



Technical documentation DTR







ENG TECHNICAL DOCUMENTATION

Table of contents

- 1. INTRODUCTION
- 1.1 PRECAUTIONS
- 1.2 TRANSPORT
- 1.3 PACKAGE CONTENT
- 1.4 USE AND PRINCIPLE OF OPERATION
- 2. DEVICE CONSTRUCTION, DIMENSIONS, TECHNICAL DATA
- 2.1 CONSTRUCTION
- 2.2 DIMENSIONS
- 2.3 TECHNICAL DATA
- 3. ASSEMBLY
- 4. INSTALLATION INSTRUCTIONS
- 5. PRECAUTIONS & WARNINGS
- 6. CONTROLS
- 7. CONNECTION SCHEMES
- 8. TERMS OF WARRANTY
- 8.1 WARRANTY CARD
- 8.2 WARRANTY FORM
- 8.3 SERVICE FORM

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 HC series 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 CONSTRUCTION

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

Casing: made of expanded 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 $\frac{3}{2}$ ". 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°. Possible rotation horizontally.

2.2 DIMENSIONS

HC20, HC30, HC35, HC45

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

HC50, HC70 height: 698mm (a)

width: 739mm (b) depth: 340 mm (c)



2.3 TECHNICAL DATA

Technical data	Unit of measure	HC20 / HC3P 20	HC30 / HC3P 30	HC35 / HC3P 35	HC45 / HC3P 45	HC50 / HC3P 50	HC70 / HC3P 70
Nominal heating capacity water 90/70°C and inlet air temperature 0°C	kW	22,4	26,4	33,9	43,3	46,7	68,5
Heating power range	kW	8-22,4	9,05-26,4	12,9-33,9	18,4-43,3	20,1-46,7	30-68,5
Maximum airow	m³/h	4100	4000	4000	3600	4600	4400
Maximum range of air stream	m	25	25	25	22	25	25
Number of rows	pcs	1	1	2	2	2	3
Capacity of water	dm³	0,65	0,8	1,35	1,7	1,95	2,85
Air temperature rise*	°C	17,8	25,2	28,6	46,7	29,6	46,5
Maximum temperature of heating agent	°C	120	120	120	120	120	120
Maximum operating pressure	MPa	1,6	1,6	1,6	1,6	1,6	1,6
Rated current	А	0,82/0,47	0,82/0,47	0,82/0,47	0,82/0,47	1,2/0,6	1,2/0,6
Power supply voltage	V/Hz	230~50/400	230~50/400	230~50/400	230~50/400	230~50/400	230~50/400
Motor power	W	180	180	180	180	250	250
Motor speed	rev/min	1380	1380	1380	1380	1350	1350
Motor IP	-	54	54	54	54	54	54
Connection diameter	"	3/4	3/4	3/4	3/4	3/4	3/4
Weight	kg	11,5	12	12,5	14	17,5	19,5
Noise**	dB	50	50	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	0 5 10 15				
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]		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]	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]	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]	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]	50/30					
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]		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]		80/60						
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]		70/40						
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]		60/30						
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]	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]	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 [kP]	2	2	2	2	1

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 [kP]	14	12	10	9	7	

HC20-4 stage 2585 m3/h				
70/50				
0	5	10	15	20
12,1	10,8	9,47	8,19	6,93
15,3	18,8	22,4	25,9	29,4
0,53	0,47	0,41	0,36	0,3
2	2	1	1	1
	12,1 15,3 0,53	0 5 12,1 10,8 15,3 18,8 0,53 0,47	70/50 0 5 10 12,1 10,8 9,47 15,3 18,8 22,4 0,53 0,47 0,41	70/50 0 5 10 15 12,1 10,8 9,47 8,19 15,3 18,8 22,4 25,9 0,53 0,47 0,41 0,36

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

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 [kP]	1	0	0	0	0

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 [kP]	4	3	3	2	2	

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 [kP]	3	2	2	2	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 [kP]	1	0	0	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 [kP]	0	0	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 [kP]	5	4	3	2	1

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 [kP]	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]			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]	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]	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]	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]			50/30		
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				
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 18	372 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 18	72 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 70/40 5 10 15 20 6,86 5,81 4,77 3,6 17,2 20,5 23,8 27				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]			60/30			
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]	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]	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 [kP]	1	1	1	1	1	

Inlet and outlet water temperature[°C]			80/70			Inlet and outlet water temperature[°C]			80/60		
Parameters		HC20-2	2 stage 15	15 m3/h		Parameters		HC20-:	2 stage 15	15 m3/h	
Pressure drop in the heat exchanger [kP]	1	1	1	1	1	Pressure drop in the heat exchanger [kP]	2	2	2	1	1
Water flow[m³/h]	0,45	0,42	0,38	0,35	0,33	Water flow[m³/h]	0,57	0,52	0,48	0,44	0,39
Outlet air temperature [°C]	32,6	35,9	39,1	42,3	45,5	Outlet air temperature [°C]	27,8	31,1	34,2	37,4	40,6
Heating capacity [kW]	15,1	14,1	13	12	11	Heating capacity [kW]	12,9	11,9	10,9	9,89	8,91
temperature [°C]	0	5	10	15	20	temperature [°C]	0	5	10	15	20

Parameters

Inlet and outlet water temperature[°C]

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 [kP]	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 [kP]	2	1	1	1	1		

HC20-2 stage 1515 m3/h

90/70

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

Parameters	HC20-1 stage 1248 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]		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]	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]	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]	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]		50/30			
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]		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 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 stage 12	248 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 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 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 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		HC30-	5 stage 40	00 m3/h		
Inlet and outlet water temperature[°C]		110/80				
Inlet air temperature [°C]	0	5	10	15	20	
Heating capacity [kW]	31,3	29	26,9	24,8	22,7	
Outlet air temperature [°C]	27,2	?	30,7	34,2	37,7	
Water flow[m³/h]	0,92	0,86	0,79	0,73	0,67	
Pressure drop in the heat exchanger [kP]	5	5	4	3	3	

Parameters		HC30-5 stage 4000 m3/h					
Inlet and outlet water temperature[°C]		80/70					
Inlet air temperature [°C]	0	5	10	15	20		
Heating capacity [kW]	26,9	24,7	22,6	20,5	18,4		
Outlet air temperature [°C]	23,4	26,9	30,3	33,8	37,2		
Water flow[m³/h]	2,37	2,17	1,98	1,8	1,62		
Pressure drop in the heat exchanger [kP]	32	27	23	19	16		

Parameters		HC30-	5 stage 40	00 m3/h	
Inlet and outlet water temperature[°C]	70/50				
Inlet air temperature [°C]	0	5	10	15	20
Heating capacity [kW]	18,3	16,3	14,3	12,3	10,4
Outlet air temperature [°C]	15,9	19,4	22,9	26,3	29,7
Water flow[m³/h]	0,8	0,71	0,62	0,54	0,45
Pressure drop in the heat exchanger [kP]	4	3	3	2	1

Parameters	HC30-5 stage 4000 m3/h				
Inlet and outlet water temperature[°C]	60/40				
Inlet air temperature [°C]	0	5	10	15	20
Heating capacity [kW]	14,1	12,1	10,1	8,25	6,42
Outlet air temperature [°C]	12,2	15,7	19,1	22,6	26
Water flow[m³/h]	0,61	0,53	0,44	0,36	0,28
Pressure drop in the heat exchanger [kP]	3	2	1	1	1

Parameters	HC30-5 stage 4000 m3/h				
Inlet and outlet water temperature[°C]	55/35				
Inlet air temperature [°C]	0	5	10	15	20
Heating capacity [kW]	11,9	10	8,09	6,26	4,48
Outlet air temperature [°C]	10,4	13,9	17,3	20,7	24,2
Water flow[m³/h]	0,52	0,44	0,35	0,27	0,19
Pressure drop in the heat exchanger [kP]	2	1	1	1	0

Parameters	HC30-5 stage 4000 m3/h				
Inlet and outlet water temperature[°C]	50/30				
Inlet air temperature [°C]	0	5	10	15	20
Heating capacity [kW]	9,83	7,94	6,09	4,31	2,61
Outlet air temperature [°C]	6,5	12	15,5	19	22,4
Water flow[m³/h]	0,43	0,34	0,26	0,19	0,11
Pressure drop in the heat exchanger [kP]	1	1	1	0	0

Parameters		HC30-	5 stage 40	00 m3/h		
Inlet and outlet water temperature[°C]		90/70				
Inlet air temperature [°C]	0	5	10	15	20	
Heating capacity [kW]	26,8	24,6	22,5	20,4	18,4	
Outlet air temperature [°C]	23,3	26,8	30,3	33,8	37,2	
Water flow[m³/h]	1,18	1,09	0,99	0,9	0,81	
Pressure drop in the heat exchanger [kP]	9	7	6	5	4	

Parameters	HC30-5 stage 4000 m3/h				
Inlet and outlet water temperature[°C]	80/60				
Inlet air temperature [°C]	0	5	10	15	20
Heating capacity [kW]	22,6	20,5	18,4	16,4	14,4
Outlet air temperature [°C]	19,6	23,1	26,6	30	33,4
Water flow[m³/h]	0,99	0,9	0,81	0,72	0,63
Pressure drop in the heat exchanger [kP]	6	5	4	3	3

Parameters	HC30-5 stage 4000 m3/h						
Inlet and outlet water temperature[°C]	70/40						
Inlet air temperature [°C]	0	0 5 10 15 20					
Heating capacity [kW]	14	12	10,1	8,2	6,36		
Outlet air temperature [°C]	12,1	15,6	19,1	22,5	25,9		
Water flow[m³/h]	0,41	0,35	0,29	0,24	0,19		
Pressure drop in the heat exchanger [kP]	1	1	1	0	0		

Parameters	HC30-5 stage 4000 m3/h					
Inlet and outlet water temperature[°C]		60/30				
Inlet air temperature [°C]	0	5	10	15	20	
Heating capacity [kW]	9,63	7,75	5,95	4,2	2,54	
Outlet air temperature [°C]	8,4	11,9	15,4	18,9	22,4	
Water flow[m³/h]	0,23	0,22	0,17	0,12	0,07	
Pressure drop in the heat exchanger [kP]	1	0	0	0	0	

Parameters	HC30-5 stage 4000 m3/h					
Inlet and outlet water temperature[°C]	50/40					
Inlet air temperature [°C]	0	5	10	15	20	
Heating capacity [kW]	14,5	12,5	10,5	8,54	6,67	
Outlet air temperature [°C]	12,6	16	19,4	22,8	26,2	
Water flow[m³/h]	1,26	1,08	0,91	0,74	0,58	
Pressure drop in the heat exchanger [kP]	10	8	6	4	2	

Parameters		HC30-5 stage 4000 m3/h				
Inlet and outlet water temperature[°C]	40/30					
Inlet air temperature [°C]	0	5	10	15	20	
Heating capacity [kW]	10,4	8,4	6,5	4,65	2,89	
Outlet air temperature [°C]	9	12,4	15,9	19,3	22,7	
Water flow[m³/h]	0,9	0,73	0,56	0,4	0,25	
Pressure drop in the heat exchanger [kP]	6	4	2	1	0	

Parameters	HC 30-4 stage 2522 m3/h						
Inlet and outlet water temperature[°C]		110/80					
Inlet air temperature [°C]	0	5	10	15	20		
Heating capacity [kW]	27,5	25,6	23,7	21,8	20		
Outlet air temperature [°C]	30,3	33,7	37,1	40,4	43,6		
Water flow[m³/h]	0,81	0,75	0,7	0,64	0,59		
Pressure drop in the heat exchanger [kP]	4	4	3	3	2		

Parameters		HC 30-4 stage 2522 m3/h					
Inlet and outlet water temperature[°C]		80/70					
Inlet air temperature [°C]	0	5	10	15	20		
Heating capacity [kW]	23,6	21,6	19,8	17,9	16,1		
Outlet air temperature [°C]	26	29,3	32,6	35,8	39,1		
Water flow[m³/h]	2,07	1,9	1,74	1,58	1,42		
Pressure drop in the heat exchanger [kP]	25	21	18	15	12		

Parameters	HC 30-4 stage 2522 m3/h				
Inlet and outlet water temperature[°C]	70/50				
Inlet air temperature [°C]	0	5	10	15	20
Heating capacity [kW]	16,1	14,4	12,6	10,9	9,18
Outlet air temperature [°C]	17,8	21,1	24,4	27,7	30,9
Water flow[m³/h]	0,71	0,63	0,55	0,48	0,4
Pressure drop in the heat exchanger [kP]	3	3	2	2	1

Parameters	HC 30-4 stage 2522 m3/h				
Inlet and outlet water temperature[°C]	60/40				
Inlet air temperature [°C]	0	5	10	15	20
Heating capacity [kW]	12,4	10,7	8,99	7,34	5,71
Outlet air temperature [°C]	13,7	17	20,3	23,5	26,8
Water flow[m³/h]	0,54	0,47	0,39	0,32	0,25
Pressure drop in the heat exchanger [kP]	2	2	1	1	0

Parameters	HC 30-4 stage 2522 m3/h				
Inlet and outlet water temperature[°C]	55/35				
Inlet air temperature [°C]	0	5	10	15	20
Heating capacity [kW]	10,6	8,87	7,21	5,6	4,02
Outlet air temperature [°C]	11,7	15	18,2	21,5	24,8
Water flow[m³/h]	0,46	0,39	0,31	0,24	0,18
Pressure drop in the heat exchanger [kP]	2	1	1	0	0

Parameters	HC 30-4 stage 2522 m3/h					
Inlet and outlet water temperature[°C]		50/30				
Inlet air temperature [°C]	0	5	10	15	20	
Heating capacity [kW]	8,75	8,75 7,06 5,45 3,88 2,38				
Outlet air temperature [°C]	9,6	12,9	16,2	19,5	22,8	
Water flow[m³/h]	0,38	0,31	0,24	0,17	0,11	
Pressure drop in the heat exchanger [kP]	1	1	0	0	0	

Parameters		HC 30-	4 stage 25	22 m3/h		
Inlet and outlet water temperature[°C]		90/70				
Inlet air temperature [°C]	0	5	10	15	20	
Heating capacity [kW]	23,5	21,7	19,8	18	16,2	
Outlet air temperature [°C]	26	29,3	32,6	35,9	39,2	
Water flow[m³/h]	1,04	0,95	0,87	0,79	0,71	
Pressure drop in the heat exchanger [kP]	7	6	5	4	3	

Parameters	HC 30-4 stage 2522 m3/h					
Inlet and outlet water temperature[°C]		80/60				
Inlet air temperature [°C]	0	5	10	15	20	
Heating capacity [kW]	19,9	18	16,2	14,4	12,7	
Outlet air temperature [°C]	21,9	25,2	28,5	31,8	35	
Water flow[m³/h]	0,87	0,79	0,71	0,63	0,56	
Pressure drop in the heat exchanger [kP]	5	4	3	3	2	

Parameters		HC 30-	4 stage 25	22 m3/h	
Inlet and outlet water temperature[°C]		10,7 8,97 7,32 5 17 20,3 23,5 2 0,31 0,26 0,21 0			
Inlet air temperature [°C]	0	5	10	15	20
Heating capacity [kW]	12,4	10,7	8,97	7,32	5,71
Outlet air temperature [°C]	13,7	17	20,3	23,5	26,8
Water flow[m³/h]	0,36	0,31	0,26	0,21	0,17
Pressure drop in the heat exchanger [kP]	1	1	1	0	0

Parameters		HC 30-4 stage 2522 m3/h					
Inlet and outlet water temperature[°C]		60/30					
Inlet air temperature [°C]	0	5	10	15	20		
Heating capacity [kW]	8,6	6,96	5,35	3,8	2,32		
Outlet air temperature [°C]	8,3	12,8	16,1	19,4	22,8		
Water flow[m³/h]	0,19	0,2	0,16	0,11	0,07		
Pressure drop in the heat exchanger [kP]	0	0	0	0	0		

Parameters	HC 30-4 stage 2522 m3/h					
Inlet and outlet water temperature[°C]	50/40					
Inlet air temperature [°C]	0	5	10	15	20	
Heating capacity [kW]	12,7	11	9,23	7,53	5,88	
Outlet air temperature [°C]	14,1	17,3	20,6	23,8	27	
Water flow[m³/h]	1,11	0,95	0,8	0,66	0,51	
Pressure drop in the heat exchanger [kP]	8	6	5	3	2	

Parameters	HC 30-4 stage 2522 m3/h				
Inlet and outlet water temperature[°C]	40/30				
Inlet air temperature [°C]	0	5	10	15	20
Heating capacity [kW]	9,13	7,42	5,78	4,14	2,58
Outlet air temperature [°C]	10,1	13,3	16,6	19,8	23,1
Water flow[m³/h]	0,79	0,64	0,5	0,36	0,22
Pressure drop in the heat exchanger [kP]	5	3	2	1	0

Parameters		HC 30-3 stage 1826 m3/h					
Inlet and outlet water temperature[°C]		110/80					
Inlet air temperature [°C]	0	5	10	15	20		
Heating capacity [kW]	22,9	21,3	19,7	18,1	16,6		
Outlet air temperature [°C]	34,9	38	41,1	44,2	47,2		
Water flow[m³/h]	0,68	0,63	0,58	0,54	0,49		
Pressure drop in the heat exchanger [kP]	3	3	2	2	2		

Parameters		HC 30-3 stage 1826 m3/h					
Inlet and outlet water temperature[°C]		80/70 5 10 15 2					
Inlet air temperature [°C]	0	5	10	15	20		
Heating capacity [kW]	19,5	17,9	16,3	14,8	13,3		
Outlet air temperature [°C]	29,7	32,8	35,8	38,8	41,8		
Water flow[m³/h]	1,72	1,57	1,3	1,44	1,17		
Pressure drop in the	17	15	12	10	9		

Parameters		HC 30-	3 stage 18	26 m3/h	
Inlet and outlet water temperature[°C]		70/50			
Inlet air temperature [°C]	0	5	10	15	20
Heating capacity [kW]	13,5	12	10,5	0,09	7,7
Outlet air temperature [°C]	20,6	23,6	26,6	29,6	32,6
Water flow[m³/h]	0,59	0,53	0,46	0,4	0,34
Pressure drop in the heat exchanger [kP]	2	2	2	1	1

Parameters	HC 30-3 stage 1826 m3/h				
Inlet and outlet water temperature[°C]	60/40				
Inlet air temperature [°C]	0	5	10	15	20
Heating capacity [kW]	10,4	8,99	7,57	6,18	4,85
Outlet air temperature [°C]	15,9	19	22	24,9	27,9
Water flow[m³/h]	0,46	0,39	0,33	0,27	0,21
Pressure drop in the heat exchanger [kP]	2	1	1	1	0

Parameters	HC 30-3 stage 1826 m3/h				
Inlet and outlet water temperature[°C]	55/35				
Inlet air temperature [°C]	0	5	10	15	20
Heating capacity [kW]	8,91	7,48	6,1	4,75	3,44
Outlet air temperature [°C]	13,6	16,6	19,6	22,6	25,6
Water flow[m³/h]	0,39	0,33	0,27	0,21	0,15
Pressure drop in the heat exchanger [kP]	1	1	1	0	0

Parameters	HC 30-3 stage 1826 m3/h				
Inlet and outlet water temperature[°C]		50/30			
Inlet air temperature [°C]	0	5	10	15	20
Heating capacity [kW]	7,38	5,99	4,64	3,33	2,07
Outlet air temperature [°C]	11,2	14,3	17,3	20,3	23,4
Water flow[m³/h]	0,32	0,26	0,2	0,14	0,09
Pressure drop in the heat exchanger [kP]	1	1	0	0	0

Parameters		HC 30-	3 stage 18	26 m3/h		
Inlet and outlet water temperature[°C]		90/70				
Inlet air temperature [°C]	0	5	10	15	20	
Heating capacity [kW]	19,6	18	16,4	14,9	13,5	
Outlet air temperature [°C]	29,8	32,9	36	39	42	
Water flow[m³/h]	0,86	0,79	0,72	0,66	0,59	
Pressure drop in the heat exchanger [kP]	5	4	3	3	0	

Parameters		HC 30-3 stage 1826 m3/h				
Inlet and outlet water temperature[°C]		80/60				
Inlet air temperature [°C]	0	5	10	15	20	
Heating capacity [kW]	16,5	15	13,5	12	10,6	
Outlet air temperature [°C]	25,2	28,2	31,3	34,3	37,3	
Water flow[m³/h]	0,73	0,66	0,59	0,53	0,46	
Pressure drop in the heat exchanger [kP]	4	3	2	2	2	

Parameters	HC 30-3 stage 1826 m3/h					
Inlet and outlet water temperature[°C]		70/40				
Inlet air temperature [°C]	0	5	10	15	20	
Heating capacity [kW]	10,5	9,02	7,6	6,23	4,88	
Outlet air temperature [°C]	15,9	19	22	25	28	
Water flow[m³/h]	0,3	0,26	0,22	0,18	0,14	
Pressure drop in the heat exchanger [kP]	1	1	0	0	0	

Parameters	HC 30-3 stage 1826 m3/h					
Inlet and outlet water temperature[°C]		60/30				
Inlet air temperature [°C]	0	5	10	15	20	
Heating capacity [kW]	7,33	5,94	4,61	3,3	2,05	
Outlet air temperature [°C]	11,2	14,2	17,3	20,3	23,3	
Water flow[m³/h]	0,21	0,17	0,13	0,1	0,06	
Pressure drop in the heat exchanger [kP]	0	0	0	0	0	

Parameters	HC 30-3 stage 1826 m3/h							
Inlet and outlet water temperature[°C]	50/40							
Inlet air temperature [°C]	0	0 5 10 15 20						
Heating capacity [kW]	10,6	9,13	7.69	6,29	4,93			
Outlet air temperature [°C]	16,2	19,2	22,2	25,1	28,1			
Water flow[m³/h]	0,92	0,79	0,55	0,67	0,43			
Pressure drop in the heat exchanger [kP]	6	4	3	2	1			

Parameters		HC 30-3 stage 1826 m3/h			
Inlet and outlet water temperature[°C]	40/30				
Inlet air temperature [°C]	0	5	10	15	20
Heating capacity [kW]	7,63	6,21	4,83	3,5	2,2
Outlet air temperature [°C]	11,6	14,6	17,6	20,6	23,6
Water flow[m³/h]	0,66	0,54	0,42	0,3	0,19
Pressure drop in the heat exchanger [kP]	3	2	1	1	0

Parameters		HC 30-2 stage 1478 m3/h					
Inlet and outlet water temperature[°C]		110/80					
Inlet air temperature [°C]	0	5	10	15	20		
Heating capacity [kW]	20,2	18,8	17,4	16	14,7		
Outlet air temperature [°C]	37,9	40,9	43,9	46,8	49,6		
Water flow[m³/h]	0,59	0,55	0,51	0,47	0,43		
Pressure drop in the heat exchanger [kP]	2	2	2	1	1		

Parameters		HC 30-2 stage 1478 m3/h					
Inlet and outlet water temperature[°C]		80/70					
Inlet air temperature [°C]	0	5	10	15	20		
Heating capacity [kW]	17,1	15,7	14,3	13	11,7		
Outlet air temperature [°C]	32,2	35,1	38	40,8	43,6		
Water flow[m³/h]	1,51	1,36	1,26	1,14	1,03		
Pressure drop in the heat exchanger [kP]	14	12	10	8	7		

Parameters		HC 30-2 stage 1478 m3/h			
Inlet and outlet water temperature[°C]	70/50				
Inlet air temperature [°C]	0	5	10	15	20
Heating capacity [kW]	11,9	10,6	8,06	9,31	6,83
Outlet air temperature [°C]	22,4	25,3	28,2	31	33,8
Water flow[m³/h]	0,52	0,46	0,41	0,35	0,3
Pressure drop in the heat exchanger [kP]	2	2	1	1	1

Parameters	HC 30-2 stage 1478 m3/h				
Inlet and outlet water temperature[°C]	60/40				
Inlet air temperature [°C]	0	5	10	15	20
Heating capacity [kW]	9,24	7,96	6,73	5,51	4,33
Outlet air temperature [°C]	17,4	20,3	23,1	25,9	28,8
Water flow[m³/h]	0,4	0,35	0,29	0,24	0,19
Pressure drop in the heat exchanger [kP]	1	1	1	0	0

Parameters		HC 30-2 stage 1478 m3/h				
Inlet and outlet water na zaeihaperapore(ଦେ)e[°C]	55/35					
Inlet air temperature [°C]	0	5	10	15	20	
Heating capacity [kW]	7,91	6,66	5,43	4,25	3,09	
Outlet air temperature [°C]	14,9	17,8	20,6	23,4	26,2	
Water flow[m³/h]	0,34	0,29	0,24	0,18	0,13	
Pressure drop in the heat exchanger [kP]	1	0	0	0	0	

Parameters	HC 30-2 stage 1478 m3/h				
Inlet and outlet water temperature[°C]		50/30			
Inlet air temperature [°C]	0	5	10	15	20
Heating capacity [kW]	6,57	5,35	4,15	3	1,88
Outlet air temperature [°C]	12,4	15,3	18,1	21	23,8
Water flow[m³/h]	0,29	0,23	0,18	0,13	0,08
Pressure drop in the heat exchanger [kP]	1	0	0	0	0

Parameters		HC 30-	2 stage 14	78 m3/h	
Inlet and outlet water temperature[°C]		90/70			
Inlet air temperature [°C]	0	5	10	15	20
Heating capacity [kW]	17,2	15,8	14,5	13,2	11,9
Outlet air temperature [°C]	32,4	35,3	38,3	41,1	44
Water flow[m³/h]	0,76	0,7	0,64	0,58	0,52
Pressure drop in the heat exchanger [kP]	4	3	3	2	2

Parameters		HC 30-2 stage 1478 m3/h				
Inlet and outlet water temperature[°C]		80/60				
Inlet air temperature [°C]	0	5	10	15	20	
Heating capacity [kW]	14,6	13,2	11,9	10,6	9,34	
Outlet air temperature [°C]	27,5	30,3	33,2	36,1	38,9	
Water flow[m³/h]	0,64	0,58	0,52	0,47	0,41	
Pressure drop in the heat exchanger [kP]	3	2	2	2	1	

Parameters		3 8,02 6,79 5,57 4,39			
Inlet and outlet water temperature[°C]			70/40		
Inlet air temperature [℃]	0	5	10	15	20
Heating capacity [kW]	9,3	8,02	6,79	5,57	4,39
Outlet air temperature [℃]	17,5	20,4	23,2	26,1	28,9
Water flow[m³/h]	0,27	0,23	0,2	0,16	0,13
Pressure drop in the heat exchanger [kP]	1	0	0	0	0

Parameters		HC 30-2 stage 1478 m3/h					
Inlet and outlet water temperature[°C]			60/30				
Inlet air temperature [°C]	0	5	10	15	20		
Heating capacity [kW]	6,55	5,34	4,14	2,99	1,87		
Outlet air temperature [°C]	12,3	15,2	18,1	20,9	23,8		
Water flow[m³/h]	0,19	0,15	0,12	0,09	0,05		
Pressure drop in the heat exchanger [kP]	0	0	0	0	0		

Parameters	HC 30-2 stage 1478 m3/h				
Inlet and outlet water temperature[°C]	50/40				
Inlet air temperature [°C]	0	5	10	15	20
Heating capacity [kW]	9,35	8,05	6,79	5,56	4,36
Outlet air temperature [°C]	17,6	20,4	23,3	26	28,8
Water flow[m³/h]	0,81	0,7	0,59	0,48	0,38
Pressure drop in the heat exchanger [kP]	5	4	3	2	1

Parameters	HC 30-2 stage 1478 m3/h					
Inlet and outlet water temperature[°C]		40/30				
Inlet air temperature [°C]	0	5	10	15	20	
Heating capacity [kW]	?	5,5	4,29	3,11	1,97	
Outlet air temperature [°C]	12,7	15,5	18,4	21,2	24	
Water flow[m³/h]	0,58	0,48	0,37	0,27	0,17	
Pressure drop in the heat exchanger [kP]	3	2	1	1	0	

Parameters	HC 30-1 stage 1217 m3/h					
Inlet and outlet water temperature[°C]		110/80				
Inlet air temperature [°C]	0	5	10	15	20	
Heating capacity [kW]	17,9	16,6	15,4	14,2	13	
Outlet air temperature [°C]	40,9	43,7	46,5	49,2	51,9	
Water flow[m³/h]	0,53	0,49	0,45	0,42	0,38	
Pressure drop in the heat exchanger [kP]	2	2	1	1	1	

Parameters		HC 30-1 stage 1217 m3/h					
Inlet and outlet water temperature[°C]		80/70					
Inlet air temperature [°C]	0	5	10	15	20		
Heating capacity [kW]	15,1	13,9	12,7	11,5	10,3		
Outlet air temperature [°C]	34,5	37,3	40	42,7	45,3		
Water flow[m³/h]	1,33	1,22	1,11	1,01	0,91		
Pressure drop in the heat exchanger [kP]	11	9	8	6	5		

Parameters	HC 30-1 stage 1217 m3/h					
Inlet and outlet water temperature[°C]		70/50				
Inlet air temperature [°C]	0	5	10	15	20	
Heating capacity [kW]	10,6	9,42	8,29	7,18	6,09	
Outlet air temperature [°C]	24,2	26,9	29,6	32,3	34,9	
Water flow[m³/h]	0,46	0,41	0,36	0,31	0,27	
Pressure drop in the heat exchanger [kP]	2	1	1	1	1	

Parameters	HC 30-1 stage 1217 m3/h				
Inlet and outlet water temperature[°C]	60/40				
Inlet air temperature [°C]	0	5	10	15	20
Heating capacity [kW]	8,24	7,11	6	4,93	3,88
Outlet air temperature [°C]	18,8	21,5	24,2	26,9	29,5
Water flow[m³/h]	0,36	0,31	0,26	0,22	0,17
Pressure drop in the heat exchanger [kP]	1	1	1	0	0

Parameters	HC 30-1 stage 1217 m3/h				
Inlet and outlet water temperature[°C]	55/35				
Inlet air temperature [°C]	0	5	10	15	20
Heating capacity [kW]	7,06	5,94	4,87	3,81	2,79
Outlet air temperature [°C]	16,1	18,8	21,5	24,2	26,8
Water flow[m³/h]	0,31	0,26	0,21	0,17	0,12
Pressure drop in the heat exchanger [kP]	1	1	0	0	0

Parameters	HC 30-1 stage 1217 m3/h					
Inlet and outlet water temperature[°C]		50/30				
Inlet air temperature [°C]	0	5	10	15	20	
Heating capacity [kW]	5,89	4,79	3,74	2,71	1,71	
Outlet air temperature [°C]	13,5	16,2	18,9	21,5	24,2	
Water flow[m³/h]	0,26	0,21	0,16	0,12	0,07	
Pressure drop in the heat exchanger [kP]	1	0	0	0	0	

Parameters		HC 30-1 stage 1217 m3/h				
Inlet and outlet water temperature[°C]		90/70				
Inlet air temperature [°C]	0	5	10	15	20	
Heating capacity [kW]	15,3	14	12,8	11,7	10,5	
Outlet air temperature [°C]	34,9	37,7	40,4	43,1	45,8	
Water flow[m³/h]	0,67	0,62	0,57	0,51	0,46	
Pressure drop in the heat exchanger [kP]	3	3	2	2	1	

Parameters		HC 30-1 stage 1217 m3/h				
Inlet and outlet water temperature[°C]		80/60				
Inlet air temperature [°C]	0	5	10	15	20	
Heating capacity [kW]	12,9	11,7	10,6	9,42	8,3	
Outlet air temperature [°C]	29,6	32,3	35	37,7	40,4	
Water flow[m³/h]	0,57	0,52	0,46	0,41	0,36	
Pressure drop in the heat exchanger [kP]	2	2	2	1	1	

Parameters	HC 30-1 stage 1217 m3/h					
Inlet and outlet water temperature[°C]		70/40				
Inlet air temperature [°C]	0	5	10	15	20	
Heating capacity [kW]	8,32	7,19	6,09	5,01	3,95	
Outlet air temperature [°C]	19	21,7	24,4	27,1	29,7	
Water flow[m³/h]	0,24	0,21	0,18	0,15	0,12	
Pressure drop in the heat exchanger [kP]	0	0	0	0	0	

Parameters	HC 30-1 stage 1217 m3/h					
Inlet and outlet water temperature[°C]		60/30				
Inlet air temperature [°C]	0	5	10	15	20	
Heating capacity [kW]	5,9	4,81	3,76	2,72	1,72	
Outlet air temperature [°C]	13,5	16,2	18,9	21,6	24,2	
Water flow[m³/h]	0,17	0,14	0,11	0,08	0,05	
Pressure drop in the heat exchanger [kP]	0	0	0	0	0	

Parameters	HC 30-1 stage 1217 m3/h					
Inlet and outlet water temperature[°C]		50/40				
Inlet air temperature [°C]	0	5	10	15	20	
Heating capacity [kW]	8,28	7,14	6,03	4,94	3,89	
Outlet air temperature [°C]	18,9	21,6	24,3	26,9	29,5	
Water flow[m³/h]	0,72	0,62	0,52	0,43	0,34	
Pressure drop in the heat exchanger [kP]	4	3	2	1	1	

Parameters		HC 30-1 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	4,9	3,83	2,78	1,77
Outlet air temperature [°C]	13,7	16,4	19,1	21,7	24,4
Water flow[m³/h]	0,52	0,42	0,33	0,24	0,15
Pressure drop in the heat exchanger [kP]	2	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 [kP]	3	4	3	3	2	

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 [kP]	10	8	8	7	6		

Parameters		HC35	-5 stage -4	1000 m3/h	1
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 [kP]	4	3	2	3	2

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 [kP]	2	3	2	2	3

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 [kP]	3	2	4	2	1

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 [kP]	2	4	2	1	4

Parameters		HC35-	5 stage -4	000 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 [kP]	5	4	4	3	4

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 [kP]	4	3	4	3	2	

Parameters		15,8 13,3 10,9 8,6 18,5 21,6 24,7 27 0,46 0,39 0,32 0,2			
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 [kP]	2	4	3	2	1

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 [kP]	3	2	4	4	2		

Parameters	HC35-5 stage-4000 m3/h				
Inlet and outlet water temperature[°C]	50/40				
Inlet air temperature [℃]	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 [kP]	4	5	3	3	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 [kP]	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 [kP]	3	2	2	3	3	

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 [kP]	7	6	5	4	5	

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 [kP]	2	3	3	2	4

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 [kP]	3	2	4	3	2

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 [kP]	2	4	3	2	3

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 [kP]	4	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 [kP]	3	4	3	3	2		

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 [kP]	3	3	2	3	3	

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 [kP]	3	2	2	1	3	

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 [kP]	2	4	5	3	1	

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 [kP]	4	4	3	4	2	

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 [kP]	3	4	2	3	1

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

Parameters		HC35-3 stage 1826 m3/h					
Inlet and outlet water temperature[°C]		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	5	4	5	4	4		

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

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

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

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

Parameters		HC35-	3 stage 18	26 m3/h		
Inlet and outlet water temperature[°C]		90/70				
Inlet air temperature [°C]	0	5	10	15	20	
Heating capacity [kW]	21,2	19,5	16,2	17,9	14,7	
Outlet air temperature [°C]	39,2	41,7	46,6	44,2	49,1	
Water flow[m³/h]	0,93	0,86	0,72	0,79	0,65	
Pressure drop in the heat exchanger [kP]	3	3	3	2	3	

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

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Parameters		HC35-3	3 stage 182	26 m3/h	
Inlet and outlet water temperature[°C]			70/40		
Inlet air temperature [°C]	0	5	10	15	20
Heating capacity [kW]	11,9	10,3	8,75	7,25	5,77
Outlet air temperature [°C]	21,9	24,3	26,8	29,1	31,4
Water flow[m³/h]	0,35	0,3	0,25	0,21	0,17
Pressure drop in the heat exchanger [kP]	2	2	1	3	4

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

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

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

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

Parameters		HC35-2 stage 1478 m3/h					
Inlet and outlet water temperature[°C]		80/70 5 10 15 2					
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]		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	2 stage 14	78 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]	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]		50/30			
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]		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]		80/60				
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]		70/40			
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]		60/30			
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]	50/40						
Inlet air temperature [°C]	0	0 5 10 15					
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]	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 [kP]	2	2	2	3	3	

Parameters		HC35-	1 stage 12	17 m3/n	
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 [kP]	3	3	2	2	2

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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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	2	4	3	1	5

Parameters		HC45-5 stage 4000 m3/h					
Inlet and outlet water temperature[°C]		110/80					
Inlet air temperature [°C]	0	5	10	15	20		
Heating capacity [kW]	49,7	46,4	43,1	39,9	36,8		
Outlet air temperature [°C]	55,3	57,5	59,7	61,9	64		
Water flow[m³/h]	1,46	1,37	1,27	1,18	1,09		
Pressure drop in the heat exchanger [kP]	17	15	13	12	10		

Parameters		HC45-5 stage 4000 m3/h					
Inlet and outlet water temperature[°C]		80/70					
Inlet air temperature [°C]	0	5	10	15	20		
Heating capacity [kW]	52,	48,4	44,8	41,2	37,7		
Outlet air temperature [°C]	38,8	41,2	43,5	45,8	48,1		
Water flow[m³/h]	4,58	4,26	3,95	3,63	3,31		
Pressure drop in the heat exchanger [kP]	106	93	82	71	60		

Parameters		HC45-	5 stage 40	00 m3/h	
Inlet and outlet water temperature[°C]			70/50		
Inlet air temperature [°C]	0	5	10	15	20
Heating capacity [kW]	30,3	27,2	24,2	21,2	18,3
Outlet air temperature [°C]	33,7	35,8	37,9	39,9	41,9
Water flow[m³/h]	1,33	1,9	1,06	0,93	0,8
Pressure drop in the heat exchanger [kP]	14	11	10	8	6

Parameters	HC45-5 stage 4000 m3/h				
Inlet and outlet water temperature[°C]	60/40				
Inlet air temperature [°C]	0	5	10	15	20
Heating capacity [kW]	24,4	21,4	18,4	15,5	12,6
Outlet air temperature [°C]	27,1	29,2	31,2	33,2	35,1
Water flow[m³/h]	1,06	0,93	0,8	0,68	0,55
Pressure drop in the heat exchanger [kP]	11	8	6	6	4

Parameters		HC45-5 stage 4000 m3/h			
Inlet and outlet water temperature[°C]	55/35				
Inlet air temperature [°C]	0	5	10	15	20
Heating capacity [kW]	21,4	18,4	15,5	12,6	9,75
Outlet air temperature [°C]	23,8	25,8	27,9	29,8	31,6
Water flow[m³/h]	0,93	0,8	0,67	0,55	0,42
Pressure drop in the heat exchanger [kP]	9	6	6	4	5

Parameters	HC45-5 stage 4000 m3/h				
Inlet and outlet water temperature[°C]			50/30		
Inlet air temperature [°C]	0	5	10	15	20
Heating capacity [kW]	18,4	15,4	12,5	9,56	6,78
Outlet air temperature [°C]	20,4	22,5	24,4	26,3	28,1
Water flow[m³/h]	0,8	0,67	0,54	0,42	0,29
Pressure drop in the heat exchanger [kP]	7	6	4	5	2

Parameters		HC45-5 stage 4000 m3/h				
Inlet and outlet water temperature[°C]		90/70				
Inlet air temperature [°C]	0	5	10	15	20	
Heating capacity [kW]	43,3	38,8	35,6	32,5	29,5	
Outlet air temperature [°C]	46,7	48,9	51,1	53,2	55,2	
Water flow[m³/h]	1,85	1,71	1,57	1,43	1,3	
Pressure drop in the heat exchanger [kP]	27	24	20	17	14	

Parameters		HC45-5 stage 4000 m3/h				
Inlet and outlet water temperature[°C]		80/60				
Inlet air temperature [°C]	0	5	10	15	20	
Heating capacity [kW]	36,2	33	29,9	26,9	24	
Outlet air temperature [°C]	40,3	42,4	44,5	46,6	48,6	
Water flow[m³/h]	1,59	1,45	1,31	1,18	1,05	
Pressure drop in the heat exchanger [kP]	17	16	13	11	10	

Parameters		HC45-5 stage 4000 m3/h					
Inlet and outlet water temperature[°C]		70/40					
Inlet air temperature [°C]	0	5	10	15	20		
Heating capacity [kW]	25,7	22,6	19,6	16,7	13,7		
Outlet air temperature [°C]	28,6	30,7	32,6	34,6	36,4		
Water flow[m³/h]	0,75	0,66	0,57	0,49	0,4		
Pressure drop in the heat exchanger [kP]	7	6	4	3	4		

Parameters	HC45-5 stage 4000 m3/h				
Inlet and outlet water temperature[°C]	60/30				
Inlet air temperature [°C]	0	5	10	15	20
Heating capacity [kW]	19,5	16,5	13,5	10,5	7,52
Outlet air temperature [°C]	21,7	23,7	25,6	27,4	29
Water flow[m³/h]	0,57	0,48	0,39	0,31	0,22
Pressure drop in the heat exchanger [kP]	5	3	4	3	4

Parameters	HC45-5 stage 4000 m3/h				
Inlet and outlet water temperature[°C]	50/40				
Inlet air temperature [℃]	0	20			
Heating capacity [kW]	23,1	20,1	17,2	14,3	11,5
Outlet air temperature [°C]	25,7	27,8	29,8	31,8	33,8
Water flow[m³/h]	2,01	1,75	1,5	1,25	1
Pressure drop in the heat exchanger [kP]	27	21	18	13	10

Parameters		HC45-	5 stage 40	00 m3/h	
Inlet and outlet water temperature[°C]	40/30				
Inlet air temperature [°C]	0	5	10	15	20
Heating capacity [kW]	17,4	14,4	11,6	8,78	6,02
Outlet air temperature [°C]	19,3	21,3	23,4	25,3	27,2
Water flow[m³/h]	1,5	1,25	1	0,76	0,52
Pressure drop in the heat exchanger [kP]	18	13	10	8	4

Parameters		HC45-4 stage 2585 m3/h				
Inlet and outlet water temperature[°C]	110/80					
Inlet air temperature [°C]	0	5	10	15	20	
Heating capacity [kW]	45,7	42,6	39,6	36,7	33,9	
Outlet air temperature [°C]	57,8	59,9	62	64	66	
Water flow[m³/h]	1,35	1,26	1,17	1,08	1	
Pressure drop in the heat exchanger [kP]	13	11	10	10	9	

Parameters		HC45-4 stage 2585 m3/h					
Inlet and outlet water temperature[°C]		80/70					
Inlet air temperature [°C]	0	5	10	15	20		
Heating capacity [kW]	38,7	36	33,4	30,7	28		
Outlet air temperature [°C]	45,8	47,6	49,5	51,4	53,2		
Water flow[m³/h]	3,4	3,17	2,94	2,7	2,47		
Pressure drop in the heat exchanger [kP]	63	55	48	41	36		

Parameters		HC45-4 stage 2585 m3/h			
Inlet and outlet water temperature[°C]		70/50			
Inlet air temperature [°C]	0	5	10	15	20
Heating capacity [kW]	27,9	25	22,3	19,6	16,9
Outlet air temperature [°C]	35,3	37,2	39,2	41,1	43
Water flow[m³/h]	1,22	1,1	0,98	0,86	0,74
Pressure drop in the heat exchanger [kP]	12	11	9	7	7

Parameters		HC45-4 stage 2585 m3/h			
Inlet and outlet water temperature[°C]	60/40				
Inlet air temperature [°C]	0	5	10	15	20
Heating capacity [kW]	22,5	19,7	17	14,3	11,7
Outlet air temperature [°C]	28,4	30,4	32,3	34,1	35,9
Water flow[m³/h]	0,98	0,86	0,74	0,62	0,51
Pressure drop in the heat exchanger [kP]	9	7	7	5	4

Parameters		HC45-4 stage 2585 m3/h			
Inlet and outlet water temperature[°C]	55/35				
Inlet air temperature [°C]	0	5	10	15	20
Heating capacity [kW]	19,7	17	14,3	11,7	9,02
Outlet air temperature [°C]	25	26,9	28,8	30,5	32,2
Water flow[m³/h]	0,86	0,74	0,62	0,51	0,39
Pressure drop in the heat exchanger [kP]	7	7	5	4	4

Parameters		HC45-4 stage 2585 m3/h			
Inlet and outlet water temperature[°C]		50/30 5 10 15 14,3 11,6 8,96 23,4 25,2 27			
Inlet air temperature [°C]	0	5	10	15	20
Heating capacity [kW]	17	14,3	11,6	8,96	6,31
Outlet air temperature [°C]	21,5	23,4	25,2	27	28,6
Water flow[m³/h]	0,74	0,62	0,5	0,39	0,27
Pressure drop in the heat exchanger [kP]	7	5	4	4	2

Parameters		HC45-	4 stage 25	85 m3/h	
Inlet and outlet water temperature[°C]		90/70			
Inlet air temperature [°C]	0	5	10	15	20
Heating capacity [kW]	38,6	35,6	32,7	29,9	27,1
Outlet air temperature [°C]	48,8	50,9	52,9	54,9	56,8
Water flow[m³/h]	1,7	1,57	1,44	1,32	1,2
Pressure drop in the heat exchanger [kP]	18	16	15	13	11

Parameters		HC45-4 stage 2585 m3/h				
Inlet and outlet water temperature[°C]		80/60				
Inlet air temperature [°C]	0	5	10	15	20	
Heating capacity [kW]	33,3	30,4	27,5	24,8	22,1	
Outlet air temperature [°C]	42,1	44,1	46	48	49,9	
Water flow[m³/h]	1,46	1,33	1,21	1,09	0,97	
Pressure drop in the heat exchanger [kP]	16	13	11	11	9	

Parameters		20,9 18,1 15,4 12 31,9 33,8 35,5 3 0,61 0,53 0,45 0,			
Inlet and outlet water temperature[°C]			70/40		
Inlet air temperature [°C]	0	5	10	15	20
Heating capacity [kW]	23,7	20,9	18,1	15,4	12,7
Outlet air temperature [°C]	30	31,9	33,8	35,5	37,3
Water flow[m³/h]	0,69	0,61	0,53	0,45	0,37
Pressure drop in the heat exchanger [kP]	6	5	4	5	4

Parameters		HC45-4 stage 2585 m3/h					
Inlet and outlet water temperature[°C]		60/30					
Inlet air temperature [°C]	0	5	10	15	20		
Heating capacity [kW]	18	15,3	12,5	9,78	7,03		
Outlet air temperature [°C]	22,8	24,7	26,4	28,1	29,5		
Water flow[m³/h]	0,52	0,44	0,36	0,28	0,2		
Pressure drop in the heat exchanger [kP]	4	5	4	2	4		

Parameters	HC45-4 stage 2585 m3/h				
Inlet and outlet water temperature[°C]	50/40				
Inlet air temperature [°C]	0	5	10	15	20
Heating capacity [kW]	21,2	18,5	15,8	13,2	10,6
Outlet air temperature [°C]	26,9	28,8	30,7	32,6	34,4
Water flow[m³/h]	1,85	1,61	1,38	1,15	0,93
Pressure drop in the heat exchanger [kP]	23	18	15	11	8

Parameters	HC45-4 stage 2585 m3/h				
Inlet and outlet water temperature[°C]	40/30				
Inlet air temperature [°C]	0	5	10	15	20
Heating capacity [kW]	16	13,3	10,7	8,1	5,58
Outlet air temperature [°C]	20,2	22,1	24	25,8	27,6
Water flow[m³/h]	1,38	1,15	0,92	0,7	0,48
Pressure drop in the heat exchanger [kP]	16	11	9	7	3

Parameters		HC45-3 stage 1826 m3/h					
Inlet and outlet water temperature[°C]		110/80					
Inlet air temperature [°C]	0	5	10	15	20		
Heating capacity [kW]	40	37	35	32,4	29,9		
Outlet air temperature [°C]	61,4	63,3	65,2	67	68,8		
Water flow[m³/h]	1,19	1,11	1,03	0,95	0,88		
Pressure drop in the heat exchanger [kP]	10	10	9	8	7		

Parameters		HC45-3 stage 1826 m3/h					
Inlet and outlet water temperature[°C]		80/70					
Inlet air temperature [°C]	0	5	10	15	20		
Heating capacity [kW]	30,9	28,8	26,7	24,6	22,5		
Outlet air temperature [°C]	50,5	52	53,6	55,2	56,7		
Water flow[m³/h]	2,72	2,53	2,35	2,16	1,98		
Pressure drop in the heat exchanger [kP]	42	38	33	29	24		

Parameters	HC45-3 stage 1826 m3/h				
Inlet and outlet water temperature[°C]	70/50				
Inlet air temperature [°C]	0	5	10	15	20
Heating capacity [kW]	24,6	22,1	19,7	17,3	15
Outlet air temperature [°C]	37,5 39,3 41,1 42,8 44,				
Water flow[m³/h]	1,08	0,97	0,86	0,76	0,66
Pressure drop in the heat exchanger [kP]	11	9	7	7	6

Parameters		HC45-	3 stage 18	26 m3/h	
Inlet and outlet water temperature[°C]	60/40				
Inlet air temperature [°C]	0	5	10	15	20
Heating capacity [kW]	19,9	17,4	15,1	12,7	10,4
Outlet air temperature [°C]	30,3	32,1	33,8	35,4	37
Water flow[m³/h]	0,87	0,76	0,66	0,55	0,45
Pressure drop in the heat exchanger [kP]	7	8	6	4	5

Parameters		HC45-3 stage 1826 m3/h			
Inlet and outlet water temperature[°C]	55/35				
Inlet air temperature [°C]	0	5	10	15	20
Heating capacity [kW]	17,5	15,1	12,7	10,4	8,06
Outlet air temperature [°C]	26,6	28,4	30	31,7	33,2
Water flow[m³/h]	0,76	0,66	0,55	0,45	0,35
Pressure drop in the heat exchanger [kP]	8	6	4	5	3

Parameters	HC45-3 stage 1826 m3/h				
Inlet and outlet water temperature[°C]		50/30			
Inlet air temperature [°C]	0	5	10	15	20
Heating capacity [kW]	15,1	12,7	10,3	7,99	5,66
Outlet air temperature [°C]	23	24,7	26,3	27,8	29,3
Water flow[m³/h]	0,65	0,55	0,45	0,35	0,25
Pressure drop in the heat exchanger [kP]	6	4	5	3	5

Parameters		HC45-	3 stage 18	26 m3/h	
Inlet and outlet water temperature[°C]		90/70			
Inlet air temperature [°C]	0	5	10	15	20
Heating capacity [kW]	34	31,4	28,8	26,3	23,9
Outlet air temperature [°C]	51,8	53,7	55,5	57,3	59,1
Water flow[m³/h]	1,5	1,38	1,27	1,16	1,05
Pressure drop in the heat exchanger [kP]	16	14	12	10	10

Parameters		HC45-3 stage 1826 m3/h			
Inlet and outlet water temperature[°C]	80/60				
Inlet air temperature [°C]	0	5	10	15	20
Heating capacity [kW]	29,3	26,8	24,3	21,8	19,5
Outlet air temperature [°C]	44,7	46,5	48,3	50,1	51,8
Water flow[m³/h]	1,29	1,18	1,07	0,96	0,86
Pressure drop in the heat exchanger [kP]	13	11	10	8	7

Parameters		HC45-3 stage 1826 m3/h			
Inlet and outlet water temperature[°C]	70/40				
Inlet air temperature [°C]	0	5	10	15	20
Heating capacity [kW]	21,1	18,6	16,1	13,7	11,3
Outlet air temperature [°C]	32,1	33,8	35,5	37,1	38,5
Water flow[m³/h]	0,61	0,54	0,47	0,4	0,33
Pressure drop in the heat exchanger [kP]	5	4	5	4	3

Parameters		HC45-3 stage 1826 m3/h				
Inlet and outlet water temperature[°C]		60/30				
Inlet air temperature [°C]	0	5	10	15	20	
Heating capacity [kW]	16,1	13,6	11,2	8,79	6,33	
Outlet air temperature [°C]	24,5	26,1	27,7	29,1	30,3	
Water flow[m³/h]	0,47	0,39	0,33	0,25	0,18	
Pressure drop in the heat exchanger [kP]	5	4	3	2	5	

Parameters	HC45-3 stage 1826 m3/h				
Inlet and outlet water temperature[°C]		50/40			
Inlet air temperature [°C]	0	5	10	15	20
Heating capacity [kW]	18,7	16,3	14	11,7	9,4
Outlet air temperature [°C]	28,5	30,3	32	33,7	35,4
Water flow[m³/h]	1,63	1,42	1,21	1,01	0,82
Pressure drop in the heat exchanger [kP]	19	16	12	10	7

Parameters	HC45-3 stage 1826 m3/h				
Inlet and outlet water temperature[°C]	40/30				
Inlet air temperature [°C]	0	5	10	15	20
Heating capacity [kW]	14,1	11,7	9,44	7,19	4,97
Outlet air temperature [°C]	21,5	23,2	24,9	26,6	28,1
Water flow[m³/h]	1,22	1,02	0,82	0,62	0,43
Pressure drop in the heat exchanger [kP]	13	10	7	5	5

Parameters	HC45-2 stage 1478 m3/h				
Inlet and outlet water temperature[°C]	110/80				
Inlet air temperature [°C]	0	5	10	15	20
Heating capacity [kW]	34,8	32,4	30,2	27,9	25,8
Outlet air temperature [°C]	65,4	67,1	68,8	70,5	72,1
Water flow[m³/h]	1,02	0,96	0,89	0,82	0,76
Pressure drop in the heat exchanger [kP]	11	10	8	7	8

Parameters	HC45-2 stage 1478 m3/h					
Inlet and outlet water temperature[°C]		90/70				
Inlet air temperature [°C]	0	5	10	15	20	
Heating capacity [kW]	29,3	27	24,8	22,7	20,6	
Outlet air temperature [°C]	55,1	56,8	58,4	60,1	61,6	
Water flow[m³/h]	1,29	1,19	1,09	1	0,91	
Pressure drop in the heat exchanger [kP]	12	11	11	9	7	
meat exemaniger [m]						

Parameters	HC45-2 stage 1478 m3/h					
Inlet and outlet water temperature[°C]		80/70				
Inlet air temperature [°C]	0	5	10	15	20	
Heating capacity [kW]	27,9	25,6	23,5	21,3	19,3	
Outlet air temperature [°C]	52,5	54,1	55,8	57	58,9	
Water flow[m³/h]	2,45	2,26	2,06	1,88	1,7	
Pressure drop in the heat exchanger [kP]	36	31	26	22	18	

Parameters	HC45-2 stage 1478 m3/h				
Inlet and outlet water temperature[°C]	80/60				
Inlet air temperature [°C]	0	5	10	15	20
Heating capacity [kW]	25,3	23,1	20,9	18,9	16,8
Outlet air temperature [°C]	47,6	49,3	50,9	52,4	53,9
Water flow[m³/h]	1,11	1,01	0,92	0,83	0,74
Pressure drop in the heat exchanger [kP]	11	9	8	6	7

Parameters	HC45-2 stage 1478 m3/h				
Inlet and outlet water temperature[°C]	70/50				
Inlet air temperature [°C]	0	5	10	15	20
Heating capacity [kW]	21,3	19,1	17	15	13
Outlet air temperature [°C]	40	41,7	43,2	44,7	46,2
Water flow[m³/h]	0,93	0,84	0,74	0,66	0,57
Pressure drop in the heat exchanger [kP]	8	7	7	6	4

Parameters	HC45-2 stage 1478 m3/h					
Inlet and outlet water temperature[°C]	70/40					
Inlet air temperature [°C]	0	5	10	15	20	
Heating capacity [kW]	18,3	16,2	14,1	12	9,94	
Outlet air temperature [°C]	64,5	36	37,5	38,8	40,1	
Water flow[m³/h]	0,53	0,47	0,41	0,35	0,29	
Pressure drop in the heat exchanger [kP]	4	5	4	3	2	

Parameters	HC45-2 stage 1478 m3/h				
Inlet and outlet water temperature[°C]	60/40				
Inlet air temperature [°C]	0	5	10	15	20
Heating capacity [kW]	17,2	0,66	0,57	0,48	0,39
Outlet air temperature [°C]	32,4	34	35,5	36,9	38,3
Water flow[m³/h]	0,75	0,66	0,57	0,48	0,39
Pressure drop in the heat exchanger [kP]	7	6	5	3	4

Parameters	HC45-2 stage 1478 m3/h				
Inlet and outlet water temperature[°C]	60/30				
Inlet air temperature [°C]	0	5	10	15	20
Heating capacity [kW]	14	11,9	9,82	7,72	5,59
Outlet air temperature [°C]	26,4	27,9	29,2	30,3	31,3
Water flow[m³/h]	0,41	0,35	0,28	0,22	0,16
Pressure drop in the heat exchanger [kP]	4	3	2	4	4

Parameters	HC45-2 stage 1478 m3/h				
Inlet and outlet water temperature[°C]	55/35				
Inlet air temperature [°C]	0	5	10	15	20
Heating capacity [kW]	15,2	13,1	11	9,03	7,05
Outlet air temperature [°C]	28,5	30,1	31,6	32,9	34,2
Water flow[m³/h]	0,66	0,57	0,48	0,39	0,31
Pressure drop in the heat exchanger [kP]	6	5	3	4	3

Parameters	HC45-2 stage 1478 m3/h				
Inlet and outlet water temperature[°C]	50/40				
Inlet air temperature [°C]	0	5	10	15	20
Heating capacity [kW]	16,1	14,1	12	10,1	8,13
Outlet air temperature [°C]	30,4	31,9	33,5	35	36,4
Water flow[m³/h]	1,4	1,22	1,05	0,88	0,71
Pressure drop in the heat exchanger [kP]	16	12	11	8	7

Parameters	HC45-2 stage 1478 m3/h				
Inlet and outlet water temperature[°C]	50/30				
Inlet air temperature [°C]	0	5	10	15	20
Heating capacity [kW]	13,1	11	9	7	4,9
Outlet air temperature [°C]	24,7	26,2	27,6	28,9	30,1
Water flow[m³/h]	0,57	0,48	0,39	0,3	0,22
Pressure drop in the heat exchanger [kP]	5	3	4	3	4

Parameters	HC45-2 stage 1478 m3/h					
Inlet and outlet water temperature[°C]	40/30					
Inlet air temperature [°C]	0	5	10	15	20	
Heating capacity [kW]	11,2	10,2	8,18	6,25	4,33	
Outlet air temperature [°C]	22,9	24,5	26	27,4	28,7	
Water flow[m³/h]	1,06	0,88	0,71	0,54	0,38	
Pressure drop in the heat exchanger [kP]	11	8	7	4	4	

Parameters		HC45-	1 stage 12	17 m3/h		
Inlet and outlet water temperature[°C]		110/80				
Inlet air temperature [°C]	0	0 5 10 15 20				
Heating capacity [kW]	30,2	28,2	26,2	24,3	22,4	
Outlet air temperature [°C]	69	70,6	72,1	73,6	75	
Water flow[m³/h]	0,89	0,83	0,77	0,72	0,66	
Pressure drop in the heat exchanger [kP]	7	6	5	6	5	

Parameters		HC45-1 stage 1217 m3/h					
Inlet and outlet water temperature[°C]		80/70					
Inlet air temperature [°C]	0	5	10	15	20		
Heating capacity [kW]	24,1	22,2	20,3	18,5	16,7		
Outlet air temperature [°C]	55,1	56,6	58,1	59,5	60,9		
Water flow[m³/h]	2,12	1,95	1,79	1,62	1,47		
Pressure drop in the heat exchanger [kP]	28	24	20	17	16		

Parameters		HC45-	1 stage 12	17 m3/h	
Inlet and outlet water temperature[°C]	70/50				
Inlet air temperature [°C]	0	5	10	15	20
Heating capacity [kW]	18,5	16,7	14,8	13,1	11,3
Outlet air temperature [°C]	42,3	43,8	45,1	46,5	47,8
Water flow[m³/h]	0,81	0,73	0,65	0,57	0,5
Pressure drop in the heat exchanger [kP]	6	7	6	4	3

Parameters	HC45-1 stage 1217 m3/h				
Inlet and outlet water temperature[°C]	60/40				
Inlet air temperature [°C]	0	5	10	15	20
Heating capacity [kW]	15	13,2	11,4	9,67	7,94
Outlet air temperature [°C]	34,3	35,7	37	38,3	39,5
Water flow[m³/h]	0,65	0,58	0,5	0,42	0,35
Pressure drop in the heat exchanger [kP]	6	5	4	5	3

Parameters	HC45-1 stage 1217 m3/h				
Inlet and outlet water temperature[°C]	55/35				
Inlet air temperature [°C]	0	5	10	15	20
Heating capacity [kW]	13,3	11,4	9,68	7,93	6,2
Outlet air temperature [°C]	30,3	31,6	32,9	34,1	35,2
Water flow[m³/h]	0,58	0,5	0,42	0,35	0,27
Pressure drop in the heat exchanger [kP]	5	4	5	3	2

Parameters	HC45-1 stage 1217 m3/h					
Inlet and outlet water temperature[°C]		50/30				
Inlet air temperature [°C]	0	0 5 10 15				
Heating capacity [kW]	11,5	9,68	7,92	6,16	4,41	
Outlet air temperature [°C]	26,2	27,5	28,8	29,9	30,8	
Water flow[m³/h]	0,5	0,42	0,34	0,27	0,19	
Pressure drop in the heat exchanger [kP]	4	5	3	2	3	

Parameters		HC45-1 stage 1217 m3/h					
Inlet and outlet water temperature[°C]		90/70					
Inlet air temperature [°C]	0	5	10	15	20		
Heating capacity [kW]	25,4	23,5	21,6	19,7	17,9		
Outlet air temperature [°C]	58,1	59,6	61,1	62,5	63,9		
Water flow[m³/h]	1,12	1,03	0,95	0,87	0,79		
Pressure drop in the heat exchanger [kP]	11	9	8	7	6		

Parameters	HC45-1 stage 1217 m3/h				
Inlet and outlet water temperature[°C]	80/60				
Inlet air temperature [°C]	0	5	10	15	20
Heating capacity [kW]	22	20,1	18,2	16,4	14,6
Outlet air temperature [°C]	50,3	51,7	53,2	54,5	55,9
Water flow[m³/h]	0,97	0,88	0,8	0,72	0,64
Pressure drop in the heat exchanger [kP]	9	7	6	7	5

Parameters	HC45-1 stage 1217 m3/h				
Inlet and outlet water temperature[°C]	70/40				
Inlet air temperature [°C]	0	5	10	15	20
Heating capacity [kW]	16	14,2	12,3	10,5	8,76
Outlet air temperature [°C]	36,7	38	39,2	40,4	41,5
Water flow[m³/h]	0,47	0,41	0,36	0,31	0,26
Pressure drop in the heat exchanger [kP]	5	4	3	2	2

Parameters	HC45-1 stage 1217 m3/h					
Inlet and outlet water temperature[°C]		60/30				
Inlet air temperature [°C]	0	5	10	15	20	
Heating capacity [kW]	12,4	10,5	8,67	6,85	4,99	
Outlet air temperature [°C]	28,2	29,4	30,6	31,5	32,2	
Water flow[m³/h]	0,36	0,3	0,25	0,2	0,14	
Pressure drop in the heat exchanger [kP]	3	3	2	3	3	

Parameters	HC45-1 stage 1217 m3/h					
Inlet and outlet water temperature[°C]	50/40					
Inlet air temperature [°C]	0	5	10	15	20	
Heating capacity [kW]	14	12,2	10,5	8,76	7,09	
Outlet air temperature [°C]	32	33,4	34,8	36,1	37,4	
Water flow[m³/h]	1,22	1,06	0,91	0,76	0,62	
Pressure drop in the heat exchanger [kP]	12	11	8	6	5	

Parameters		HC45-1 stage 1217 m3/h				
Inlet and outlet water temperature[°C]	40/30					
Inlet air temperature [°C]	0	5	10	15	20	
Heating capacity [kW]	10,6	8,85	7,14	5,47	3,81	
Outlet air temperature [°C]	24,2	25,6	26,9	28,2	29,3	
Water flow[m³/h]	0,92	0,77	0,62	0,47	0,33	
Pressure drop in the heat exchanger [kP]	9	6	5	3	3	

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 [kP]	9	8	7	6	5	

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	48	41	35	29	24			

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 [kP]	8	6	5	4	3

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 [kP]	5	4	3	2	2

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 [kP]	4	3	2	2	1

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 [kP]	3	2	2	1	0

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 [kP]	14	12	10	9	7		

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 [kP]	11	9	8	6	5	

Parameters		HC50	-5 stage-4	600 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 [kP]	3	2	2	1	1

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 [kP]	2	1	1	0	0		

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 [kP]	18	14	10	7	5

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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	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 [kP]	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]		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]	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]	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]	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]		50/30			
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 21	.00 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]		80/60			
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 21	.00 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]		60/30					
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]	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]		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 [kP]	2	2	2	1	1	

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 [kP]	12	10	9	7	6	

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 [kP]	2	2	1	1	1

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

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 [kP]	1	1	0	0	0		

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 [kP]	4	3	3	2	2		

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 [kP]	3	2	2	2	1		

Parameters		HC50-1 stage 1400 m3/h 70/40 0 5 10 15 20 13,8 12,2 10,6 9 7,46 28,6 30,7 32,8 34,7 36,6				
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 [kP]	1	1	0	0	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 [kP]	0	0	0	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 [kP]	5	3	3	2	1

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 [kP]	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 [kP]	7	6	5	4	4		

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

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

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

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

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

Parameters		HC70-	4 stage 27	74 m3/h		
Inlet and outlet water temperature[°C]		90/70				
Inlet air temperature [°C]	0	5	10	15	20	
Heating capacity [kW]	50,2	46,3	42,5	38,9	35,3	
Outlet air temperature [°C]	54	55,7	57,5	59,1	60,7	
Water flow[m³/h]	2,21	2,04	1,87	1,71	1,55	
Pressure drop in the heat exchanger [kP]	11	9	8	6	5	

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

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

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

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

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

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

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 [kP]	23	19	16	14	11		

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 [kP]	4	3	3	2	2

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 [kP]	3	2	2	1	1

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 [kP]	2	2	1	1	0

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 [kP]	2	1	1	0	0

Parameters		HC70-	3 stage 20	09 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 [kP]	7	6	5	4	4	

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 [kP]	5	4	4	3	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 [kP]	1	1	1	1	0

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 [kP]	1	1	0	0	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 [kP]	9	7	5	4	2

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 [kP]	5	4	2	2	1	

Parameters		HC70-2 bieg 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 bieg 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 bieg 162	6 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 bieg 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]	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]		50/30				
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 bieg 162	26 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 bieg 162	6 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		19,1 16,7 14,3 1 40,7 41,8 42,7 4 0,56 0,49 0,42 0			
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	! bieg 1626	5 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]	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]	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 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 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 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 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 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 stage 13	339 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 13	339 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]		70/40				
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	

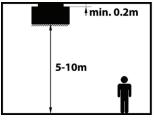
Parameters	HC70-1 stage 1339 m3/h					
Inlet and outlet water temperature[°C]		60/30				
Inlet air temperature [°C]	0	5	10	15	20	
Heating capacity [kW]	14,6	12,5	10,3	8,23	6,07	
Outlet air temperature [°C]	32,5	33,3	33,9	34,4	34,5	
Water flow[m³/h]	0,42	0,36	0,3	0,24	0,18	
Pressure drop in the heat exchanger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

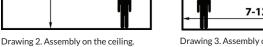
Parameters	HC70-1 stage 1339 m3/h					
Inlet and outlet water temperature[°C]		50/40				
Inlet air temperature [°C]	0	5	10	15	20	
Heating capacity [kW]	16,1	14	12	10,1	8,2	
Outlet air temperature [°C]	35,8	36,8	37,8	38,7	39,6	
Water flow[m³/h]	1,4	1,22	1,05	0,88	0,71	
Pressure drop in the heat exchanger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

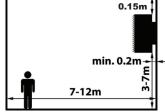
Parameters	HC70-1 stage 1339 m3/h						
Inlet and outlet water temperature[°C]	40/30						
Inlet air temperature [°C]	0	5	10	15	20		
Heating capacity [kW]	12,2	10,2	8,29	6,38	4,49		
Outlet air temperature [°C]	27,3	28,2	29,2	30	30,7		
Water flow[m³/h]	1,06	0,89	0,72	0,55	0,39		
Pressure drop in the heat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

3. ASSEMBLY

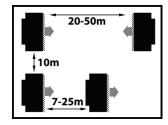
Water heaters Reventon Group HC series can be assembled on the wall or ceiling via rotating mounting bracket. The drawings below show the ways of assembly. In the bigger accommodation it is recommended to assemble more than one device. Follow the parameters which are provided on the drawings.





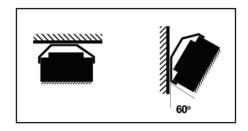


Drawing 3. Assembly on the wall.



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°. 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 water heaters Reventon Group HC series use the duct size 2 x 2,5 mm².

5. PRECAUTIONS & WARNINGS

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

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

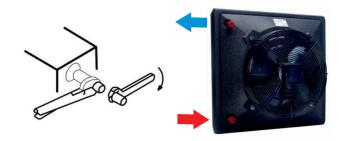
- The device should be secured against pressure increase in the water installation.
- Before plugging the electric supply check the leak tightness.
- The device does not consist of the anti-frost protection. The temperature in the room should not go below 0°C. In such case please empty the device out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

It is recommended to clean the device periodically:

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



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



6.CONTROLS

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

Fan speed controller HC 1,2A

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



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

Weight: 1,3kg Degree of protection: IP 54

Fan speed controller HC 3A

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



5 control levels: 0-70-85-105- 145-230V Power supply voltage: 230V AC/50-60Hz Allowable current output: 3A Protection: thermal cut-out Dimensions: 126mm x 176mm x 56mm

Degree of protection: IP 54

Fan speed controller HC 5A

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



5 control levels: 0-80-120-140-170-230V Power supply voltage: 230V AC/50-60Hz Allowable current output: 5A Maximum ambient temperature 40°C Maximum temperature controller 70°C. limited motor protection. Dimensions: 125 mm x 175 mm x 100 mm Weight: 3,8 kg

Degree of protection: IP 54

Fan speed controller HC 7A

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



5 control levels: 0-80-120-140-170-230V Power supply voltage: 230V AC/50-60Hz Allowable current output: 7A
Maximum ambient temperature 40°C Maximum temperature controller 70°C, limited motor protection. Dimensions: 240 mm x 190 mm x 125 mm Weight: 6,4 kg Degree of protection: IP 54

Fan speed controller HC 11A

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



5 control levels: 0-80-120-140-170-230V Power supply voltage: 230V AC/50-60Hz Allowable current output: 11A Maximum ambient temperature 40°C Maximum temperature controller 70°C limited motor protection.

Dimensions: 240 mm x 190 mm x 125 mm Weight: 8,1 kg Degree of protection: IP 54

Fan speed controller HC 14A

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



5 control levels: 0-80-120-140-170-230V Power supply voltage: 230V AC/50-60Hz Allowable current output: 14A Maximum ambient temperature 40°C
Maximum temperature controller 70°C, limited motor protection.

Dimensions: 240 mm x 190 mm x 125 mm Weight: 10,2kg Degree of protection: IP 54

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



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

Programmable room thermostat HC



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

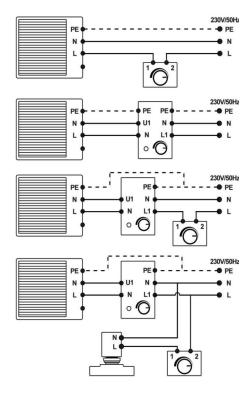
Room thermostat HC



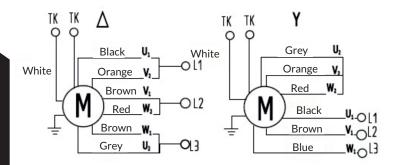
Operating temperature range: 0-40°C Temperature control range: $10-30^{\circ}C$ Accuracy of temperature: 1°C Number of temperature levels: 1

		SPEED	CONTROLLERS							
COOPERATION WITH EQUIPMENT										
Model	HC 1,2 A	HC 3 A	HC 5 A	HC 7 A	HC 11 A	HC 14 A				
Article no.	FSHC-1520	FS3HX-1521	FS5HC-1607	FS7HC-1608	FS11HC-1609	FS14HC-1610				
HC20	1	3	6	8	13	17				
HC30	1	3	6	8	13	17				
HC35	1	3	6	8	13	17				
HC45	1	3	6	8	13	17				
HC50	1	2	4	5	9	11				
HC70	1	2	4	5	9	11				
Farmer IP54	1	2	4	5	9	11				
Farmer IP65	0	1	2	3	5	7				

7. CONNECTION SCHEMES



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



Three-phase scheme connection

8. TERMS OF WARRANTY

- I. Reventon Group Sp. z o.o. [Ltd.] 3B Montazowa Street , 43-300 Bielsko-Biała, Poland, is the producer of the Reventon Group brand. The warranty concerns the following devices and it is valid for 3 years:
- air heater Reventon Group HC20
- air heater Reventon Group HC30
- -air heater Reventon Group HC35
- -air heater Reventon Group HC45
- air heater Reventon Group HC50
- all fleater Reventori Group II C70
- -air heater Reventon Group HC70
- -waterheater HC3P 20 22kW 400V
- -water heater HC3P3026kW400V
- -waterheater HC3P3534kW400V
- -waterheater HC3P4543kW400V
- -water heater HC3P 50 47kW 400V
- -water heater HC3P 70 69kW 400V
- * lifetime warranty for EPP caisng
- II. Warranty is valid in the European Union.

- III. The terms of warranty are valid from purchasing the device (the date issuing a document confirming the purchase of the device) but not further than 42 months from leaving the producer's warehouse.
- IV. The defects revealed during the warranty period will be removed free of charge in 14 working days. The service will be done by the installation company due to the terms of included in warranty card. The elements will be supplied by the Reventon Group producer during the warranty period.
- V. Warranty does not cover the parts of the device subject to normal maintenance and the cases as below:
- a) Mechanical defects, damages from the impact of the improper transportation or damages through improper storage.
- b) Defects through:
- -improper usage and service;
- using the device in the improper conditions (too high humidity, too high or too low temperature, impact of the surrounding, sun etc.);
- modified equipment that has been modified or repaired without written agreement of the producer;
- connecting additional equipment, which is not recommended by the producer or inconsistent with the technical documentation;
- -improper power supply.
- c) Elements which wear and tear such as discolor or using.
- VI. All changes in record in the warranty terms or any constructive modifications, independent service outside the Reventon Group service or use, uncaring, makes the warranty not valid.
- VII. To obtain the service it is needed to send to the producer warranty card with the signature, document confirming the purchase, (copy of the invoice) and correctly filled the warranty form.
- VIII. Not following to any of warranty regulations makes the warranty not valid.
- IX. All correspondence, returns, complains should be send to the following address: Reventon Group Sp. z o.o. 3B Montazowa Street, 43-300 Bielsko-Biała, Poland or e-mail: serwis@reventongroup.eu

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

Warranty card



reventon 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:
Cia
City:
Postal code:
Street:
Number:
Place:

Warranty form



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

The company reporting the complaint:
The company installing the device:
The company installing the device.
Factory number of the device:
Date of assembly:
Date and circumstances of noticing the defect:
bate and encumbances 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



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