] | 1 | 1 | 0 | 0 | 0 |

| Parameters | HC70-3 stage 2009 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 55/35 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 20,7 | 17,9 | 15,1 | 12,4 | 9,72 |
| Outlet air temperature [°C] | 30,8 | 32,1 | 33,3 | 34,5 | 35,5 |
| Water flow [m³/h] | 0,9 | 0,78 | 0,66 | 0,54 | 0,42 |
| Pressure drop in the heat exchanger [kPa] | 2 | 2 | 1 | 1 | 0 |

| Parameters | HC70-3 stage 2009 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 50/40 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 21,9 | 19,1 | 16,3 | 13,7 | 11,1 |
| Outlet air temperature [°C] | 32,5 | 33,9 | 35,2 | 36,5 | 37,7 |
| Water flow [m³/h] | 1,9 | 1,66 | 1,42 | 1,19 | 0,96 |
| Pressure drop in the heat exchanger [kPa] | 9 | 7 | 5 | 4 | 2 |

| Parameters | HC70-3 stage 2009 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 50/30 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 18 | 15,1 | 12,4 | 9,67 | 6,93 |
| Outlet air temperature [°C] | 26,7 | 27,9 | 29,1 | 30,2 | 31 |
| Water flow [m³/h] | 0,78 | 0,66 | 0,54 | 0,42 | 0,3 |
| Pressure drop in the heat exchanger [kPa] | 2 | 1 | 1 | 0 | 0 |

| Parameters | HC70-3 stage 2009 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 40/30 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 16,6 | 13,8 | 11,2 | 8,55 | 5,97 |
| Outlet air temperature [°C] | 24,6 | 25,9 | 27,2 | 28,4 | 29,5 |
| Water flow [m³/h] | 1,44 | 1,2 | 0,97 | 0,74 | 0,52 |
| Pressure drop in the heat exchanger [kPa] | 5 | 4 | 2 | 2 | 1 |

| Parameters | HC70-2 stage 1626 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 110/80 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 40,3 | 37,6 | 35 | 32,4 | 29,9 |
| Outlet air temperature [°C] | 74 | 75,3 | 76,6 | 77,8 | 78,9 |
| Water flow[m³/h] | 1,19 | 1,11 | 1,03 | 0,96 | 0,88 |
| Pressure drop in the heat exchanger [kPa] | 3 | 3 | 2 | 2 | 2 |

| Parameters | HC70-2 stage 1626 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 90/70 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 33,8 | 31,2 | 28,7 | 26,3 | 23,9 |
| Outlet air temperature [°C] | 62,2 | 63,4 | 64,6 | 65,9 | 67 |
| Water flow[m³/h] | 1,49 | 1,38 | 1,26 | 1,16 | 1,05 |
| Pressure drop in the heat exchanger [kPa] | 5 | 4 | 4 | 3 | 3 |

| Parameters | HC70-2 stage 1626 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 80/70 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 32 | 29,4 | 26,9 | 24,5 | 22,1 |
| Outlet air temperature [°C] | 58,7 | 60 | 61,2 | 62,4 | 63,6 |
| Water flow[m³/h] | 2,81 | 2,59 | 2,37 | 2,15 | 1,94 |
| Pressure drop in the heat exchanger [kPa] | 17 | 14 | 12 | 10 | 8 |

| Parameters | HC70-2 stage 1626 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 80/60 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 29,3 | 26,8 | 24,3 | 21,9 | 19,5 |
| Outlet air temperature [°C] | 53,8 | 55,1 | 56,3 | 57,4 | 58,5 |
| Water flow[m³/h] | 1,29 | 1,18 | 1,07 | 0,96 | 0,86 |
| Pressure drop in the heat exchanger [kPa] | 4 | 3 | 3 | 2 | 2 |

| Parameters | HC70-2 stage 1626 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 70/50 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 24,8 | 22,3 | 19,8 | 17,5 | 15,2 |
| Outlet air temperature [°C] | 45,4 | 46,7 | 47,8 | 48,9 | 49,9 |
| Water flow[m³/h] | 1,08 | 0,98 | 0,87 | 0,77 | 0,66 |
| Pressure drop in the heat exchanger [kPa] | 3 | 2 | 2 | 1 | 1 |

| Parameters | HC70-2 stage 1626 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 70/40 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 21,6 | 19,1 | 16,7 | 14,3 | 11,9 |
| Outlet air temperature [°C] | 39,7 | 40,7 | 41,8 | 42,7 | 43,4 |
| Water flow[m³/h] | 0,63 | 0,56 | 0,49 | 0,42 | 0,35 |
| Pressure drop in the heat exchanger [kPa] | 1 | 1 | 1 | 0 | 0 |

| Parameters | HC70-2 stage 1626 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 60/40 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 20,2 | 17,7 | 15,3 | 13 | 10,7 |
| Outlet air temperature [°C] | 37 | 38,1 | 39,2 | 40,2 | 41,1 |
| Water flow[m³/h] | 0,88 | 0,77 | 0,67 | 0,57 | 0,47 |
| Pressure drop in the heat exchanger [kPa] | 2 | 2 | 1 | 1 | 1 |

| Parameters | HC70-2 stage 1626 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 60/30 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 16,7 | 14,2 | 11,8 | 9,35 | 6,86 |
| Outlet air temperature [°C] | 30,7 | 31,6 | 32,5 | 33,1 | 33,5 |
| Water flow[m³/h] | 0,48 | 0,41 | 0,34 | 0,27 | 0,2 |
| Pressure drop in the heat exchanger [kPa] | 1 | 0 | 0 | 0 | 0 |

| Parameters | HC70-2 stage 1626 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 55/35 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 17,8 | 15,4 | 13,1 | 10,7 | 8,43 |
| Outlet air temperature [°C] | 32,7 | 33,8 | 34,8 | 35,8 | 36,6 |
| Water flow[m³/h] | 0,77 | 0,67 | 0,57 | 0,47 | 0,37 |
| Pressure drop in the heat exchanger [kPa] | 2 | 1 | 1 | 1 | 0 |

| Parameters | HC70-2 stage 1626 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 50/40 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 18,7 | 16,3 | 14 | 11,7 | 9,49 |
| Outlet air temperature [°C] | 34,3 | 35,4 | 36,6 | 37,7 | 38,7 |
| Water flow[m³/h] | 1,62 | 1,42 | 1,21 | 1,02 | 0,83 |
| Pressure drop in the heat exchanger [kPa] | 6 | 5 | 4 | 3 | 2 |

| Parameters | HC70-2 stage 1626 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 50/30 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 15,5 | 13,1 | 10,7 | 8,39 | 6,05 |
| Outlet air temperature [°C] | 28,4 | 29,4 | 30,4 | 31,3 | 31,9 |
| Water flow[m³/h] | 0,67 | 0,57 | 0,47 | 0,36 | 0,26 |
| Pressure drop in the heat exchanger [kPa] | 1 | 1 | 1 | 0 | 0 |

| Parameters | HC70-2 stage 1626 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature[°C] | 40/30 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 14,2 | 11,9 | 9,58 | 7,36 | 5,15 |
| Outlet air temperature [°C] | 26 | 27,2 | 28,2 | 29,3 | 30,2 |
| Water flow[m³/h] | 1,23 | 1,03 | 0,83 | 0,64 | 0,45 |
| Pressure drop in the heat exchanger [kPa] | 4 | 3 | 2 | 1 | 1 |

| Parameters | HC70-1 stage 1339 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 110/80 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 34,7 | 32,4 | 30,1 | 27,9 | 25,8 |
| Outlet air temperature [°C] | 77,4 | 78,5 | 79,6 | 80,7 | 81,7 |
| Water flow [m³/h] | 1,02 | 0,95 | 0,89 | 0,82 | 0,76 |
| Pressure drop in the heat exchanger [kPa] | 2 | 2 | 2 | 2 | 1 |

| Parameters | HC70-1 stage 1339 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 90/70 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 29,1 | 26,9 | 24,7 | 22,6 | 20,5 |
| Outlet air temperature [°C] | 64,9 | 66 | 67,1 | 68,1 | 69,1 |
| Water flow [m³/h] | 1,28 | 1,18 | 1,09 | 1 | 0,9 |
| Pressure drop in the heat exchanger [kPa] | 4 | 3 | 3 | 2 | 2 |

| Parameters | HC70-1 stage 1339 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 80/70 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 27,4 | 25,2 | 23,1 | 21 | 19 |
| Outlet air temperature [°C] | 61,1 | 62,2 | 63,3 | 64,3 | 65,3 |
| Water flow [m³/h] | 2,41 | 2,22 | 2,03 | 1,85 | 1,67 |
| Pressure drop in the heat exchanger [kPa] | 12 | 11 | 9 | 8 | 6 |

| Parameters | HC70-1 stage 1339 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 80/60 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 25,3 | 23,1 | 21 | 18,9 | 16,9 |
| Outlet air temperature [°C] | 56,3 | 57,3 | 58,4 | 59,4 | 60,4 |
| Water flow [m³/h] | 1,11 | 1,01 | 0,92 | 0,83 | 0,74 |
| Pressure drop in the heat exchanger [kPa] | 3 | 2 | 2 | 2 | 1 |

| Parameters | HC70-1 stage 1339 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 70/50 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 21,4 | 19,2 | 17,2 | 15,1 | 13,1 |
| Outlet air temperature [°C] | 47,6 | 48,7 | 49,6 | 50,6 | 51,5 |
| Water flow [m³/h] | 0,93 | 0,84 | 0,75 | 0,66 | 0,58 |
| Pressure drop in the heat exchanger [kPa] | 2 | 2 | 1 | 1 | 1 |

| Parameters | HC70-1 stage 1339 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 70/40 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 18,8 | 16,6 | 14,5 | 12,4 | 10,4 |
| Outlet air temperature [°C] | 41,8 | 42,7 | 43,5 | 44,2 | 44,9 |
| Water flow [m³/h] | 0,55 | 0,48 | 0,42 | 0,36 | 0,3 |
| Pressure drop in the heat exchanger [kPa] | 1 | 1 | 0 | 0 | 0 |

| Parameters | HC70-1 stage 1339 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 60/40 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 17,4 | 15,3 | 13,3 | 11,3 | 9,33 |
| Outlet air temperature [°C] | 38,8 | 39,8 | 40,7 | 41,6 | 42,3 |
| Water flow [m³/h] | 0,76 | 0,67 | 0,58 | 0,49 | 0,41 |
| Pressure drop in the heat exchanger [kPa] | 2 | 1 | 1 | 1 | 0 |

| Parameters | HC70-1 stage 1339 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 60/30 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 14,6 | 12,5 | 10,3 | 8,23 | 6,07 |
| Outlet air temperature [°C] | 32,5 | 33,3 | 33,9 | 34,4 | 34,5 |
| Water flow [m³/h] | 0,42 | 0,36 | 0,3 | 0,24 | 0,18 |
| Pressure drop in the heat exchanger [kPa] | 0 | 0 | 0 | 0 | 0 |

| Parameters | HC70-1 stage 1339 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 55/35 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 15,4 | 13,4 | 11,3 | 9,34 | 7,36 |
| Outlet air temperature [°C] | 34,4 | 35,3 | 36,2 | 37 | 37,6 |
| Water flow [m³/h] | 0,67 | 0,58 | 0,49 | 0,41 | 0,32 |
| Pressure drop in the heat exchanger [kPa] | 1 | 1 | 1 | 0 | 0 |

| Parameters | HC70-1 stage 1339 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 50/40 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 16,1 | 14 | 12 | 10,1 | 8,2 |
| Outlet air temperature [°C] | 35,8 | 36,8 | 37,8 | 38,7 | 39,6 |
| Water flow [m³/h] | 1,4 | 1,22 | 1,05 | 0,88 | 0,71 |
| Pressure drop in the heat exchanger [kPa] | 5 | 4 | 3 | 2 | 1 |

| Parameters | HC70-1 stage 1339 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 50/30 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 13,4 | 11,4 | 9,34 | 7,33 | 5,31 |
| Outlet air temperature [°C] | 29,9 | 30,8 | 31,6 | 32,2 | 32,7 |
| Water flow [m³/h] | 0,58 | 0,49 | 0,41 | 0,32 | 0,23 |
| Pressure drop in the heat exchanger [kPa] | 1 | 1 | 0 | 0 | 0 |

| Parameters | HC70-1 stage 1339 m3/h | | | | |
|---|------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 40/30 | | | | |
| Inlet air temperature [°C] | 0 | 5 | 10 | 15 | 20 |
| Heating capacity [kW] | 12,2 | 10,2 | 8,29 | 6,38 | 4,49 |
| Outlet air temperature [°C] | 27,3 | 28,2 | 29,2 | 30 | 30,7 |
| Water flow [m³/h] | 1,06 | 0,89 | 0,72 | 0,55 | 0,39 |
| Pressure drop in the heat exchanger [kPa] | 3 | 2 | 1 | 1 | 0 |

COOLING

| Parameters | HC 20 - 5 stage 4100 m3/h | | | | |
|---|---------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 5/10 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 3,4 | 3,97 | 4,54 | 5,11 | 5,69 |
| Outlet air temperature [°C] | 21,1 | 22,6 | 24 | 25,5 | 27 |
| Water flow [m³/h] | 0,58 | 0,68 | 0,78 | 0,88 | 0,98 |
| Water pressure drop in the heat exchanger [kPa] | 3 | 4 | 5 | 6 | 7 |
| Inlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 65,7 | 67,6 | 63,2 | 58,5 | 53,5 |

| Parameters | HC 20 - 4 stage 2585 m3/h | | | | |
|---|---------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 5/10 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 2,71 | 3,15 | 3,59 | 4,03 | 4,48 |
| Outlet air temperature [°C] | 20,3 | 21,7 | 23 | 24,4 | 25,7 |
| Water flow [m³/h] | 0,46 | 0,54 | 0,62 | 0,69 | 0,77 |
| Water pressure drop in the heat exchanger [kPa] | 2 | 2 | 3 | 4 | 5 |
| Inlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 68,9 | 71,3 | 67,1 | 62,5 | 57,5 |

| Parameters | HC 20 - 3 stage 1872 m3/h | | | | |
|---|---------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 5/10 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 2,28 | 2,64 | 3 | 3,37 | 3,73 |
| Outlet air temperature [°C] | 19,7 | 21 | 22,3 | 23,5 | 24,8 |
| Water flow [m³/h] | 0,39 | 0,45 | 0,51 | 0,58 | 0,64 |
| Water pressure drop in the heat exchanger [kPa] | 1 | 2 | 2 | 3 | 3 |
| Inlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 71,5 | 74,4 | 70,4 | 65,9 | 60,9 |

| Parameters | HC 20 - 2 stage 1515 m3/h | | | | |
|---|---------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 5/10 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 2,02 | 2,34 | 2,66 | 2,98 | 3,3 |
| Outlet air temperature [°C] | 19,3 | 20,5 | 21,7 | 22,9 | 24,1 |
| Water flow [m³/h] | 0,35 | 0,4 | 0,46 | 0,51 | 0,57 |
| Water pressure drop in the heat exchanger [kPa] | 1 | 1 | 2 | 2 | 3 |
| Inlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 73,4 | 76,6 | 72,7 | 68,4 | 63,4 |

| Parameters | HC 20 - 1 stage 1248 m3/h | | | | |
|---|---------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 5/10 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 1,8 | 2,09 | 2,37 | 2,65 | 2,93 |
| Outlet air temperature [°C] | 18,9 | 20,1 | 21,2 | 22,3 | 23,5 |
| Water flow [m³/h] | 0,31 | 0,36 | 0,41 | 0,45 | 0,5 |
| Water pressure drop in the heat exchanger [kPa] | 1 | 1 | 1 | 2 | 3 |
| Inlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 75,2 | 78,8 | 75,1 | 70,8 | 65,8 |

| Parameters | HC 35 - 5 stage 4000 m3/h | | | | |
|---|---------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 5/10 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 5,24 | 6,08 | 6,93 | 7,78 | 8,62 |
| Outlet air temperature [°C] | 19,2 | 20,4 | 21,6 | 22,8 | 23,9 |
| Water flow [m³/h] | 0,9 | 1,04 | 1,19 | 1,33 | 1,48 |
| Water pressure drop in the heat exchanger [kPa] | 3 | 4 | 4 | 5 | 6 |
| Inlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 73,7 | 77,1 | 73,3 | 69 | 64,1 |

| Parameters | HC 35 - 4 stage 2522 m3/h | | | | |
|---|---------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 5/10 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 4,06 | 4,7 | 5,34 | 5,98 | 6,61 |
| Outlet air temperature [°C] | 18,1 | 19,2 | 20,2 | 21,2 | 22,2 |
| Water flow [m³/h] | 0,7 | 0,81 | 0,92 | 1,02 | 1,13 |
| Water pressure drop in the heat exchanger [kPa] | 4 | 3 | 3 | 4 | 4 |
| Inlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 78,9 | 83,4 | 80,1 | 76 | 71,3 |

| Parameters | HC 35 - 3 stage 1826 m3/h | | | | |
|---|---------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 5/10 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 3,35 | 5,19 | 5,85 | 4,9 | 5,41 |
| Outlet air temperature [°C] | 17,3 | 18,3 | 19,2 | 20 | 20,9 |
| Water flow [m³/h] | 0,57 | 0,89 | 1 | 0,84 | 0,93 |
| Water pressure drop in the heat exchanger [kPa] | 3 | 3 | 4 | 3 | 4 |
| Inlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 83,1 | 79,6 | 76,6 | 81,7 | 77,1 |

| Parameters | HC 35 - 2 stage 1478 m3/h | | | | |
|---|---------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 5/10 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 2,94 | 4,58 | 5,16 | 5,66 | 6,06 |
| Outlet air temperature [°C] | 16,7 | 17,8 | 18,6 | 19,3 | 20,1 |
| Water flow [m³/h] | 0,5 | 0,79 | 0,88 | 0,97 | 1,04 |
| Water pressure drop in the heat exchanger [kPa] | 2 | 3 | 3 | 4 | 4 |
| Inlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 86,1 | 80,9 | 78,1 | 75 | 71,8 |

| Parameters | HC 35 - 1 stage 1217 m3/h | | | | |
|---|---------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 5/10 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 2,59 | 4,07 | 4,58 | 5,02 | 5,36 |
| Outlet air temperature [°C] | 16,2 | 17,3 | 18 | 18,7 | 19,4 |
| Water flow [m³/h] | 0,44 | 0,7 | 0,79 | 0,86 | 0,92 |
| Water pressure drop in the heat exchanger [kPa] | 4 | 4 | 3 | 3 | 4 |
| Inlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 89,1 | 82,1 | 79,4 | 76,6 | 73,5 |

COOLING

| Parameters | HC 50 -5 stage 4600 m3/h | | | | |
|---|--------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 5/10 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 8,04 | 9,17 | 10,3 | 11,4 | 12,5 |
| Outlet air temperature [°C] | 18,5 | 19,7 | 20,9 | 22 | 23,2 |
| Water flow [m³/h] | 1,38 | 1,57 | 1,76 | 1,96 | 2,15 |
| Water pressure drop in the heat exchanger [kPa] | 8 | 77 | 13 | 16 | 19 |
| Inlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 77,1 | 80,7 | 76,7 | 72,1 | 66,9 |

| Parameters | HC 50 -4 stage 2900 m3/h | | | | |
|---|--------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 5/10 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 6,16 | 10,3 | 11,4 | 12,4 | 9,53 |
| Outlet air temperature [°C] | 17,3 | 18,4 | 19,4 | 20,4 | 21,4 |
| Water flow [m³/h] | 1,06 | 1,76 | 1,95 | 2,12 | 1,63 |
| Water pressure drop in the heat exchanger [kPa] | 7 | 11 | 13 | 15 | 9 |
| Inlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 83,1 | 76,1 | 72,7 | 69,1 | 74,8 |

| Parameters | HC 50 -3 stage 2100 m3/h | | | | |
|---|--------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 5/10 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 6,66 | 8,48 | 9,39 | 10,2 | 10,8 |
| Outlet air temperature [°C] | 16,6 | 17,6 | 18,5 | 19,3 | 20,2 |
| Water flow [m³/h] | 1,14 | 1,45 | 1,61 | 1,74 | 1,85 |
| Water pressure drop in the heat exchanger [kPa] | 6 | 9 | 11 | 13 | 14 |
| Inlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 78,3 | 77,9 | 74,7 | 71,4 | 67,8 |

| Parameters | HC 50 -2 stage 1700 m3/h | | | | |
|---|--------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 5/10 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 5,85 | 7,43 | 8,21 | 8,88 | 9,41 |
| Outlet air temperature [°C] | 16,1 | 17 | 17,9 | 18,7 | 19,4 |
| Water flow [m³/h] | 1 | 1,27 | 1,41 | 1,52 | 1,61 |
| Water pressure drop in the heat exchanger [kPa] | 6 | 7 | 9 | 10 | 9 |
| Inlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 79,6 | 79,2 | 76,1 | 72,9 | 69,5 |

| Parameters | HC 50 -1 stage 1400 m3/h | | | | |
|---|--------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 5/10 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 5,17 | 6,56 | 7,23 | 7,81 | 8,27 |
| Outlet air temperature [°C] | 15,6 | 16,5 | 17,3 | 18 | 18,7 |
| Water flow [m³/h] | 0,89 | 1,12 | 1,24 | 1,34 | 1,42 |
| Water pressure drop in the heat exchanger [kPa] | 5 | 7 | 7 | 8 | 9 |
| Inlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 80,7 | 80,4 | 77,4 | 74,4 | 71,1 |

| Parameters | HC 70 -5 stage 4400 m3/h | | | | |
|---|--------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 5/10 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 15,4 | 19,7 | 21,8 | 23,6 | 25,1 |
| Outlet air temperature [°C] | 15,3 | 16,2 | 16,8 | 17,5 | 18,1 |
| Water flow [m³/h] | 2,63 | 3,37 | 3,73 | 4,05 | 4,3 |
| Water pressure drop in the heat exchanger [kPa] | 18 | 28 | 34 | 40 | 44 |
| Inlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 84,6 | 84,2 | 81,8 | 79,3 | 76,5 |

| Parameters | HC 70 -4 stage 2774 m3/h | | | | |
|---|--------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 5/10 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 11,5 | 14,7 | 16,2 | 17,5 | 18,6 |
| Outlet air temperature [°C] | 14,2 | 14,8 | 15,3 | 15,8 | 16,3 |
| Water flow [m³/h] | 1,98 | 2,52 | 2,78 | 3 | 3,18 |
| Water pressure drop in the heat exchanger [kPa] | 10 | 16 | 20 | 23 | 25 |
| Inlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 87,4 | 87,1 | 85,1 | 82,9 | 80,6 |

| Parameters | HC 70 -3 stage 2009 m3/h | | | | |
|---|--------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 5/10 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 8,05 | 10,1 | 11,2 | 12 | 12,7 |
| Outlet air temperature [°C] | 12,8 | 13,2 | 13,6 | 13,9 | 14,2 |
| Water flow [m³/h] | 1,38 | 1,74 | 1,91 | 2,06 | 2,18 |
| Water pressure drop in the heat exchanger [kPa] | 5 | 8 | 10 | 11 | 12 |
| Inlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 90,6 | 90,3 | 88,8 | 87,1 | 85,2 |

| Parameters | HC 70 -2 stage 1626 m3/h | | | | |
|---|--------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 5/10 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 7,01 | 8,8 | 9,67 | 10,4 | 11 |
| Outlet air temperature [°C] | 12,3 | 12,6 | 12,9 | 13,2 | 13,5 |
| Water flow [m³/h] | 1,2 | 1,51 | 1,66 | 1,78 | 1,88 |
| Water pressure drop in the heat exchanger [kPa] | 4 | 6 | 8 | 9 | 10 |
| Inlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 91,7 | 91,4 | 90 | 88,5 | 86,9 |

| Parameters | HC 70 -1 stage 1339 m3/h | | | | |
|---|--------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 5/10 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 9,32 | 11,8 | 13 | 14 | 14,8 |
| Outlet air temperature [°C] | 13,3 | 13,8 | 14,3 | 14,7 | 15 |
| Water flow [m³/h] | 1,6 | 2,02 | 2,22 | 2,4 | 2,54 |
| Water pressure drop in the heat exchanger [kPa] | 7 | 11 | 13 | 15 | 17 |
| Inlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 89,4 | 89,1 | 87,3 | 85,4 | 83,4 |

COOLING

| Parameters | HC 20 - 5 stage 4100 m3/h | | | | |
|---|---------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 6/12 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 2,74 | 3,3 | 3,86 | 4,43 | 5 |
| Outlet air temperature [°C] | 21,6 | 23,1 | 24,6 | 26,1 | 27,6 |
| Water flow [m³/h] | 0,39 | 0,47 | 0,55 | 0,63 | 0,71 |
| Water pressure drop in the heat exchanger [kPa] | 1 | 2 | 3 | 3 | 4 |
| Intlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 63,5 | 65,3 | 61 | 56,5 | 51,6 |

| Parameters | HC 20 - 4 stage 2585 m3/h | | | | |
|---|---------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 6/12 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 2,2 | 2,64 | 3,08 | 3,51 | 3,95 |
| Outlet air temperature [°C] | 21 | 22,4 | 23,7 | 25,1 | 26,5 |
| Water flow [m³/h] | 0,31 | 0,38 | 0,44 | 0,5 | 0,56 |
| Water pressure drop in the heat exchanger [kPa] | 1 | 1 | 2 | 2 | 3 |
| Intlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 66 | 68,3 | 64,3 | 59,9 | 55,1 |

| Parameters | HC 20 - 3 stage 1872 m3/h | | | | |
|---|---------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 6/12 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 1,86 | 2,22 | 2,59 | 2,95 | 3,31 |
| Outlet air temperature [°C] | 20,5 | 21,8 | 23,1 | 24,3 | 25,6 |
| Water flow [m³/h] | 0,27 | 0,32 | 0,37 | 0,42 | 0,47 |
| Water pressure drop in the heat exchanger [kPa] | 1 | 1 | 1 | 2 | 2 |
| Intlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 68,1 | 70,9 | 67,1 | 62,7 | 58 |

| Parameters | HC 20 - 2 stage 1515 m3/h | | | | |
|---|---------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 6/12 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 1,66 | 1,98 | 2,3 | 2,61 | 2,93 |
| Outlet air temperature [°C] | 20,1 | 21,4 | 22,6 | 23,8 | 25 |
| Water flow [m³/h] | 0,24 | 0,28 | 0,33 | 0,37 | 0,42 |
| Water pressure drop in the heat exchanger [kPa] | 1 | 1 | 1 | 1 | 2 |
| Intlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 69,6 | 72,7 | 69 | 64,8 | 60,1 |

| Parameters | HC 20 - 1 stage 1248 m3/h | | | | |
|---|---------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 6/12 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 1,49 | 1,77 | 2,05 | 2,33 | 2,61 |
| Outlet air temperature [°C] | 19,8 | 21 | 22,1 | 23,3 | 24,4 |
| Water flow [m³/h] | 0,21 | 0,25 | 0,29 | 0,33 | 0,37 |
| Water pressure drop in the heat exchanger [kPa] | 0 | 1 | 1 | 1 | 1 |
| Intlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 71,1 | 74,5 | 71 | 66,9 | 62,2 |

| Parameters | HC 35 - 5 stage 4000 m3/h | | | | |
|---|---------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 6/12 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 4,27 | 5,11 | 5,95 | 6,79 | 7,62 |
| Outlet air temperature [°C] | 20,1 | 21,3 | 22,5 | 23,7 | 24,9 |
| Water flow [m³/h] | 0,61 | 0,73 | 0,85 | 0,97 | 1,09 |
| Water pressure drop in the heat exchanger [kPa] | 3 | 4 | 3 | 4 | 5 |
| Intlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 69,8 | 73 | 69,4 | 65,3 | 60,6 |

| Parameters | HC 35 - 4 stage 2522 m3/h | | | | |
|---|---------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 6/12 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 3,34 | 3,98 | 4,62 | 5,25 | 5,88 |
| Outlet air temperature [°C] | 19,2 | 20,2 | 21,2 | 22,3 | 23,3 |
| Water flow [m³/h] | 0,48 | 0,57 | 0,66 | 0,75 | 0,84 |
| Water pressure drop in the heat exchanger [kPa] | 2 | 3 | 3 | 4 | 3 |
| Intlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 74 | 78,1 | 75 | 71,2 | 66,7 |

| Parameters | HC 35 - 3 stage 1826 m3/h | | | | |
|---|---------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 6/12 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 2,78 | 3,3 | 3,81 | 4,32 | 4,84 |
| Outlet air temperature [°C] | 18,4 | 19,4 | 20,3 | 21,2 | 22,1 |
| Water flow [m³/h] | 0,4 | 0,47 | 0,54 | 0,62 | 0,69 |
| Water pressure drop in the heat exchanger [kPa] | 3 | 5 | 2 | 3 | 4 |
| Intlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 77,4 | 82,3 | 79,5 | 75,9 | 71,7 |

| Parameters | HC 35 - 2 stage 1478 m3/h | | | | |
|---|---------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 6/12 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 2,45 | 2,9 | 3,34 | 3,78 | 4,23 |
| Outlet air temperature [°C] | 18 | 18,6 | 19,6 | 20,5 | 21,3 |
| Water flow [m³/h] | 0,35 | 0,41 | 0,48 | 0,54 | 0,6 |
| Water pressure drop in the heat exchanger [kPa] | 3 | 4 | 2 | 2 | 3 |
| Intlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 79,8 | 85,3 | 82,7 | 79,4 | 75,3 |

| Parameters | HC 35 - 1 stage 1217 m3/h | | | | |
|---|---------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 6/12 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 2,17 | 2,56 | 2,95 | 3,34 | 3,72 |
| Outlet air temperature [°C] | 17,5 | 18,3 | 19 | 19,8 | 20,5 |
| Water flow [m³/h] | 0,31 | 0,37 | 0,42 | 0,48 | 0,53 |
| Water pressure drop in the heat exchanger [kPa] | 2 | 3 | 4 | 2 | 2 |
| Intlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 82,1 | 88,2 | 85,9 | 82,8 | 78,8 |

COOLING

| Parameters | HC 50 -5 stage 4600 m3/h | | | | |
|---|--------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 6/12 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 4,27 | 5,11 | 5,95 | 6,79 | 7,62 |
| Outlet air temperature [°C] | 20,1 | 21,3 | 22,5 | 23,7 | 24,9 |
| Water flow [m³/h] | 0,61 | 0,73 | 0,85 | 0,97 | 1,09 |
| Water pressure drop in the heat exchanger [kPa] | 3 | 4 | 3 | 4 | 5 |
| Inlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 69,8 | 73 | 69,4 | 65,3 | 60,6 |

| Parameters | HC 50 -4 stage 2900 m3/h | | | | |
|---|--------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 6/12 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 3,34 | 3,98 | 4,62 | 5,25 | 5,88 |
| Outlet air temperature [°C] | 19,2 | 20,2 | 21,2 | 22,3 | 23,3 |
| Water flow [m³/h] | 0,48 | 0,57 | 0,66 | 0,75 | 0,84 |
| Water pressure drop in the heat exchanger [kPa] | 2 | 3 | 3 | 4 | 3 |
| Inlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 74 | 78,1 | 75 | 71,2 | 66,7 |

| Parameters | HC 50 -3 stage 2100 m3/h | | | | |
|---|--------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 6/12 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 2,78 | 3,3 | 3,81 | 4,32 | 4,84 |
| Outlet air temperature [°C] | 18,4 | 19,4 | 20,3 | 21,2 | 22,1 |
| Water flow [m³/h] | 0,4 | 0,47 | 0,54 | 0,62 | 0,69 |
| Water pressure drop in the heat exchanger [kPa] | 3 | 5 | 2 | 3 | 4 |
| Inlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 77,4 | 82,3 | 79,5 | 75,9 | 71,7 |

| Parameters | HC 50 -2 stage 1700 m3/h | | | | |
|---|--------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 6/12 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 2,45 | 2,9 | 3,34 | 3,78 | 4,23 |
| Outlet air temperature [°C] | 18 | 18,6 | 19,6 | 20,5 | 21,3 |
| Water flow [m³/h] | 0,35 | 0,41 | 0,48 | 0,54 | 0,6 |
| Water pressure drop in the heat exchanger [kPa] | 3 | 4 | 2 | 2 | 3 |
| Inlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 79,8 | 85,3 | 82,7 | 79,4 | 75,3 |

| Parameters | HC 50 -1 stage 1400 m3/h | | | | |
|---|--------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 6/12 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 3,37 | 5,27 | 5,96 | 6,54 | 7,01 |
| Outlet air temperature [°C] | 16,4 | 17,6 | 18,3 | 19,1 | 19,8 |
| Water flow [m³/h] | 0,48 | 0,75 | 0,85 | 0,93 | 1 |
| Water pressure drop in the heat exchanger [kPa] | 2 | 6 | 4 | 5 | 6 |
| Inlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 87,9 | 80,9 | 78,1 | 75,1 | 71,8 |

| Parameters | HC 70 -5 stage 4400 m3/h | | | | |
|---|--------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 6/12 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 10,2 | 15,5 | 17,6 | 19,5 | 20,9 |
| Outlet air temperature [°C] | 16,5 | 17,3 | 18 | 18,6 | 19,2 |
| Water flow [m³/h] | 1,45 | 2,21 | 2,52 | 2,78 | 2,99 |
| Water pressure drop in the heat exchanger [kPa] | 6 | 13 | 16 | 30 | 22 |
| Inlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 87,4 | 84,7 | 82,4 | 79,9 | 77,2 |

| Parameters | HC 70 -4 stage 2774 m3/h | | | | |
|---|--------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 6/12 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 8,56 | 11,7 | 13,3 | 14,6 | 15,7 |
| Outlet air temperature [°C] | 15,5 | 16,1 | 16,6 | 17,1 | 17,6 |
| Water flow [m³/h] | 1,22 | 1,67 | 1,9 | 2,09 | 2,24 |
| Water pressure drop in the heat exchanger [kPa] | 4 | 8 | 10 | 11 | 13 |
| Inlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 87,9 | 87,6 | 85,6 | 83,5 | 81,3 |

| Parameters | HC 70 -3 stage 2009 m3/h | | | | |
|---|--------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 6/12 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 6,12 | 8,25 | 9,28 | 10,2 | 10,9 |
| Outlet air temperature [°C] | 14,3 | 14,7 | 15 | 15,4 | 15,7 |
| Water flow [m³/h] | 0,87 | 1,18 | 1,33 | 1,45 | 1,55 |
| Water pressure drop in the heat exchanger [kPa] | 2 | 4 | 5 | 6 | 7 |
| Inlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 91 | 90,8 | 89,2 | 87,6 | 85,9 |

| Parameters | HC 70 -2 stage 1626 m3/h | | | | |
|---|--------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 6/12 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 5,37 | 7,2 | 8,09 | 8,84 | 9,46 |
| Outlet air temperature [°C] | 13,9 | 14,2 | 14,5 | 14,8 | 15 |
| Water flow [m³/h] | 0,77 | 1,03 | 1,16 | 1,26 | 1,35 |
| Water pressure drop in the heat exchanger [kPa] | 2 | 3 | 4 | 5 | 5 |
| Inlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 92,1 | 91,8 | 90,5 | 89 | 87,5 |

| Parameters | HC 70 -1 stage 1339 m3/h | | | | |
|---|--------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 6/12 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 7 | 9,52 | 10,7 | 11,8 | 12,6 |
| Outlet air temperature [°C] | 14,8 | 15,3 | 15,7 | 16,1 | 16,4 |
| Water flow [m³/h] | 1 | 1,36 | 1,53 | 1,68 | 1,8 |
| Water pressure drop in the heat exchanger [kPa] | 3 | 5 | 6 | 8 | 9 |
| Inlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 89,8 | 89,5 | 87,8 | 86 | 84,1 |

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| Parameters | HC 20 - 5 stage 4100 m3/h | | | | |
|---|---------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 7/12 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 2,87 | 3,43 | 4,01 | 4,58 | 5,15 |
| Outlet air temperature [°C] | 21,5 | 23 | 24,5 | 26 | 27,5 |
| Water flow [m³/h] | 0,49 | 0,59 | 0,69 | 0,78 | 0,88 |
| Water pressure drop in the heat exchanger [kPa] | 2 | 3 | 4 | 5 | 6 |
| Inlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 63,9 | 65,7 | 61,5 | 56,9 | 52 |

| Parameters | HC 20 - 4 stage 2585 m3/h | | | | |
|---|---------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 7/12 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 2,29 | 2,73 | 3,71 | 3,61 | 4,06 |
| Outlet air temperature [°C] | 20,9 | 22,2 | 23,6 | 25 | 26,3 |
| Water flow [m³/h] | 0,39 | 0,47 | 0,54 | 0,62 | 0,7 |
| Water pressure drop in the heat exchanger [kPa] | 1 | 2 | 2 | 3 | 4 |
| Inlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 66,5 | 68,9 | 64,8 | 60,4 | 55,6 |

| Parameters | HC 20 - 3 stage 1872 m3/h | | | | |
|---|---------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 7/12 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 1,93 | 2,29 | 2,66 | 3,02 | 3,39 |
| Outlet air temperature [°C] | 20,4 | 21,6 | 22,9 | 24,2 | 25,4 |
| Water flow [m³/h] | 0,33 | 0,39 | 0,46 | 0,52 | 0,58 |
| Water pressure drop in the heat exchanger [kPa] | 1 | 1 | 2 | 2 | 3 |
| Inlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 68,6 | 71,5 | 67,6 | 63,3 | 58,5 |

| Parameters | HC 20 - 2 stage 1515 m3/h | | | | |
|---|---------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 7/12 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 1,71 | 2,03 | 2,35 | 2,67 | 2,99 |
| Outlet air temperature [°C] | 20 | 21,2 | 22,4 | 23,7 | 24,8 |
| Water flow [m³/h] | 0,29 | 0,35 | 0,4 | 0,46 | 0,51 |
| Water pressure drop in the heat exchanger [kPa] | 1 | 1 | 1 | 2 | 2 |
| Inlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 70,2 | 73,3 | 69,3 | 65,4 | 60,7 |

| Parameters | HC 20 - 1 stage 1248 m3/h | | | | |
|---|---------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 7/12 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 1,54 | 1,82 | 2,1 | 2,38 | 2,66 |
| Outlet air temperature [°C] | 19,7 | 20,8 | 22 | 23,1 | 24,3 |
| Water flow [m³/h] | 0,26 | 0,31 | 0,36 | 0,41 | 0,46 |
| Water pressure drop in the heat exchanger [kPa] | 1 | 1 | 1 | 1 | 2 |
| Inlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 71,7 | 75,2 | 71,6 | 67,5 | 62,8 |

| Parameters | HC 35 - 5 stage 4000 m3/h | | | | |
|---|---------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 7/12 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 4,43 | 5,28 | 6,12 | 6,97 | 7,82 |
| Outlet air temperature [°C] | 20 | 21,2 | 22,3 | 23,5 | 24,7 |
| Water flow [m³/h] | 0,76 | 0,91 | 1,05 | 1,2 | 1,34 |
| Water pressure drop in the heat exchanger [kPa] | 4 | 3 | 4 | 4 | 5 |
| Inlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 70,4 | 73,7 | 70,1 | 65,9 | 61,3 |

| Parameters | HC 35 - 4 stage 2522 m3/h | | | | |
|---|---------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 7/12 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 3,45 | 4,09 | 4,73 | 5,37 | 6 |
| Outlet air temperature [°C] | 19 | 20 | 21,1 | 22,1 | 23,1 |
| Water flow [m³/h] | 0,59 | 0,7 | 0,81 | 0,92 | 1,03 |
| Water pressure drop in the heat exchanger [kPa] | 3 | 4 | 3 | 3 | 4 |
| Inlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 74,7 | 78,9 | 75,7 | 72 | 67,5 |

| Parameters | HC 35 - 3 stage 1826 m3/h | | | | |
|---|---------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 7/12 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 2,86 | 3,37 | 3,89 | 4,41 | 4,92 |
| Outlet air temperature [°C] | 18,3 | 19,2 | 20,1 | 21 | 21,9 |
| Water flow [m³/h] | 0,49 | 0,58 | 0,67 | 0,76 | 0,84 |
| Water pressure drop in the heat exchanger [kPa] | 2 | 3 | 4 | 4 | 3 |
| Inlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 78,1 | 83,1 | 80,3 | 76,8 | 72,4 |

| Parameters | HC 35 - 2 stage 1478 m3/h | | | | |
|---|---------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 7/12 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 2,51 | 2,96 | 3,41 | 3,85 | 4,29 |
| Outlet air temperature [°C] | 17,8 | 18,7 | 19,5 | 20,3 | 21,1 |
| Water flow [m³/h] | 0,43 | 0,51 | 0,58 | 0,66 | 0,74 |
| Water pressure drop in the heat exchanger [kPa] | 4 | 2 | 3 | 3 | 4 |
| Inlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 80,5 | 86 | 83,6 | 80,2 | 76 |

| Parameters | HC 35 - 1 stage 1217 m3/h | | | | |
|---|---------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 7/12 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 2,22 | 2,61 | 3 | 3,39 | 3,77 |
| Outlet air temperature [°C] | 17,3 | 18,1 | 18,9 | 19,6 | 20,4 |
| Water flow [m³/h] | 0,38 | 0,45 | 0,51 | 0,58 | 0,65 |
| Water pressure drop in the heat exchanger [kPa] | 3 | 4 | 2 | 3 | 3 |
| Inlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 82,9 | 88,9 | 86,7 | 83,6 | 79,5 |

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| Parameters | HC 50 -5 stage 4600 m3/h | | | | |
|---|--------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 7/12 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 6,92 | 8,06 | 9,19 | 10,3 | 11,4 |
| Outlet air temperature [°C] | 19,3 | 20,4 | 21,6 | 22,8 | 24 |
| Water flow [m³/h] | 1,19 | 1,38 | 1,58 | 1,77 | 1,96 |
| Water pressure drop in the heat exchanger [kPa] | 6 | 8 | 11 | 13 | 16 |
| Intlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 73,5 | 77 | 73,2 | 68,8 | 63,9 |

| Parameters | HC 50 -4 stage 2900 m3/h | | | | |
|---|--------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 7/12 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 5,32 | 6,17 | 7,02 | 7,86 | 8,69 |
| Outlet air temperature [°C] | 18,2 | 19,3 | 20,3 | 21,3 | 22,3 |
| Water flow [m³/h] | 0,91 | 1,06 | 1,2 | 1,35 | 1,49 |
| Water pressure drop in the heat exchanger [kPa] | 4 | 5 | 6 | 8 | 10 |
| Intlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 78,4 | 82,8 | 79,5 | 75,4 | 70,7 |

| Parameters | HC 50 -3 stage 2100 m3/h | | | | |
|---|--------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 7/12 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 4,36 | 6,87 | 7,77 | 6,41 | 7,09 |
| Outlet air temperature [°C] | 17,5 | 18,5 | 19,4 | 20,2 | 21,1 |
| Water flow [m³/h] | 0,75 | 1,18 | 1,33 | 1,1 | 1,22 |
| Water pressure drop in the heat exchanger [kPa] | 3 | 6 | 8 | 5 | 7 |
| Intlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 82,3 | 78,4 | 75,3 | 80,7 | 76,1 |

| Parameters | HC 50 -2 stage 1700 m3/h | | | | |
|---|--------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 7/12 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 3,81 | 6,03 | 6,81 | 7,48 | 6,16 |
| Outlet air temperature [°C] | 16,9 | 18 | 18,8 | 19,6 | 20,3 |
| Water flow [m³/h] | 0,65 | 1,03 | 1,17 | 1,28 | 1,06 |
| Water pressure drop in the heat exchanger [kPa] | 2 | 5 | 6 | 7 | 5 |
| Intlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 85 | 79,7 | 76,7 | 73,5 | 80 |

| Parameters | HC 50 -1 stage 1400 m3/h | | | | |
|---|--------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 7/12 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 3,35 | 5,33 | 6,01 | 6,6 | 7,07 |
| Outlet air temperature [°C] | 16,5 | 17,5 | 18,3 | 19 | 19,7 |
| Water flow [m³/h] | 0,57 | 0,91 | 1,03 | 1,13 | 1,21 |
| Water pressure drop in the heat exchanger [kPa] | 2 | 4 | 5 | 6 | 7 |
| Intlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 87,6 | 80,9 | 78,1 | 75 | 71,8 |

| Parameters | HC 70 -5 stage 4400 m3/h | | | | |
|---|--------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 7/12 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 10,2 | 15,8 | 18 | 19,8 | 21,3 |
| Outlet air temperature [°C] | 16,5 | 17,2 | 17,9 | 18,5 | 19,1 |
| Water flow [m³/h] | 1,75 | 2,71 | 3,08 | 3,39 | 3,65 |
| Water pressure drop in the heat exchanger [kPa] | 8 | 19 | 24 | 28 | 32 |
| Intlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 87,4 | 84,7 | 82,3 | 79,8 | 77,1 |

| Parameters | HC 70 -4 stage 2774 m3/h | | | | |
|---|--------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 7/12 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 8,74 | 11,9 | 13,4 | 14,8 | 15,8 |
| Outlet air temperature [°C] | 15,4 | 16 | 16,5 | 17 | 17,5 |
| Water flow [m³/h] | 1,5 | 2,04 | 2,31 | 2,53 | 2,72 |
| Water pressure drop in the heat exchanger [kPa] | 6 | 11 | 14 | 16 | 19 |
| Intlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 87,9 | 87,6 | 85,6 | 83,5 | 81,2 |

| Parameters | HC 70 -3 stage 2009 m3/h | | | | |
|---|--------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 7/12 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 7,12 | 9,61 | 10,8 | 11,9 | 12,7 |
| Outlet air temperature [°C] | 14,7 | 15,2 | 15,6 | 16 | 16,4 |
| Water flow [m³/h] | 1,22 | 1,65 | 1,86 | 2,04 | 2,18 |
| Water pressure drop in the heat exchanger [kPa] | 4 | 7 | 9 | 11 | 12 |
| Intlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 89,8 | 89,5 | 87,8 | 86 | 84 |

| Parameters | HC 70 -2 stage 1626 m3/h | | | | |
|---|--------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 7/12 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 6,18 | 8,3 | 9,34 | 10,2 | 10,9 |
| Outlet air temperature [°C] | 14,3 | 14,7 | 15 | 15,3 | 15,7 |
| Water flow [m³/h] | 1,06 | 1,42 | 1,6 | 1,75 | 1,87 |
| Water pressure drop in the heat exchanger [kPa] | 3 | 6 | 7 | 8 | 9 |
| Intlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 91 | 90,7 | 89,2 | 87,6 | 85,8 |

| Parameters | HC 70 -1 stage 1339 m3/h | | | | |
|---|--------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 7/12 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 5,41 | 7,23 | 8,12 | 8,87 | 9,47 |
| Outlet air temperature [°C] | 13,8 | 14,2 | 14,5 | 14,7 | 15 |
| Water flow [m³/h] | 0,93 | 1,24 | 1,39 | 1,52 | 1,62 |
| Water pressure drop in the heat exchanger [kPa] | 3 | 4 | 5 | 6 | 7 |
| Intlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 92,1 | 91,8 | 90,5 | 89 | 87,5 |

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| Parameters | HC 20 - 5 stage 4100 m3/h | | | | |
|---|---------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 10/16 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 1,71 | 2,26 | 2,82 | 3,38 | 3,94 |
| Outlet air temperature [°C] | 22,5 | 24 | 25,5 | 27 | 28,5 |
| Water flow [m³/h] | 0,25 | 0,32 | 0,4 | 0,48 | 0,56 |
| Water pressure drop in the heat exchanger [kPa] | 1 | 1 | 1 | 2 | 3 |
| Inlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 60,1 | 61,8 | 57,8 | 53,5 | 48,8 |

| Parameters | HC 20 - 4 stage 2585 m3/h | | | | |
|---|---------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 10/16 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 1,39 | 1,82 | 2,25 | 2,69 | 3,13 |
| Outlet air temperature [°C] | 22,1 | 23,5 | 24,9 | 26,3 | 27,6 |
| Water flow [m³/h] | 0,2 | 0,26 | 0,32 | 0,38 | 0,45 |
| Water pressure drop in the heat exchanger [kPa] | 0 | 1 | 1 | 1 | 2 |
| Inlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 61,7 | 63,9 | 60,1 | 56 | 51,5 |

| Parameters | HC 20 - 3 stage 1872 m3/h | | | | |
|---|---------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 10/16 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 1,19 | 1,54 | 1,9 | 2,26 | 2,63 |
| Outlet air temperature [°C] | 21,8 | 23,1 | 24,4 | 25,7 | 26,9 |
| Water flow [m³/h] | 0,17 | 0,22 | 0,27 | 0,32 | 0,38 |
| Water pressure drop in the heat exchanger [kPa] | 0 | 0 | 1 | 1 | 1 |
| Inlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 63 | 65,5 | 62 | 58 | 53,6 |

| Parameters | HC 20 - 2 stage 1515 m3/h | | | | |
|---|---------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 10/16 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 1,06 | 1,38 | 1,69 | 2,01 | 2,33 |
| Outlet air temperature [°C] | 21,5 | 22,8 | 24 | 25,2 | 26,4 |
| Water flow [m³/h] | 0,15 | 0,2 | 0,24 | 0,29 | 0,33 |
| Water pressure drop in the heat exchanger [kPa] | 0 | 0 | 1 | 1 | 1 |
| Inlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 63,9 | 66,7 | 63,4 | 59,5 | 55,2 |

| Parameters | HC 20 - 1 stage 1248 m3/h | | | | |
|---|---------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 10/16 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 0,96 | 1,24 | 1,52 | 1,8 | 2,08 |
| Outlet air temperature [°C] | 21,3 | 22,5 | 23,7 | 24,8 | 26 |
| Water flow [m³/h] | 0,14 | 0,18 | 0,22 | 0,26 | 0,3 |
| Water pressure drop in the heat exchanger [kPa] | 0 | 0 | 0 | 1 | 1 |
| Inlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 64,9 | 67,9 | 64,7 | 61 | 56,7 |

| Parameters | HC 35 - 5 stage 4000 m3/h | | | | |
|---|---------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 10/16 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 2,71 | 3,53 | 4,37 | 5,2 | 6,05 |
| Outlet air temperature [°C] | 21,5 | 22,8 | 24 | 25,2 | 26,3 |
| Water flow [m³/h] | 0,39 | 0,51 | 0,63 | 0,74 | 0,87 |
| Water pressure drop in the heat exchanger [kPa] | 3 | 2 | 3 | 4 | 3 |
| Inlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 63,9 | 66,8 | 63,5 | 59,7 | 55,5 |

| Parameters | HC 35 - 4 stage 2522 m3/h | | | | |
|---|---------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 10/16 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 2,14 | 2,78 | 3,41 | 4,05 | 4,68 |
| Outlet air temperature [°C] | 20,9 | 22 | 23 | 24 | 25 |
| Water flow [m³/h] | 0,31 | 0,4 | 0,49 | 0,58 | 0,67 |
| Water pressure drop in the heat exchanger [kPa] | 2 | 3 | 2 | 3 | 3 |
| Inlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 66,4 | 70,1 | 67,3 | 64 | 59,9 |

| Parameters | HC 35 - 3 stage 1826 m3/h | | | | |
|---|---------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 10/16 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 1,8 | 2,32 | 2,83 | 3,35 | 3,86 |
| Outlet air temperature [°C] | 20,4 | 21,3 | 22,3 | 23,2 | 24,1 |
| Water flow [m³/h] | 0,26 | 0,33 | 0,41 | 0,48 | 0,55 |
| Water pressure drop in the heat exchanger [kPa] | 1 | 2 | 3 | 2 | 2 |
| Inlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 68,5 | 72,9 | 70,4 | 67,3 | 63,5 |

| Parameters | HC 35 - 2 stage 1478 m3/h | | | | |
|---|---------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 10/16 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 1,6 | 2,05 | 2,49 | 2,94 | 3,38 |
| Outlet air temperature [°C] | 20,1 | 20,9 | 21,8 | 22,6 | 23,4 |
| Water flow [m³/h] | 0,23 | 0,29 | 0,36 | 0,42 | 0,48 |
| Water pressure drop in the heat exchanger [kPa] | 4 | 2 | 3 | 4 | 2 |
| Inlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 70 | 74,8 | 72,5 | 69,7 | 66 |

| Parameters | HC 35 - 1 stage 1217 m3/h | | | | |
|---|---------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 10/16 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 1,42 | 1,82 | 2,21 | 2,6 | 2,98 |
| Outlet air temperature [°C] | 19,7 | 20,5 | 21,3 | 22,1 | 22,8 |
| Water flow [m³/h] | 0,2 | 0,26 | 0,32 | 0,37 | 0,43 |
| Water pressure drop in the heat exchanger [kPa] | 4 | 1 | 2 | 3 | 4 |
| Inlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 71,4 | 76,6 | 74,7 | 72 | 68,5 |

COOLING

| Parameters | HC 50 -5 stage 4600 m3/h | | | | |
|---|--------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 10/16 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 4,69 | 5,83 | 6,96 | 8,08 | 9,21 |
| Outlet air temperature [°C] | 20,8 | 22 | 23,2 | 24,4 | 25,5 |
| Water flow [m³/h] | 0,67 | 0,83 | 1 | 1,16 | 1,32 |
| Water pressure drop in the heat exchanger [kPa] | 2 | 3 | 5 | 6 | 8 |
| Inlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 66,9 | 70 | 66,6 | 62,7 | 58,2 |

| Parameters | HC 50 -4 stage 2900 m3/h | | | | |
|---|--------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 10/16 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 3,64 | 4,5 | 5,35 | 6,2 | 7,04 |
| Outlet air temperature [°C] | 20,1 | 21,1 | 22,1 | 23,1 | 24,2 |
| Water flow [m³/h] | 0,52 | 0,64 | 0,77 | 0,89 | 1,01 |
| Water pressure drop in the heat exchanger [kPa] | 1 | 2 | 3 | 4 | 5 |
| Inlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 70 | 74 | 71 | 67,5 | 63,2 |

| Parameters | HC 50 -3 stage 2100 m3/h | | | | |
|---|--------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 10/16 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 3,01 | 3,7 | 4,39 | 5,08 | 5,76 |
| Outlet air temperature [°C] | 19,5 | 20,4 | 21,3 | 22,2 | 23,1 |
| Water flow [m³/h] | 0,43 | 0,53 | 0,63 | 0,73 | 0,82 |
| Water pressure drop in the heat exchanger [kPa] | 1 | 1 | 2 | 3 | 3 |
| Inlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 72,4 | 77,1 | 74,5 | 71,3 | 67,2 |

| Parameters | HC 50 -2 stage 1700 m3/h | | | | |
|---|--------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 10/16 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 2,64 | 3,24 | 3,84 | 4,43 | 5,02 |
| Outlet air temperature [°C] | 19,1 | 20 | 20,8 | 21,6 | 22,5 |
| Water flow [m³/h] | 0,38 | 0,46 | 0,55 | 0,63 | 0,72 |
| Water pressure drop in the heat exchanger [kPa] | 1 | 1 | 2 | 2 | 2 |
| Inlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 74,2 | 79,3 | 77 | 74 | 70 |

| Parameters | HC 50 -1 stage 1400 m3/h | | | | |
|---|--------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 10/16 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 2,34 | 2,86 | 3,38 | 3,9 | 4,41 |
| Outlet air temperature [°C] | 18,7 | 19,5 | 20,3 | 21,1 | 21,8 |
| Water flow [m³/h] | 0,33 | 0,41 | 0,48 | 0,56 | 0,63 |
| Water pressure drop in the heat exchanger [kPa] | 1 | 1 | 1 | 2 | 2 |
| Inlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 75,9 | 81,5 | 79,5 | 76,6 | 72,8 |

| Parameters | HC 70 -5 stage 4400 m3/h | | | | |
|---|--------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 10/16 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 6,97 | 8,63 | 10,3 | 11,9 | 13,5 |
| Outlet air temperature [°C] | 18,9 | 19,6 | 20,4 | 21,1 | 21,8 |
| Water flow [m³/h] | 1 | 1,23 | 1,47 | 1,7 | 1,93 |
| Water pressure drop in the heat exchanger [kPa] | 3 | 4 | 6 | 8 | 10 |
| Inlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 75,3 | 81 | 79,1 | 76,4 | 72,7 |

| Parameters | HC 70 -4 stage 2774 m3/h | | | | |
|---|--------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 10/16 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 5,24 | 6,43 | 7,62 | 8,78 | 9,93 |
| Outlet air temperature [°C] | 17,9 | 18,5 | 19 | 19,6 | 20,1 |
| Water flow [m³/h] | 0,75 | 0,92 | 1,09 | 1,26 | 1,42 |
| Water pressure drop in the heat exchanger [kPa] | 2 | 2 | 3 | 4 | 5 |
| Inlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 80,1 | 87,1 | 86 | 84 | 80,8 |

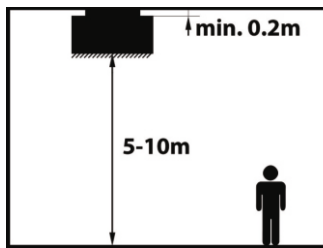
| Parameters | HC 70 -3 stage 2009 m3/h | | | | |
|---|--------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 10/16 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 4,23 | 5,16 | 6,09 | 7 | 7,9 |
| Outlet air temperature [°C] | 17,2 | 17,6 | 18,1 | 18,5 | 19 |
| Water flow [m³/h] | 0,61 | 0,74 | 0,87 | 1 | 1,13 |
| Water pressure drop in the heat exchanger [kPa] | 1 | 2 | 2 | 3 | 4 |
| Inlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 83,7 | 91,7 | 91,2 | 89,7 | 86,9 |

| Parameters | HC 70 -2 stage 1626 m3/h | | | | |
|---|--------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 10/16 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 3,65 | 4,44 | 5,23 | 6 | 6,76 |
| Outlet air temperature [°C] | 16,7 | 17,1 | 17,5 | 17,8 | 18,2 |
| Water flow [m³/h] | 0,52 | 0,64 | 0,75 | 0,86 | 0,97 |
| Water pressure drop in the heat exchanger [kPa] | 1 | 1 | 2 | 2 | 3 |
| Inlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 86,1 | 94,8 | 94,8 | 93,6 | 91,1 |

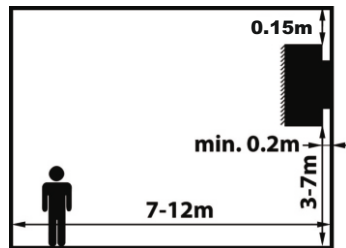
| Parameters | HC 70 -1 stage 1339 m3/h | | | | |
|---|--------------------------|------|------|------|------|
| Inlet and outlet water temperature [°C] | 10/16 | | | | |
| Inlet air temperature [°C] | 24 | 26 | 28 | 30 | 32 |
| Cooling capacity [kW] | 3,18 | 3,86 | 4,53 | 5,19 | 5,84 |
| Outlet air temperature [°C] | 16,3 | 16,6 | 16,9 | 17,2 | 17,5 |
| Water flow [m³/h] | 0,45 | 0,55 | 0,65 | 0,74 | 0,84 |
| Water pressure drop in the heat exchanger [kPa] | 1 | 1 | 1 | 2 | 2 |
| Inlet air relative humidity [%] | 55 | 55 | 50 | 45 | 40 |
| Outlet air relative humidity [%] | 88,4 | 97,8 | 98,1 | 97,2 | 95 |

3. ASSEMBLY

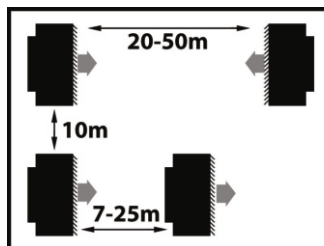
Water heaters Reventon Group HC20, HC35, HC50, HC70 can be assembled on the wall or ceiling via rotating mounting bracket. The drawings below show the ways of assembly. In the bigger accommodation it is recommended to assemble more than one device. Follow the parameters which are provided on the drawings.



Drawing 2. Assembly on the ceiling.

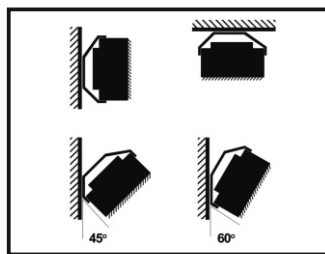


Drawing 3. Assembly on the wall.



Drawing 4. Example arrangement for few devices in the room.

Reventon Group devices can be assembled on the wall or ceiling via rotating mounting bracket. It is possible to assemble the device in parallel on the angle 60° and 45°. Please follow the parameters as shown below.



4. INSTALLATION INSTRUCTIONS

The installation should be made by the qualified staff, who possess the needed rights to install electrical devices, as instructed in the following documentation. To install the air waiver heater Reventon Group HC20, HC35, HC50, HC70 use the duct size 2 x 2,5mm².

5. PRECAUTIONS & WARNINGS

All works concerning electrical installation should be made by the qualified staff, who possess the qualifications due to the domestic and local norms. These recommendations include service and disassembly as well. Not following to the recommendations may cause electrocution, device damages or its incorrect work.

- Before service or exchange of the device it is obligatory to cut off the current supply.
- Do not cover the inlet and outlet of the device.
- Do not use the device in room with high moisture or close to the water basin.
- Do not install, service the device with wet hands or barefoot.
- Do not use the device in room with flammable fumes, gas and high concentration of dust.
- The device should be kept out of reach of children and animals.
- During the assembly use the filter on the hydraulic supply.

- Please use the following valves:

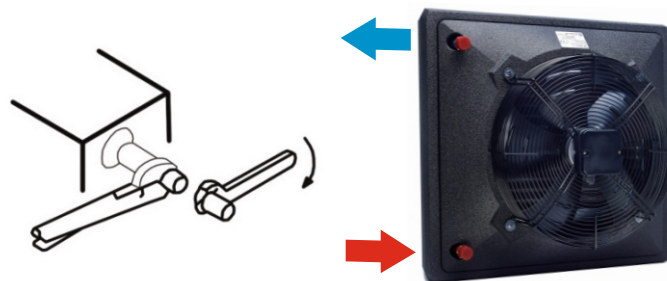
- vent valve in the highest place on the hydraulic installation,
- cut off valve on the supply and return of the device.
- The device should be secured against pressure increase in the water installation.
- Before plugging the electric supply check the leak tightness.
- The device does not consist of the anti-frost protection. The temperature in the room should not go below 0°C. In such case please empty the device out of water.
- It is recommended to check the electric installation before the first start.
- It is recommended to use the external current differential protection.
- After the turn off, the elements of device may be warm.
- After operating time of the device, please utilize it concerning the local norms and regulations.

It is recommended to clean the device periodically:

- heating coil blow through by compressed air,
- fan casing and blades clean form the dirt.
- If the device is not used for a longer time disconnect the voltage supply.
- The device is transported with the closed air stators. It is essential to open them in 30 % before first start. Not keeping to the following recommendation may cause the damages of the fan.
- Opening the air stators must be made by two hands in parallel. Not keeping to the following recommendation may cause the damages of the air stators.



While plugging the device to the water installation do remember to hold its stub pipes by pipes spanner, not keeping to the recommendation may cause the damages of the heating coil.



6. CONTROLS

To make easier the usage of the Reventon Group devices we also offer the additional controls:

Fan speed controller HC 1,2A

designed to change the single-phase fan's speed voltage controlled in industrial supply and heating systems



5 control levels: 0-70-85-105- 145-230V
Power supply voltage: 230V AC/50-60Hz
Allowable current output: 1,2 A
Protection: thermal cut-out
Dimensions: 126mm x 176mm x 56mm
Weight: 1,3kg
Degree of protection: IP 54

Fan speed controller HC 3A

designed to change the single-phase fan's speed voltage controlled in industrial supply and heating systems



5 control levels: 0-70-85-105- 145-230V
Power supply voltage: 230V AC/50-60Hz
Allowable current output: 3A
Protection: thermal cut-out
Dimensions: 126mm x 176mm x 56mm
Weight: 1,3kg
Degree of protection: IP 54

Two-way valve with actuator HC 3/4" assembly on the return (outlet) pipe



Operating voltage: 230V 50/60 Hz
Breakaway current: <0,25A
Input: <0,015 (3,35VA)
Auxiliary microswitch: 5A
Max. ambient temperature: 60°C
Class of insulation: double
Degree of protection: IP40
Aperture time: 5-6 min
Max. height: 3,6 mm

Programmable room thermostat HC



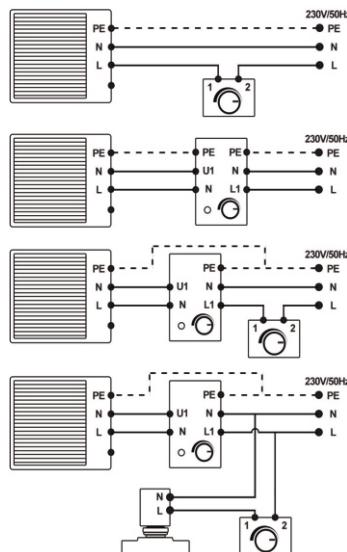
Numbers of temperature levels: 1
Hysteresis: 0,50°C/1°C
Power: 2 batteries AA
Switching: 230 VAC/50Hz 5(3) A
Operating temperature range: 0-40°C
Temperature control range: 5-30°C
Accuracy of temperature: 0,2°C
Number of programs: 9

Room thermostat HC



Operating temperature range: 0-40°C
Temperature control range: 10-30°C
Accuracy of temperature: 1°C
Number of temperature levels: 1

7. CONNECTION SCHEMES



PE- protective earthing, duct yellow-green colour;
N- neutral, duct black-black colour;
L- phase duct, duct brown colour;
Empty clamp, duct blue-black colour.

8. TERMS OF WARRANTY

I. Reventon Group Sp. z o.o. [Ltd.] 3B Montazowa Street , 43-300 Bielsko-Biala, Poland, is the producer of the Reventon Group brand. The warranty concerns the following devices and it is valid for 3 years:

- air heater Reventon Group HC20
- air heater Reventon Group HC35
- air heater Reventon Group HC50
- air heater Reventon Group HC70

* lifetime warranty for EPP caisng

II. Warranty is valid in the European Union.

III. The terms of warranty are valid from purchasing the device (the date issuing a document confirming the purchase of the device) but not further than 42 months from leaving the producer's warehouse.

IV. The defects revealed during the warranty period will be removed free of charge in 14 working days. The service will be done by the installation company due to the terms of included in warranty card. The elements will be supplied by the Reventon Group producer during the warranty period.

V. Warranty does not cover the parts of the device subject to normal maintenance and the cases as below:

a) Mechanical defects, damages from the impact of the improper transportation or damages through improper storage.

b) Defects through:

- improper usage and service;

- using the device in the improper conditions (too high humidity, too high or too low temperature, impact of the surrounding, sun etc.);

- modified equipment that has been modified or repaired without written agreement of the producer;

- connecting additional equipment, which is not recommended by the producer or inconsistent with the technical documentation;

- improper power supply.

c) Elements which wear and tear such as discolor or using.

VI. All changes in record in the warranty terms or any constructive modifications, independent service outside the Reventon Group service or use, uncaring, makes the warranty not valid.

VII. To obtain the service it is needed to send to the producer warranty card with the signature, document confirming the purchase, (copy of the invoice) and correctly filled the warranty form.

VIII. Not following to any of warranty regulations makes the warranty not valid.

IX. All correspondence, returns, complains should be send to the following address: Reventon Group Sp. z o.o. 3B Montazowa Street, 43-300 Bielsko-Biala, Poland or e-mail: serwis@reventongroup.eu

The producer reserves the rights to make changes to the technical documentation without previous notice.

Warranty card



Reventon Group [Ltd.] 3B Montazowa Street, 43-300 Bielsko-Biała, Poland

Stamp and signature of the installation company:

Factory number of the device:

Address and place of assembly :

City:

Postal code:

Street:

Number:

Place:

Warranty form



Reventon Group [Ltd.] 3B Montazowa Street, 43-300 Bielsko-Biała, Poland

The company reporting the complaint:

The company installing the device:

Factory number of the device:

Date of assembly:

Date and circumstances of noticing the defect:

Date of declaration the complaint:

Address and place of assembly the device:

Contact Name and Surname:

Telephone number/ e-mail address:

Description of the defect:

Service card



Reventon Group [Ltd.] 3B Montazowa Street, 43-300 Bielsko-Biała, Poland

| Lp. | Date of declaration the complaint | Date of repair | Description of the repair | Service stamp |
|-----|-----------------------------------|----------------|---------------------------|---------------|
|-----|-----------------------------------|----------------|---------------------------|---------------|