



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.

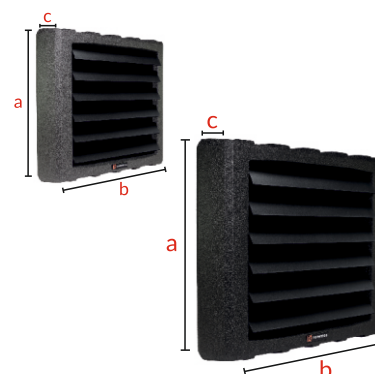
Axial blowing fan: protective grid made of steel wire galvanized, metal blades. The motor has got the safety degree IP 54. Rate current 0,82A-1,2A. 1-phase device. Depending on the water heater model we offer fans with a diameter 400-450 mm.

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: 320mm (c)



BIG CASING HC50, HC70

height: 698mm (a)
width: 739mm (b)
depth: 340mm (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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kPa]	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 [kPa]	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 [kPa]	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 [kPa]	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 [kPa]	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 [kPa]	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 [kPa]	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 [kPa]	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 [kPa]	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 [kPa]	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 [kPa]	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 [kPa]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	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]	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]	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]	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]	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]	50/30				
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]	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]	80/60				
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]	70/40				
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]	60/30				
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]	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]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	3	2	2	2	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 [kP]	15	13	11	9	8

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 [kP]	3	2	2	1	1

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 [kP]	2	1	1	1	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 [kP]	1	1	1	1	0

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 [kP]	1	1	1	0	0

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 [kP]	5	4	3	3	2

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 [kP]	3	3	2	2	2

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 [kP]	1	1	1	0	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 [kP]	1	0	0	0	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 [kP]	6	4	3	2	2

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 [kP]	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 [kP]	12	10	9	8	7

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 [kP]	65	56	47	39	33

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 [kP]	11	9	7	5	4

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 [kP]	7	5	4	3	2

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 [kP]	6	4	3	2	1

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 [kP]	4	3	2	1	1

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 [kP]	19	16	14	12	10

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 [kP]	14	12	10	8	7

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 [kP]	4	3	2	2	1

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 [kP]	2	2	1	1	0

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 [kP]	24	18	14	10	6

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 [kP]	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 [kPa]	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 [kPa]	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 [kPa]	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 [kPa]	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 [kPa]	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 [kPa]	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 [kPa]	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 [kPa]	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 [kPa]	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 [kPa]	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 [kPa]	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 [kPa]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	2	2	2	2	1

Parameters	HC70-1 stage1339 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 [kP]	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 [kP]	12	11	9	8	6

Parameters	HC70-1 stage1339 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 [kP]	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 [kP]	2	2	1	1	1

Parameters	HC70-1 stage1339 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 [kP]	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 [kP]	2	1	1	1	0

Parameters	HC70-1 stage1339 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 [kP]	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 [kP]	1	1	1	0	0

Parameters	HC70-1 stage1339 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 [kP]	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 [kP]	1	1	0	0	0

Parameters	HC70-1 stage1339 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 [kP]	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
Intlet 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
Intlet 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
Intlet 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
Intlet 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
Intlet 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
Intlet 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
Intlet 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
Intlet 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
Intlet 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
Intlet 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
Intlet 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
Intlet 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
Intlet 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
Intlet 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
Intlet 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
Intlet 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
Intlet 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
Intlet 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
Intlet 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
Intlet 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
Intlet 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
Intlet 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
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 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
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 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
Intlet 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
Intlet 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
Intlet 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
Intlet 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
Intlet 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
Intlet air relative humidity [%]	55	55	50	45	40
Outlet air relative humidity [%]	89,8	89,5	87,8	86	84,1

COOLING

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
Intlet 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
Intlet 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
Intlet 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
Intlet 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
Intlet 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
Intlet 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
Intlet 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
Intlet 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
Intlet 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
Intlet air relative humidity [%]	55	55	50	45	40
Outlet air relative humidity [%]	82,9	88,9	86,7	83,6	79,5

COOLING

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
Inlet 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
Inlet 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
Inlet 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
Inlet 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
Inlet 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
Inlet 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
Inlet 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
Inlet 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
Inlet 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
Inlet air relative humidity [%]	55	55	50	45	40
Outlet air relative humidity [%]	92,1	91,8	90,5	89	87,5

COOLING

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
Intlet 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
Intlet 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
Intlet 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
Intlet 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
Intlet 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
Intlet 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
Intlet 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
Intlet 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
Intlet 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
Intlet 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

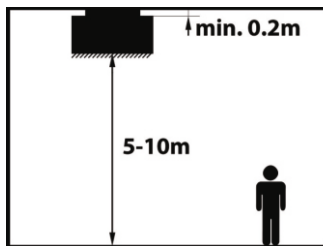
Parameters	HC 70 -3 stage 2009 m3/h				
Inlet and outlet water temperature [°C]	10/16				
Inlet air temperature [°C]	24	26	28	30	32
Cooling capacity [kW]	4,23	5,16	6,09	7	7,9
Outlet air temperature [°C]	17,2	17,6	18,1	18,5	19
Water flow [m³/h]	0,61	74	0,87	1	1,13
Water pressure drop in the heat exchanger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

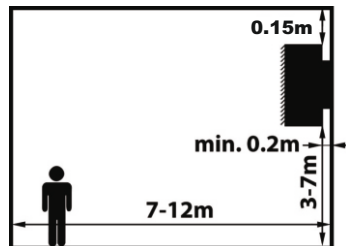
Parameters	HC 70 -1 stage 1339 m3/h				
Inlet and outlet water temperature [°C]	10/16				
Inlet air temperature [°C]	24	26	28	30	32
Cooling capacity [kW]	3,18	3,86	4,53	5,19	5,84
Outlet air temperature [°C]	16,3	16,6	16,9	17,2	17,5
Water flow [m³/h]	0,45	0,55	0,65	0,74	0,84
Water pressure drop in the 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

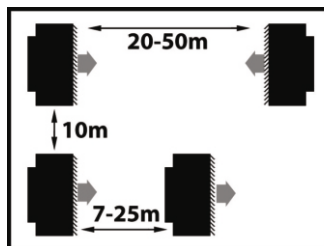
Water heaters Reventon Group HC20, HC35, HC50, HC70 can be assembled on the wall or ceiling via rotating mounting bracket. The drawings below show the ways of assembly. In the bigger accommodation it is recommended to assemble more than one device. Follow the parameters which are provided on the drawings.



Drawing 2. Assembly on the ceiling.

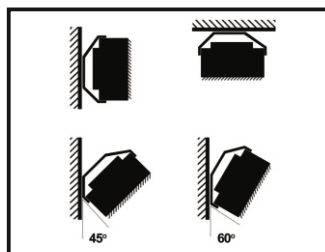


Drawing 3. Assembly on the wall.



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 waster 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 stuff, 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 diereential 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.

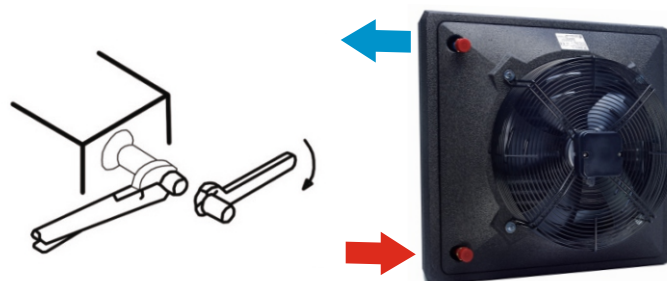
- If the device is not used for a longer time disconnect the voltage supply.

- 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.



Warranty card

 **reventon** INDUSTRIAL SOLUTIONS 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:

**Cartão de Garantia / Karta Gwarancyjna / Warranty card / Garantieschein /
Талон сервисного обслуживания**



Reventon Group Sp. z o.o. 3B Montazowa Street, 43-300 Bielsko-Biała, Poland

Carimbo e assinatura da empresa instaladora:
Pieczęćka i podpis firmy instalującej:
Stamp and signature of the installation company:
Stempel und Unterschrift des Installateurs:
Печать и подпись монтажной фирмы:

Numero de série do equipamentos:
Numer fabryczny urządzenia:
Factory number of the device:
Geräte-Seriennummer:
Серийный номер устройства:

Endereço da instalação:
Adres i miejsce montażu urządzenia:
Address and place of assembly:
Adresse und Montageort:
Адрес и место установки устройства:

Cidade:
Miasto:
City:
Stadt:
Город:

Código Postal:
Kod pocztowy:
Postal code:
Postleitzahl:
Почтовый индекс:

Rua:
Ulica:
Street:
Adresse:
Улица:

Número :
Nr lokalu:
Number:
Kein Platz:
№ офиса:

Local:
Miejsce:
Place:
Ort:
Место:

Warranty form

 **reventon** INDUSTRIAL SOLUTIONS 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
INDUSTRIAL SOLUTIONS

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
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