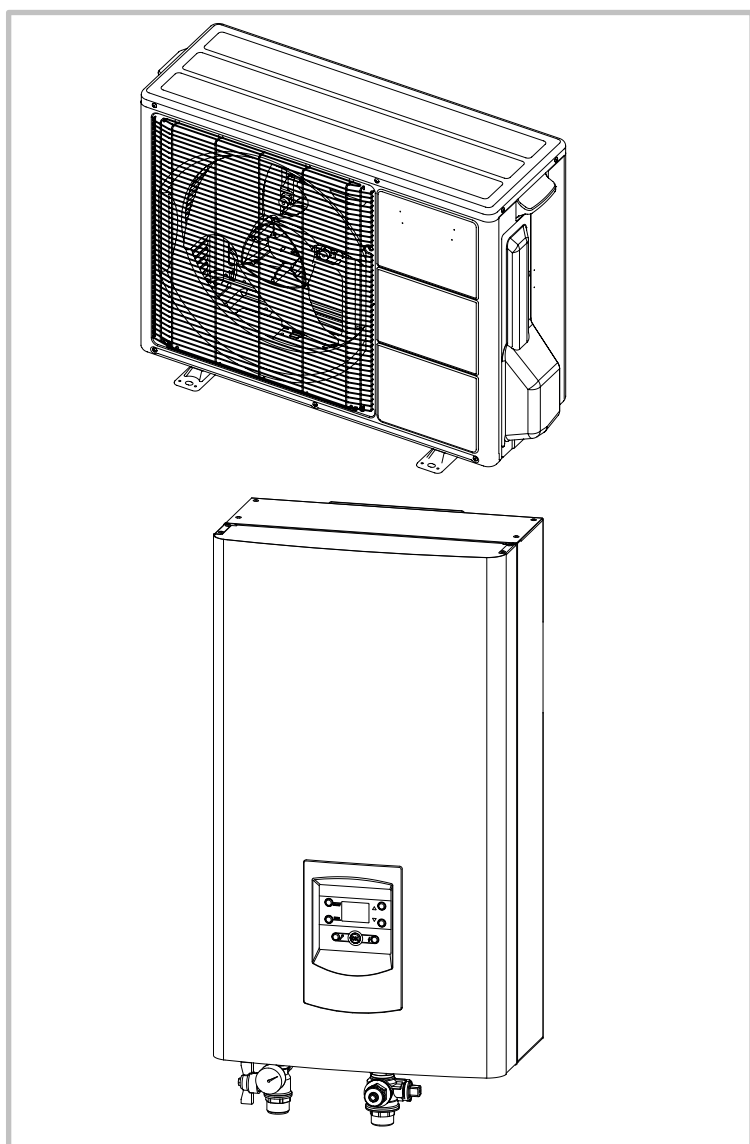
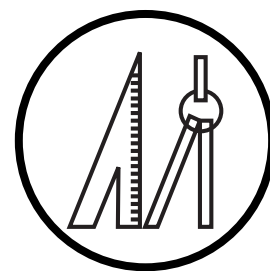


Loria 6000

Ilmavesilämpöpumput 1 vaihe



Document n°1692-2~ 09/02/2015



Tekniset tiedot

Technical data

Intended for professionals.
Completed by the
installation manuals 1633.

www.atlantic.fi

Subject to modifications without notice.
Non contractual document.

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1. General description

For more information, please refer to the installation manual 1633.

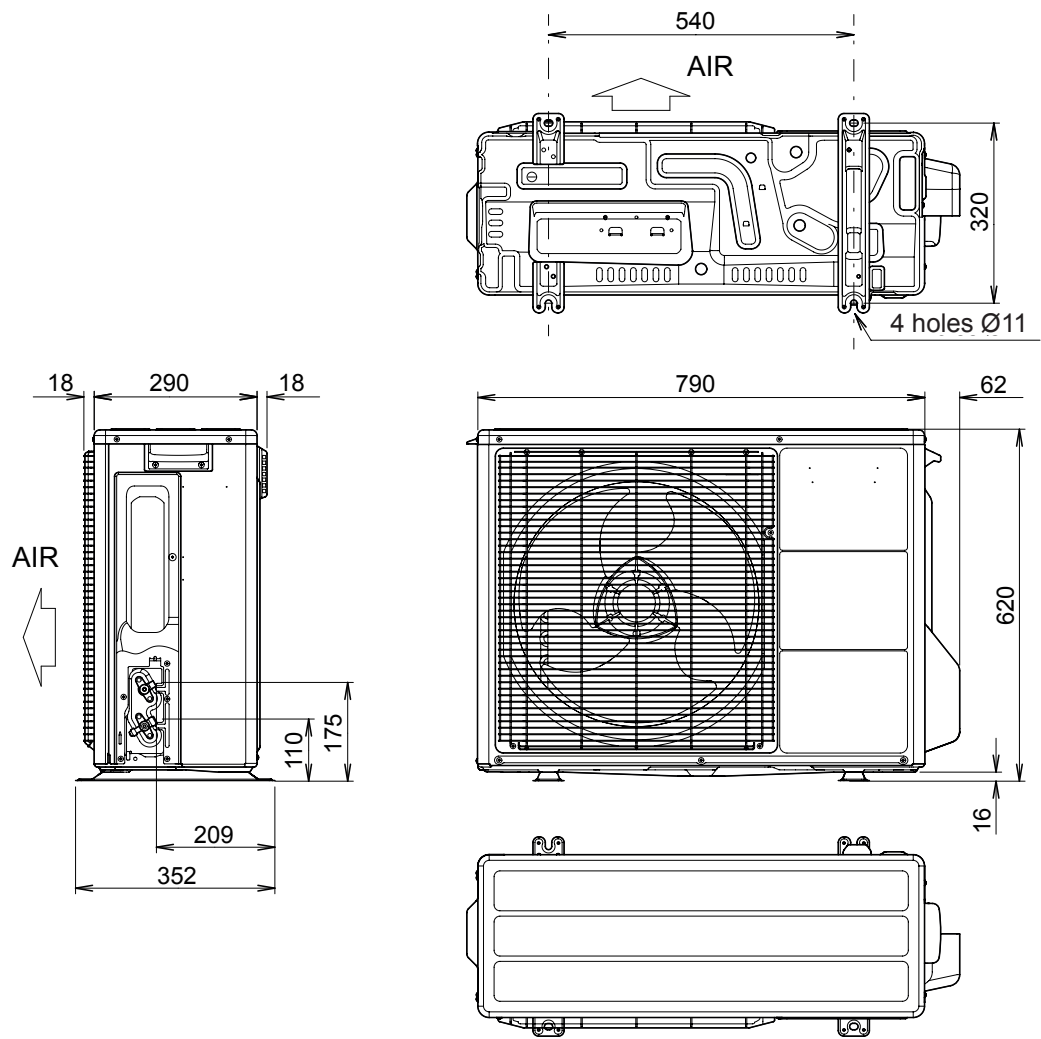
• Table of dimensions and weight

	Loria 6004	Loria 6006	Loria 6008
Reference	522 259	522 260	522 261
Outdoor unit	700 169 or 700171	700 169 or 700171	700 170 or 700172
Dimensions H x W x D (mm)	620 x 790 x 290	620 x 790 x 290	620 x 790 x 290
Weight (kg)	41	41	42
Air flow rate (Heating) (m³/h)	2070	2340	3600
Hydraulic unit	023 001	023 000	023 000
Dimensions H x W x D (mm)	841 x 450 x 274,5	841 x 450 x 274,5	841 x 450 x 274,5
Weight empty / water (kg)	37,5 / 41,5	37,5 / 41,5	37,5 / 41,5

• Dimensional drawing

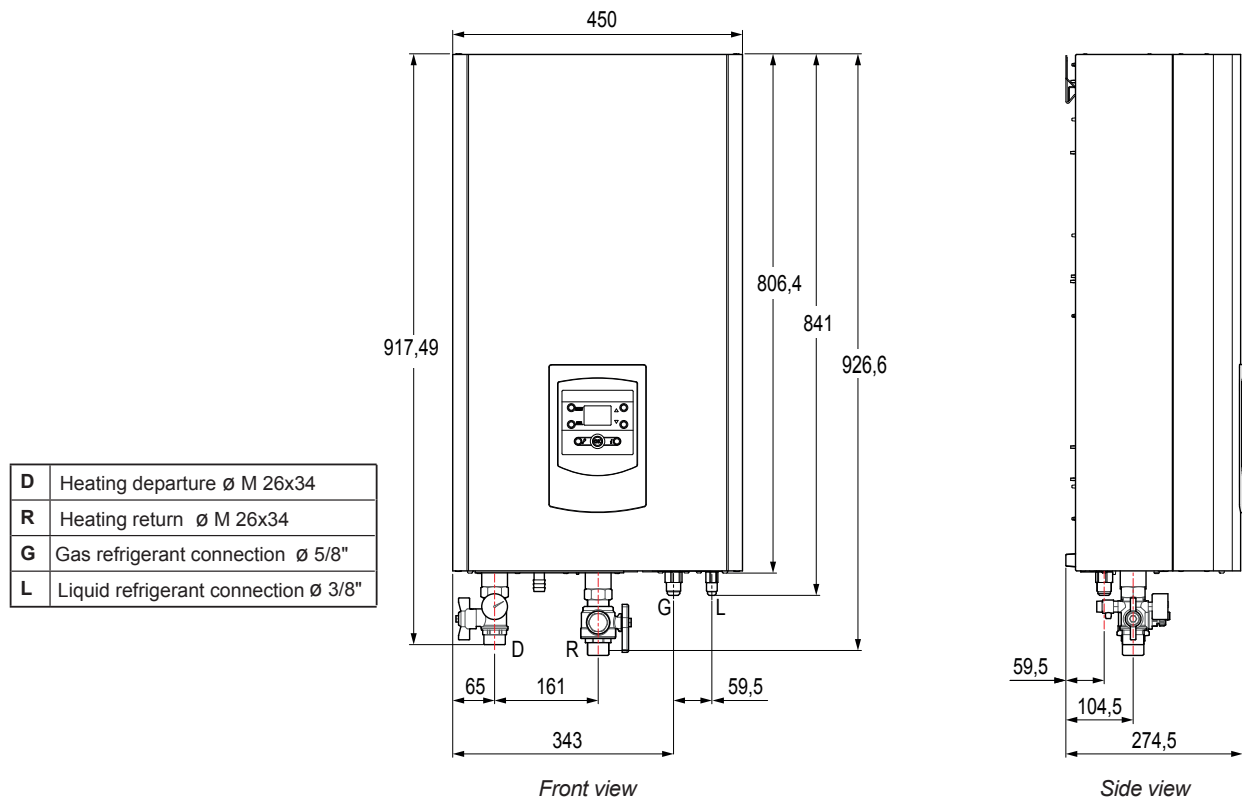
Outdoor unit :

Unit = mm



Hydraulic unit :

Unit = mm

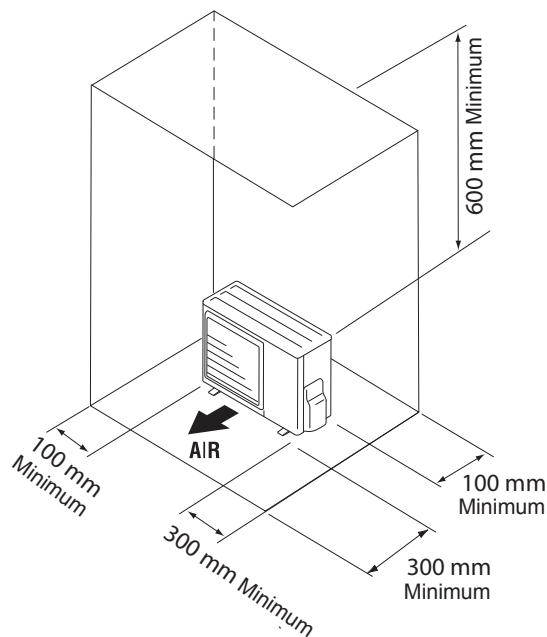


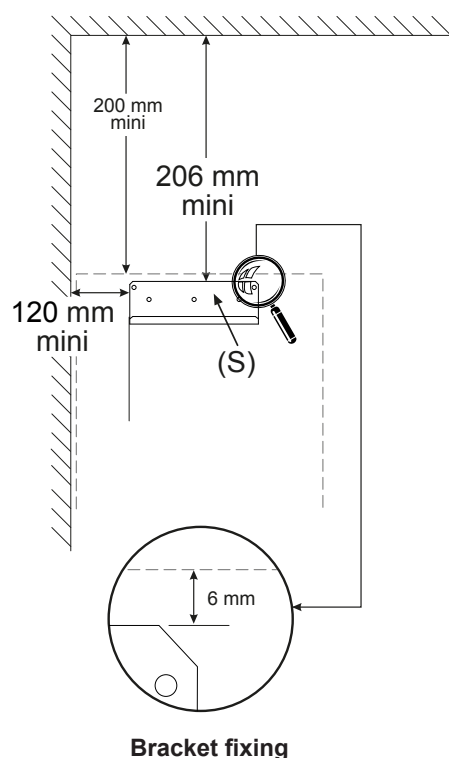
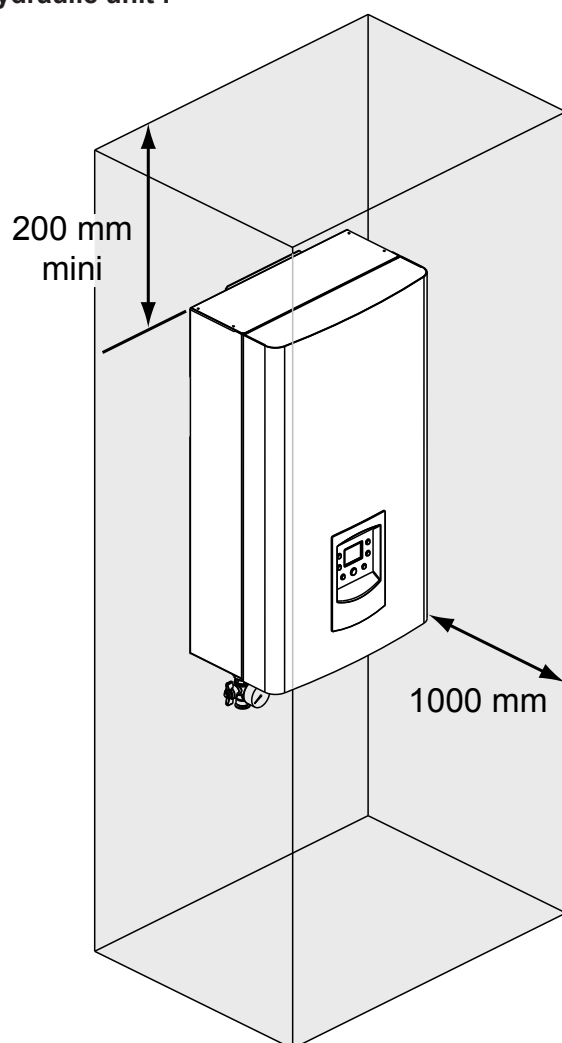
• Installation area

Outdoor unit :

The outdoor unit must only be installed outside. If a shelter is required, it must have broad openings on all 4 sides and the following clearances shall be respected.

The outdoor unit is to be raised at least 50 mm from the ground. In snowy areas, the height should be increased, but not to exceed 1.5 m. If the installation is carried out in an area where the temperature can fall below 0 ° C for a long time, a thermal tracer shall be provided to prevent the drain pipe and the outdoor unit bottom drain pan from freezing.



Hydraulic unit :

According to EN 378-1 (requirement of safety and environmental for heat pump), the heat pump must be installed in a room with minimal volume is : machine load in kg / 0,44 m³.

Otherwise, it must be ensured that :

- Either the room is mechanically ventilated,
- Either the door is left open when the installer comes on the heat pump.

- Pipe connections**

		Loria 6004	Loria 6006	Loria 6008
Input and Output heating diameters (male thread) circuit	inch	1		
Diameter of «Gas» pipes		1/4		
Diameter of «Liquid» pipes		1/2		5/8

- Hydraulic characteristics**

		Loria 6004	Loria 6006	Loria 6008
Minimum heating return temperature in heating mode	°C	17		
Maximum Water temperature (heating departure)		50		
Minimum allowed flow	l/h	420	600	600
Volume of mini circulating water for installation of	VCV* (45 °C) ⁽¹⁾ / Dynamic radiators or VCV* (35 °C) ⁽¹⁾	31 / 64 ⁽¹⁾	42 / 86 ⁽¹⁾	52 / 106 ⁽¹⁾
	Cast iron radiators / Steel radiators (low voltage radiators)	21 / 26	28 / 35	35 / 42
	Floor heating/cooling	15	21	26
Maximum Pressure of using	bar	3		
Available pressure at nominal +7°C/35°C		0,64	0,5	0,36

* : Fan coil

⁽¹⁾ Mandatory buffer tank

2. Performances

2.1 Nominal performances and sound power

		Loria 6004	Loria 6006	Loria 6008
+7°C/+35°C Floor heating	Heating capacity (kW)	4,00	6,00	7,50
	Input power (kW)	0,83	1,35	1,81
	COP	4,80	4,45	4,15
+2°C/+35°C Floor heating	Heating capacity (kW)	4,50	4,95	5,65
	Input power (kW)	1,39	1,53	1,78
	COP	3,24	3,24	3,17
-7°C/+35°C Floor heating	Heating capacity (kW)	4,10	5,00	5,90
	Input power (kW)	1,46	1,79	2,46
	COP	2,80	2,80	2,40
+7°C/+45°C Radiator low voltage	Heating capacity (kW)	4,00	5,10	6,20
	Input power (kW)	1,14	1,46	1,85
	COP	3,50	3,50	3,35
+2°C/+45°C Radiator low voltage	Heating capacity (kW)	4,00	4,50	5,00
	Input power (kW)	1,48	1,69	1,92
	COP	2,70	2,66	2,60
-7°C/+45°C Radiator low voltage	Heating capacity (kW)	4,10	4,50	5,15
	Input power (kW)	1,78	1,99	2,45
	COP	2,30	2,26	2,10
Sound power* (dBA)	Outdoor unit	64	64	69
	Hydraulic module	39	39	39

Test conditions comply with EN 14-511.

* Sound power at 7/45°C according to EN12102 ; Sound power is a laboratory measurement of the sound power emitted but unlike at sound level, it does not correspond to the feel perceived. Used by specialists in acoustics, it allows to calculate the sound pressure level that is a function of the environment.

2.2 Nominal performances tables (Heating mode)

Test conditions comply with EN 14-511 (defrosting included)

2.2.1 Loria 6004

		Starting temperature														
		30°C			35°C			40°C			45°C			50°C		
		IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP
Outdoor temperature	-20°C	0,58	4,10	7,04	0,60	4,00	6,69	0,71	4,00	5,64	0,82	4,00	4,87	0,84	3,90	4,64
	-19°C	0,59	4,10	6,94	0,61	4,00	6,60	0,72	4,00	5,56	0,83	4,00	4,81	0,85	3,90	4,57
	-18°C	0,60	4,10	6,85	0,61	4,00	6,51	0,73	4,00	5,49	0,84	4,00	4,74	0,86	3,90	4,51
	-17°C	0,61	4,10	6,76	0,62	4,00	6,43	0,74	4,00	5,41	0,85	4,00	4,68	0,88	3,90	4,45
	-16°C	0,62	4,10	6,67	0,63	4,00	6,34	0,75	4,00	5,34	0,87	4,00	4,62	0,89	3,90	4,39
	-15°C	0,62	4,10	6,58	0,64	4,00	6,26	0,76	4,00	5,27	0,88	4,00	4,56	0,90	3,90	4,33
	-14°C	0,63	4,10	6,50	0,65	4,00	6,18	0,77	4,00	5,21	0,89	4,00	4,50	0,91	3,90	4,28
	-13°C	0,64	4,10	6,41	0,66	4,00	6,10	0,78	4,00	5,14	0,90	4,00	4,44	0,92	3,90	4,22
	-12°C	0,65	4,10	6,33	0,66	4,00	6,02	0,79	4,00	5,08	0,91	4,00	4,39	0,93	3,90	4,17
	-11°C	0,66	4,10	6,25	0,67	4,00	5,95	0,80	4,00	5,01	0,92	4,00	4,33	0,95	3,90	4,12
	-10°C	0,66	4,10	6,18	0,68	4,00	5,88	0,81	4,00	4,95	0,93	4,00	4,28	0,96	3,90	4,07
	-9°C	0,67	4,10	6,10	0,69	4,00	5,81	0,82	4,00	4,89	0,95	4,00	4,23	0,97	3,90	4,02
	-8°C	0,68	4,10	6,03	0,70	4,00	5,74	0,83	4,00	4,83	0,96	4,00	4,18	0,98	3,90	3,97
	-7°C	0,69	4,10	5,96	0,71	4,00	5,67	0,84	4,00	4,78	0,97	4,00	4,13	0,99	3,90	3,93
	-6°C	0,70	4,10	5,89	0,71	4,00	5,60	0,85	4,00	4,72	0,98	4,00	4,08	1,00	3,90	3,88
	-5°C	0,70	4,10	5,82	0,72	4,00	5,54	0,86	4,00	4,67	0,99	4,00	4,03	1,02	3,90	3,84
	-4°C	0,71	4,10	5,76	0,73	4,00	5,48	0,87	4,00	4,61	1,00	4,00	3,99	1,03	3,90	3,79
	-3°C	0,72	4,10	5,69	0,74	4,00	5,41	0,88	4,00	4,56	1,01	4,00	3,94	1,04	3,90	3,75
	2°C	0,73	4,10	5,63	0,75	4,00	5,35	0,89	4,00	4,51	1,03	4,00	3,90	1,05	3,90	3,71
	-1°C	0,74	4,10	5,57	0,76	4,00	5,30	0,90	4,00	4,46	1,04	4,00	3,86	1,06	3,90	3,67
	0°C	0,74	4,10	5,51	0,76	4,00	5,24	0,91	4,00	4,41	1,05	4,00	3,81	1,08	3,90	3,63
	1°C	0,75	4,10	5,45	0,77	4,00	5,18	0,92	4,00	4,37	1,06	4,00	3,77	1,09	3,90	3,59
	2°C	0,76	4,10	5,39	0,78	4,00	5,13	0,93	4,00	4,32	1,07	4,00	3,73	1,10	3,90	3,55
	3°C	0,77	4,10	5,33	0,79	4,00	5,07	0,94	4,00	4,27	1,08	4,00	3,69	1,11	3,90	3,51
	4°C	0,78	4,10	5,28	0,80	4,00	5,02	0,95	4,00	4,23	1,09	4,00	3,65	1,12	3,90	3,48
	5°C	0,78	4,10	5,22	0,81	4,00	4,97	0,96	4,00	4,19	1,11	4,00	3,62	1,13	3,90	3,44
	6°C	0,79	4,10	5,17	0,81	4,00	4,92	0,97	4,00	4,14	1,12	4,00	3,58	1,15	3,90	3,41
	7°C	0,80	4,10	5,12	0,82	4,00	4,87	0,98	4,00	4,10	1,13	4,00	3,54	1,16	3,90	3,37
	8°C	0,81	4,10	5,07	0,83	4,00	4,82	0,99	4,00	4,06	1,14	4,00	3,51	1,17	3,90	3,34
	9°C	0,81	4,10	5,06	0,84	4,04	4,82	0,99	4,02	4,04	1,15	4,00	3,47	1,18	3,90	3,30
	10°C	0,95	4,23	4,47	0,98	4,16	4,26	1,10	4,08	3,69	1,23	4,00	3,24	1,26	3,90	3,08
	11°C	1,08	4,36	4,02	1,11	4,27	3,83	1,21	4,14	3,40	1,32	4,00	3,04	1,35	3,90	2,89
	12°C	1,22	4,48	3,68	1,25	4,39	3,50	1,32	4,19	3,16	1,40	4,00	2,86	1,43	3,90	2,72
	13°C	1,36	4,61	3,40	1,39	4,50	3,24	1,44	4,25	2,96	1,48	4,00	2,70	1,52	3,90	2,57
	14°C	1,36	4,61	3,40	1,39	4,50	3,24	1,44	4,25	2,96	1,48	4,00	2,70	1,52	3,90	2,57
	15°C	1,36	4,56	3,35	1,40	4,45	3,18	1,46	4,23	2,90	1,52	4,01	2,64	1,56	3,91	2,51
	16°C	1,37	4,51	3,29	1,41	4,40	3,13	1,48	4,21	2,84	1,56	4,02	2,57	1,60	3,92	2,45
	17°C	1,38	4,45	3,23	1,41	4,35	3,07	1,51	4,19	2,78	1,60	4,03	2,51	1,64	3,92	2,39
	18°C	1,39	4,40	3,18	1,42	4,29	3,02	1,53	4,16	2,72	1,64	4,03	2,46	1,68	3,93	2,34
	19°C	1,39	4,35	3,12	1,43	4,24	2,97	1,56	4,14	2,66	1,68	4,04	2,40	1,72	3,94	2,29
	20°C	1,40	4,30	3,07	1,44	4,19	2,92	1,58	4,12	2,61	1,72	4,05	2,35	1,76	3,95	2,24
	21°C	1,41	4,24	3,01	1,45	4,14	2,86	1,60	4,10	2,56	1,76	4,06	2,30	1,81	3,96	2,19
	22°C	1,42	4,20	2,95	1,46	4,10	2,81	1,62	4,10	2,53	1,78	4,10	2,30	1,82	4,00	2,19
	23°C	1,45	4,12	2,84	1,49	4,02	2,70	1,65	4,02	2,43	1,82	4,02	2,21	1,86	3,92	2,11
	24°C	1,48	4,03	2,73	1,52	3,94	2,59	1,68	3,94	2,34	1,85	3,94	2,13	1,90	3,84	2,02
	25°C	1,51	3,95	2,62	1,55	3,85	2,49	1,72	3,85	2,24	1,89	3,85	2,04	1,93	3,76	1,94
	26°C	1,54	3,87	2,51	1,58	3,77	2,39	1,75	3,77	2,16	1,92	3,77	1,96	1,97	3,68	1,87
	27°C	1,57	3,78	2,42	1,61	3,69	2,30	1,78	3,69	2,07	1,96	3,69	1,88	2,01	3,60	1,79
	28°C	1,59	3,70	2,32	1,64	3,61	2,21	1,81	3,61	1,99	1,99	3,61	1,81	2,04	3,52	1,72
	29°C	1,62	3,61	2,23	1,66	3,53	2,12	1,85	3,53	1,91	2,03	3,53	1,74	2,08	3,44	1,65
	30°C	1,65	3,53	2,14	1,69	3,44	2,03	1,88	3,44	1,83	2,06	3,44	1,67	2,12	3,36	1,59
	31°C	1,68	3,45	2,05	1,72	3,36	1,95	1,91	3,36	1,76	2,10	3,36	1,60	2,15	3,28	1,52
	32°C	1,71	3,36	1,97	1,75	3,28	1,87	1,94	3,28	1,69	2,14	3,28	1,54	2,19	3,20	1,46
	33°C	1,74	3,28	1,89	1,78	3,20	1,80	1,98	3,20	1,62	2,17	3,20	1,47	2,23	3,12	1,40
	34°C	1,77	3,19	1,81	1,81	3,12	1,72	2,01	3,12	1,55	2,21	3,12	1,41	2,26	3,04	1,34
	35°C	1,79	3,11	1,73	1,84	3,03	1,65	2,04	3,03	1,49	2,24	3,03	1,35	2,30	2,96	1,29

HC : Heating capacity (kW)

IP : Input power (kW)

COP : Coefficient of performance

2.2.2 Loria 6006

		Starting temperature														
		30°C			35°C			40°C			45°C			50°C		
		IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP
Outdoor temperature	-20°C	0,95	6,15	6,49	0,97	6,00	6,17	1,01	5,55	5,49	1,05	5,10	4,85	1,08	4,97	4,61
	-19°C	0,96	6,15	6,40	0,99	6,00	6,09	1,03	5,55	5,41	1,07	5,10	4,79	1,09	4,97	4,55
	-18°C	0,97	6,15	6,31	1,00	6,00	6,01	1,04	5,55	5,34	1,08	5,10	4,72	1,11	4,97	4,49
	-17°C	0,99	6,15	6,23	1,01	6,00	5,93	1,05	5,55	5,27	1,10	5,10	4,66	1,12	4,97	4,43
	-16°C	1,00	6,15	6,15	1,03	6,00	5,85	1,07	5,55	5,20	1,11	5,10	4,60	1,14	4,97	4,37
	-15°C	1,01	6,15	6,07	1,04	6,00	5,77	1,08	5,55	5,13	1,12	5,10	4,54	1,15	4,97	4,32
	-14°C	1,03	6,15	5,99	1,05	6,00	5,70	1,10	5,55	5,06	1,14	5,10	4,48	1,17	4,97	4,26
	-13°C	1,04	6,15	5,91	1,07	6,00	5,63	1,11	5,55	5,00	1,15	5,10	4,42	1,18	4,97	4,21
	-12°C	1,05	6,15	5,84	1,08	6,00	5,56	1,12	5,55	4,94	1,17	5,10	4,37	1,20	4,97	4,15
	-11°C	1,07	6,15	5,77	1,09	6,00	5,49	1,14	5,55	4,88	1,18	5,10	4,31	1,21	4,97	4,10
	-10°C	1,08	6,15	5,70	1,11	6,00	5,42	1,15	5,55	4,82	1,20	5,10	4,26	1,23	4,97	4,05
	-9°C	1,09	6,15	5,63	1,12	6,00	5,35	1,17	5,55	4,76	1,21	5,10	4,21	1,24	4,97	4,00
	-8°C	1,11	6,15	5,56	1,13	6,00	5,29	1,18	5,55	4,70	1,23	5,10	4,16	1,26	4,97	3,96
	-7°C	1,12	6,15	5,50	1,15	6,00	5,23	1,19	5,55	4,65	1,24	5,10	4,11	1,27	4,97	3,91
	-6°C	1,13	6,15	5,43	1,16	6,00	5,17	1,21	5,55	4,59	1,26	5,10	4,06	1,29	4,97	3,86
	-5°C	1,15	6,15	5,37	1,17	6,00	5,11	1,22	5,55	4,54	1,27	5,10	4,02	1,30	4,97	3,82
	-4°C	1,16	6,15	5,31	1,19	6,00	5,05	1,24	5,55	4,49	1,28	5,10	3,97	1,32	4,97	3,78
	-3°C	1,17	6,15	5,25	1,20	6,00	4,99	1,25	5,55	4,44	1,30	5,10	3,92	1,33	4,97	3,73
	2°C	1,18	6,15	5,19	1,22	6,00	4,94	1,26	5,55	4,39	1,31	5,10	3,88	1,35	4,97	3,69
	-1°C	1,20	6,15	5,13	1,23	6,00	4,88	1,28	5,55	4,34	1,33	5,10	3,84	1,36	4,97	3,65
	0°C	1,21	6,15	5,08	1,24	6,00	4,83	1,29	5,55	4,29	1,34	5,10	3,80	1,38	4,97	3,61
	1°C	1,22	6,15	5,02	1,26	6,00	4,78	1,31	5,55	4,25	1,36	5,10	3,76	1,39	4,97	3,57
	2°C	1,24	6,15	4,97	1,27	6,00	4,73	1,32	5,55	4,20	1,37	5,10	3,72	1,41	4,97	3,53
	3°C	1,25	6,15	4,92	1,28	6,00	4,68	1,33	5,55	4,16	1,39	5,10	3,68	1,42	4,97	3,50
	4°C	1,26	6,15	4,87	1,30	6,00	4,63	1,35	5,55	4,11	1,40	5,10	3,64	1,44	4,97	3,46
	5°C	1,28	6,15	4,82	1,31	6,00	4,58	1,36	5,55	4,07	1,42	5,10	3,60	1,45	4,97	3,43
	6°C	1,29	6,15	4,77	1,32	6,00	4,54	1,38	5,55	4,03	1,43	5,10	3,56	1,47	4,97	3,39
	7°C	1,30	6,15	4,72	1,34	6,00	4,49	1,39	5,55	3,99	1,45	5,10	3,53	1,48	4,97	3,36
	8°C	1,32	6,15	4,67	1,35	6,00	4,44	1,41	5,55	3,95	1,46	5,10	3,49	1,50	4,97	3,32
	9°C	1,32	6,09	4,62	1,36	5,94	4,36	1,42	5,49	3,87	1,47	5,05	3,42	1,51	4,92	3,26
	10°C	1,36	5,83	4,29	1,41	5,69	4,05	1,47	5,30	3,61	1,53	4,91	3,21	1,57	4,79	3,06
	11°C	1,40	5,58	3,97	1,45	5,45	3,76	1,51	5,11	3,37	1,58	4,77	3,02	1,62	4,66	2,87
	12°C	1,45	5,33	3,68	1,49	5,20	3,49	1,56	4,92	3,15	1,64	4,64	2,83	1,68	4,52	2,70
	13°C	1,49	5,07	3,40	1,53	4,95	3,24	1,61	4,73	2,93	1,69	4,50	2,66	1,73	4,39	2,53
	14°C	1,49	5,07	3,40	1,53	4,95	3,24	1,61	4,73	2,93	1,69	4,50	2,66	1,73	4,39	2,53
	15°C	1,53	5,07	3,33	1,56	4,95	3,16	1,65	4,73	2,87	1,73	4,50	2,60	1,77	4,39	2,47
	16°C	1,56	5,07	3,25	1,60	4,95	3,10	1,68	4,73	2,80	1,77	4,50	2,54	1,81	4,39	2,42
	17°C	1,59	5,07	3,19	1,63	4,95	3,03	1,72	4,73	2,74	1,81	4,50	2,49	1,86	4,39	2,36
	18°C	1,63	5,07	3,12	1,67	4,95	2,97	1,76	4,73	2,69	1,85	4,50	2,43	1,90	4,39	2,31
	19°C	1,66	5,07	3,06	1,70	4,95	2,91	1,80	4,73	2,63	1,89	4,50	2,38	1,94	4,39	2,26
	20°C	1,69	5,07	2,99	1,74	4,95	2,85	1,83	4,73	2,58	1,93	4,50	2,33	1,98	4,39	2,22
	21°C	1,73	5,07	2,94	1,77	4,95	2,79	1,87	4,73	2,53	1,97	4,50	2,28	2,02	4,39	2,17
	22°C	1,75	5,13	2,94	1,79	5,00	2,79	1,89	4,75	2,51	1,99	4,50	2,26	2,04	4,39	2,15
	23°C	1,78	5,02	2,82	1,83	4,90	2,68	1,93	4,66	2,41	2,03	4,41	2,17	2,08	4,30	2,07
	24°C	1,82	4,92	2,71	1,86	4,80	2,58	1,97	4,56	2,32	2,07	4,32	2,09	2,12	4,21	1,99
	25°C	1,85	4,82	2,60	1,90	4,70	2,48	2,00	4,47	2,23	2,11	4,23	2,01	2,16	4,12	1,91
	26°C	1,88	4,72	2,50	1,93	4,60	2,38	2,04	4,37	2,14	2,15	4,14	1,93	2,20	4,04	1,83
	27°C	1,92	4,61	2,40	1,97	4,50	2,29	2,08	4,28	2,06	2,19	4,05	1,85	2,24	3,95	1,76
	28°C	1,95	4,51	2,31	2,00	4,40	2,19	2,12	4,18	1,97	2,23	3,96	1,78	2,28	3,86	1,69
	29°C	1,99	4,41	2,22	2,04	4,30	2,11	2,15	4,09	1,90	2,27	3,87	1,71	2,33	3,77	1,62
	30°C	2,02	4,31	2,13	2,08	4,20	2,02	2,19	3,99	1,82	2,31	3,78	1,64	2,37	3,69	1,56
	31°C	2,06	4,20	2,04	2,11	4,10	1,94	2,23	3,90	1,75	2,35	3,69	1,57	2,41	3,60	1,49
	32°C	2,09	4,10	1,96	2,15	4,00	1,86	2,27	3,80	1,68	2,39	3,60	1,51	2,45	3,51	1,43
	33°C	2,13	4,00	1,88	2,18	3,90	1,79	2,31	3,71	1,61	2,43	3,51	1,45	2,49	3,42	1,38
	34°C	2,16	3,90	1,80	2,22	3,80	1,71	2,34	3,61	1,54	2,47	3,42	1,39	2,53	3,33	1,32
	35°C	2,20	3,79	1,72	2,26	3,70	1,64	2,38	3,52	1,48	2,51	3,33	1,33	2,57	3,25	1,26

HC : Heating capacity (kW)

IP : Input power (kW)

COP : Coefficient of performance

2.2.3 Loria 6008

		Starting temperature														
		30°C			35°C			40°C			45°C			50°C		
		IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP
Outdoor temperature	-20°C	1,27	7,69	6,05	1,30	7,50	5,76	1,32	6,85	5,20	1,33	6,20	4,65	1,37	6,05	4,43
	-19°C	1,29	7,69	5,97	1,32	7,50	5,68	1,34	6,85	5,13	1,35	6,20	4,59	1,38	6,05	4,37
	-18°C	1,31	7,69	5,89	1,34	7,50	5,60	1,35	6,85	5,06	1,37	6,20	4,53	1,40	6,05	4,31
	-17°C	1,32	7,69	5,81	1,36	7,50	5,52	1,37	6,85	4,99	1,39	6,20	4,47	1,42	6,05	4,25
	-16°C	1,34	7,69	5,73	1,38	7,50	5,45	1,39	6,85	4,93	1,41	6,20	4,41	1,44	6,05	4,19
	-15°C	1,36	7,69	5,66	1,39	7,50	5,38	1,41	6,85	4,86	1,42	6,20	4,35	1,46	6,05	4,14
	-14°C	1,38	7,69	5,58	1,41	7,50	5,31	1,43	6,85	4,80	1,44	6,20	4,30	1,48	6,05	4,09
	-13°C	1,39	7,69	5,51	1,43	7,50	5,25	1,45	6,85	4,74	1,46	6,20	4,24	1,50	6,05	4,04
	-12°C	1,41	7,69	5,45	1,45	7,50	5,18	1,46	6,85	4,68	1,48	6,20	4,19	1,52	6,05	3,98
	-11°C	1,43	7,69	5,38	1,47	7,50	5,12	1,48	6,85	4,62	1,50	6,20	4,14	1,54	6,05	3,94
	-10°C	1,45	7,69	5,31	1,48	7,50	5,05	1,50	6,85	4,56	1,52	6,20	4,09	1,55	6,05	3,89
	-9°C	1,46	7,69	5,25	1,50	7,50	4,99	1,52	6,85	4,51	1,54	6,20	4,04	1,57	6,05	3,84
	-8°C	1,48	7,69	5,19	1,52	7,50	4,93	1,54	6,85	4,46	1,55	6,20	3,99	1,59	6,05	3,80
	-7°C	1,50	7,69	5,12	1,54	7,50	4,87	1,56	6,85	4,40	1,57	6,20	3,94	1,61	6,05	3,75
	-6°C	1,52	7,69	5,07	1,56	7,50	4,82	1,57	6,85	4,35	1,59	6,20	3,90	1,63	6,05	3,71
	-5°C	1,54	7,69	5,01	1,57	7,50	4,76	1,59	6,85	4,30	1,61	6,20	3,85	1,65	6,05	3,66
	-4°C	1,55	7,69	4,95	1,59	7,50	4,71	1,61	6,85	4,25	1,63	6,20	3,81	1,67	6,05	3,62
	-3°C	1,57	7,69	4,89	1,61	7,50	4,66	1,63	6,85	4,21	1,65	6,20	3,77	1,69	6,05	3,58
	2°C	1,59	7,69	4,84	1,63	7,50	4,60	1,65	6,85	4,16	1,67	6,20	3,72	1,71	6,05	3,54
	-1°C	1,61	7,69	4,79	1,65	7,50	4,55	1,67	6,85	4,11	1,68	6,20	3,68	1,73	6,05	3,50
	0°C	1,62	7,69	4,73	1,67	7,50	4,50	1,68	6,85	4,07	1,70	6,20	3,64	1,74	6,05	3,47
	1°C	1,64	7,69	4,68	1,68	7,50	4,46	1,70	6,85	4,02	1,72	6,20	3,60	1,76	6,05	3,43
	2°C	1,66	7,69	4,63	1,70	7,50	4,41	1,72	6,85	3,98	1,74	6,20	3,57	1,78	6,05	3,39
	3°C	1,68	7,69	4,59	1,72	7,50	4,36	1,74	6,85	3,94	1,76	6,20	3,53	1,80	6,05	3,36
	4°C	1,69	7,69	4,54	1,74	7,50	4,32	1,76	6,85	3,90	1,78	6,20	3,49	1,82	6,05	3,32
	5°C	1,71	7,69	4,49	1,76	7,50	4,27	1,78	6,85	3,86	1,79	6,20	3,46	1,84	6,05	3,29
	6°C	1,73	7,69	4,45	1,77	7,50	4,23	1,79	6,85	3,82	1,81	6,20	3,42	1,86	6,05	3,25
	7°C	1,75	7,69	4,40	1,79	7,50	4,19	1,81	6,85	3,78	1,83	6,20	3,39	1,88	6,05	3,22
	8°C	1,76	7,69	4,36	1,81	7,50	4,14	1,83	6,85	3,74	1,85	6,20	3,35	1,90	6,05	3,19
	9°C	1,75	7,61	4,36	1,79	7,43	4,14	1,83	6,78	3,71	1,87	6,14	3,28	1,92	5,98	3,12
	10°C	1,74	7,16	4,10	1,79	6,98	3,90	1,84	6,42	3,50	1,88	5,85	3,11	1,93	5,71	2,96
	11°C	1,74	6,70	3,85	1,79	6,54	3,66	1,84	6,05	3,29	1,89	5,57	2,94	1,94	5,43	2,80
	12°C	1,74	6,25	3,59	1,78	6,09	3,42	1,85	5,69	3,08	1,91	5,28	2,77	1,95	5,15	2,64
	13°C	1,74	5,79	3,34	1,78	5,65	3,17	1,85	5,33	2,88	1,92	5,00	2,60	1,97	4,88	2,48
	14°C	1,74	5,79	3,34	1,78	5,65	3,17	1,85	5,33	2,88	1,92	5,00	2,60	1,97	4,88	2,48
	15°C	1,83	5,82	3,19	1,87	5,68	3,03	1,93	5,35	2,77	1,99	5,01	2,52	2,04	4,89	2,39
	16°C	1,92	5,85	3,05	1,97	5,70	2,90	2,02	5,37	2,66	2,06	5,03	2,44	2,12	4,90	2,32
	17°C	2,01	5,88	2,92	2,06	5,73	2,78	2,10	5,39	2,57	2,14	5,04	2,36	2,19	4,92	2,24
	18°C	2,10	5,90	2,81	2,15	5,76	2,67	2,18	5,41	2,48	2,21	5,06	2,29	2,26	4,93	2,18
	19°C	2,19	5,93	2,71	2,25	5,79	2,57	2,26	5,43	2,40	2,28	5,07	2,22	2,34	4,94	2,11
	20°C	2,28	5,96	2,61	2,34	5,81	2,48	2,35	5,45	2,32	2,35	5,08	2,16	2,41	4,96	2,06
	21°C	2,37	5,99	2,52	2,44	5,84	2,40	2,43	5,47	2,25	2,43	5,10	2,10	2,49	4,97	2,00
	22°C	2,40	6,05	2,52	2,46	5,90	2,40	2,46	5,53	2,25	2,45	5,15	2,10	2,51	5,02	2,00
	23°C	2,45	5,93	2,42	2,51	5,78	2,30	2,50	5,41	2,16	2,50	5,05	2,02	2,56	4,92	1,92
	24°C	2,49	5,81	2,33	2,56	5,66	2,21	2,55	5,30	2,08	2,55	4,94	1,94	2,61	4,82	1,85
	25°C	2,54	5,68	2,24	2,61	5,55	2,13	2,60	5,19	2,00	2,60	4,84	1,86	2,66	4,72	1,77
	26°C	2,59	5,56	2,15	2,66	5,43	2,04	2,65	5,08	1,92	2,65	4,74	1,79	2,71	4,62	1,70
	27°C	2,64	5,44	2,06	2,71	5,31	1,96	2,70	4,97	1,84	2,70	4,64	1,72	2,76	4,52	1,64
	28°C	2,69	5,32	1,98	2,76	5,19	1,88	2,75	4,86	1,77	2,74	4,53	1,65	2,81	4,42	1,57
	29°C	2,73	5,20	1,90	2,80	5,07	1,81	2,80	4,75	1,70	2,79	4,43	1,59	2,86	4,32	1,51
	30°C	2,78	5,08	1,83	2,85	4,96	1,74	2,85	4,64	1,63	2,84	4,33	1,52	2,91	4,22	1,45
	31°C	2,83	4,96	1,75	2,90	4,84	1,67	2,90	4,53	1,56	2,89	4,22	1,46	2,96	4,12	1,39
	32°C	2,88	4,84	1,68	2,95	4,72	1,60	2,95	4,42	1,50	2,94	4,12	1,40	3,01	4,02	1,33
	33°C	2,93	4,72	1,61	3,00	4,60	1,53	3,00	4,31	1,44	2,99	4,02	1,34	3,06	3,92	1,28
	34°C	2,97	4,60	1,55	3,05	4,48	1,47	3,04	4,20	1,38	3,04	3,91	1,29	3,11	3,82	1,23
	35°C	3,02	4,48	1,48	3,10	4,37	1,41	3,09	4,09	1,32	3,09	3,81	1,23	3,16	3,72	1,17

HC : Heating capacity (kW)

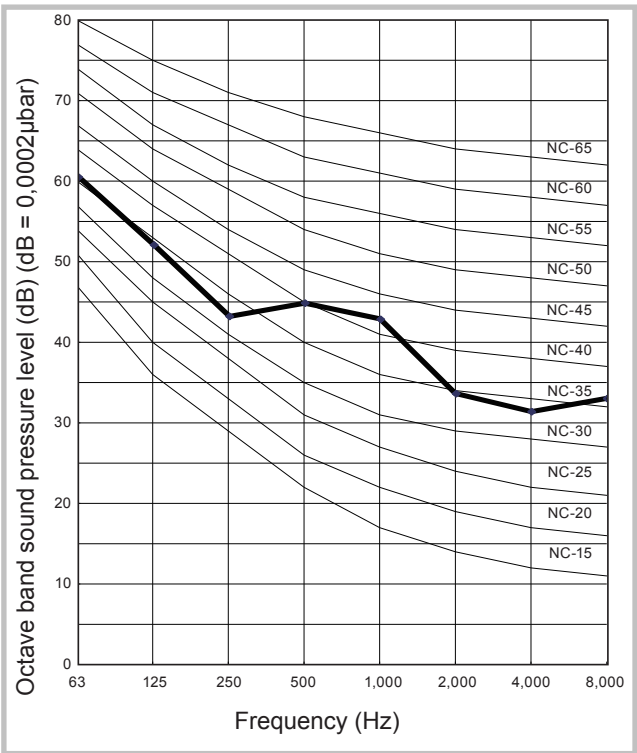
IP : Input power (kW)

COP : Coefficient of performance

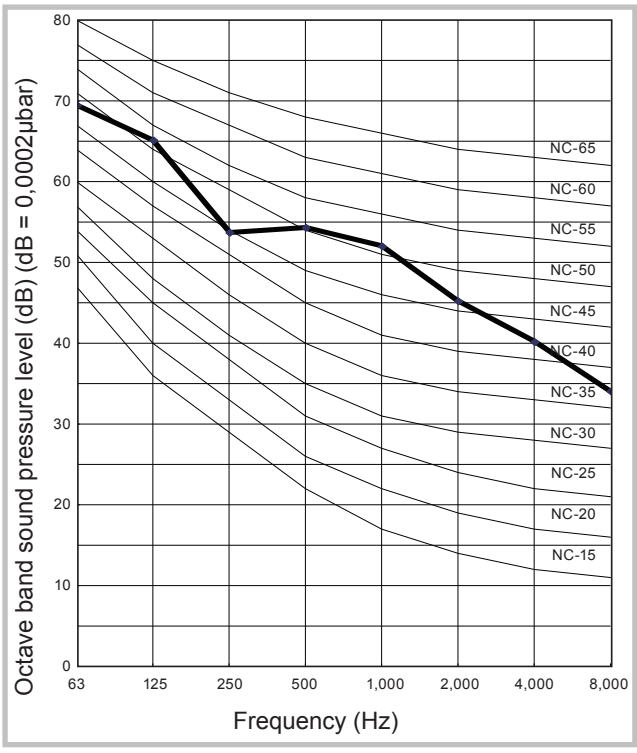
2.3 Sound power of the outdoor unit

2.3.1 Sound power curves in heating mode

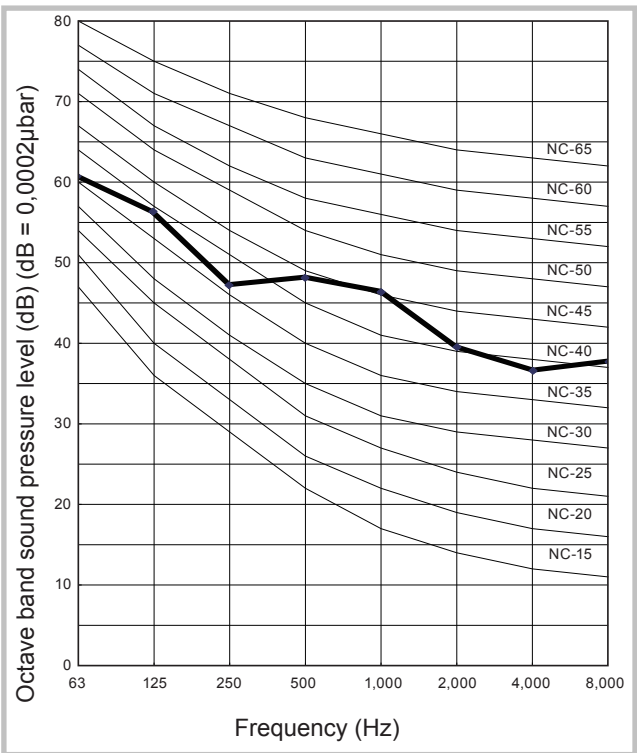
Loria 6004



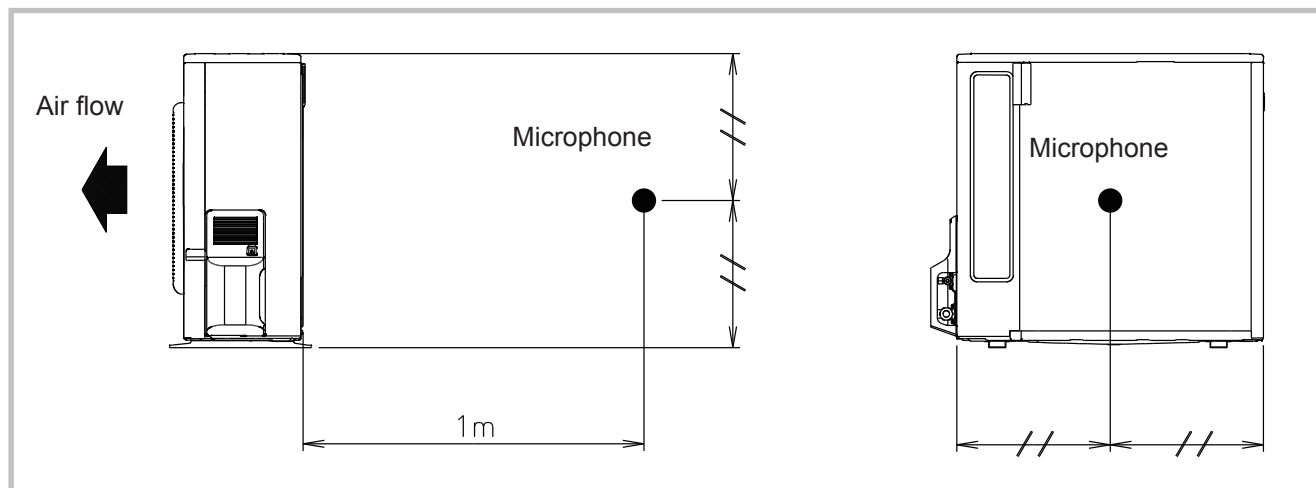
Loria 6008



Loria 6006



2.3.2 Sound level check point



2.4 Safety devices

ATTENTION : In order to avoid all risks due to inadvertent resetting of the thermal cutout, this model must not be powered via an external switch, such as a timer, or be connected to a circuit that is regularly switched on and off by the electricity supplier.

2.4.1 Outdoor unit

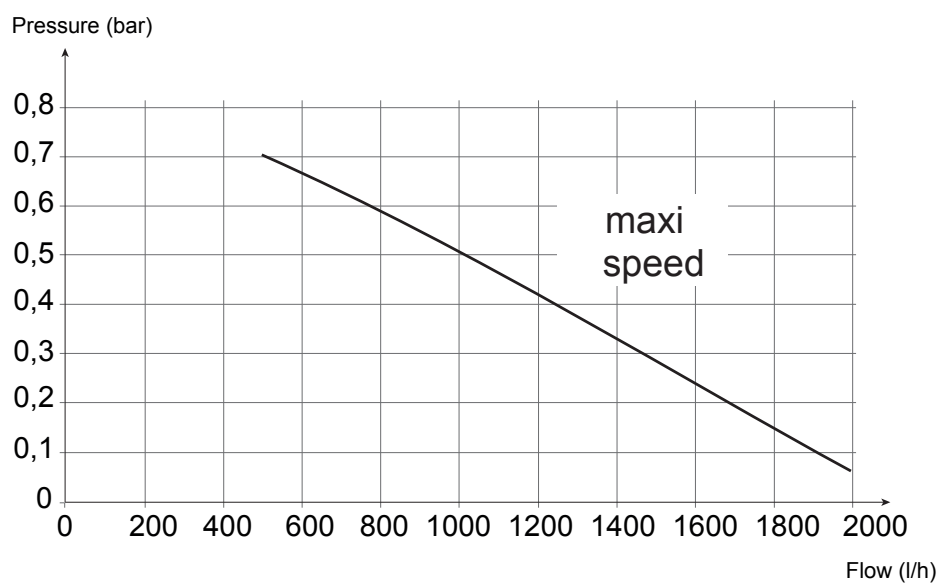
		Ioria 6004 Ioria 6006	Ioria 6008
Calibre curve D breaker		16 A	20 A
Circuit protection	Fuse (near power supply)	20 A 250 V	25 A 250 V
	Fuse (Main PCB)	15 A 250 V	3,15 A 250 V
		10 A 250 V	
		3.15 A 250 V	
		OFF : 100 ±10°C ON : 95 ±10°C	
Fan protection	Thermal protector	OFF : 108°C ON : 80°C	
Compressor protection	Thermal protection program (Compressor temp.)	OFF : 110°C ON : after 7 minutes	
	Thermal protection program (Discharge temp.)	OFF : 67°C ON : 63°C	
High pressure protection	Thermal protection program (Heat exchanger temp.)	OFF : 4.2 MPa ON : 3.0 MPa	
	Pressure sensor	OFF : 0.12 MPa ON : 0.15 MPa	
Low pressure protection (cool mode)	Pressure sensor	OFF : 0.12 MPa ON : 0.15 MPa	

2.4.2 Hydraulic unit

Circuit protection back-ups PAC curve C		16 A
High pressure protection		0.3 Mpa (3 Bar)
Outgoing temperature max. protection		90°C
Protection circuit	Control board of outdoor unit	3.15A 250V
	Interface board	3.15A 250V

3. Hydraulic circuit

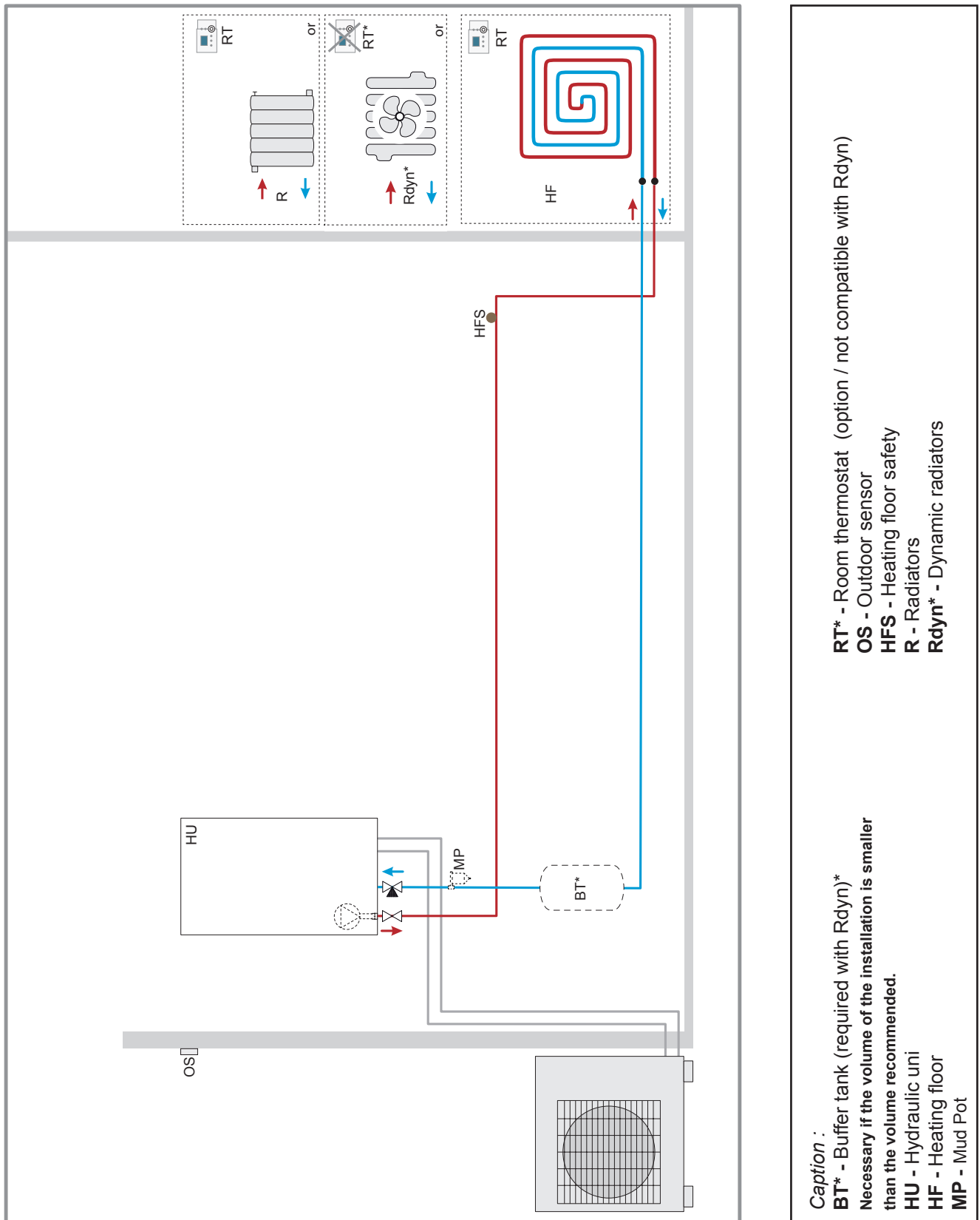
3.1 Available pressures



3.2 Overall hydraulic layout

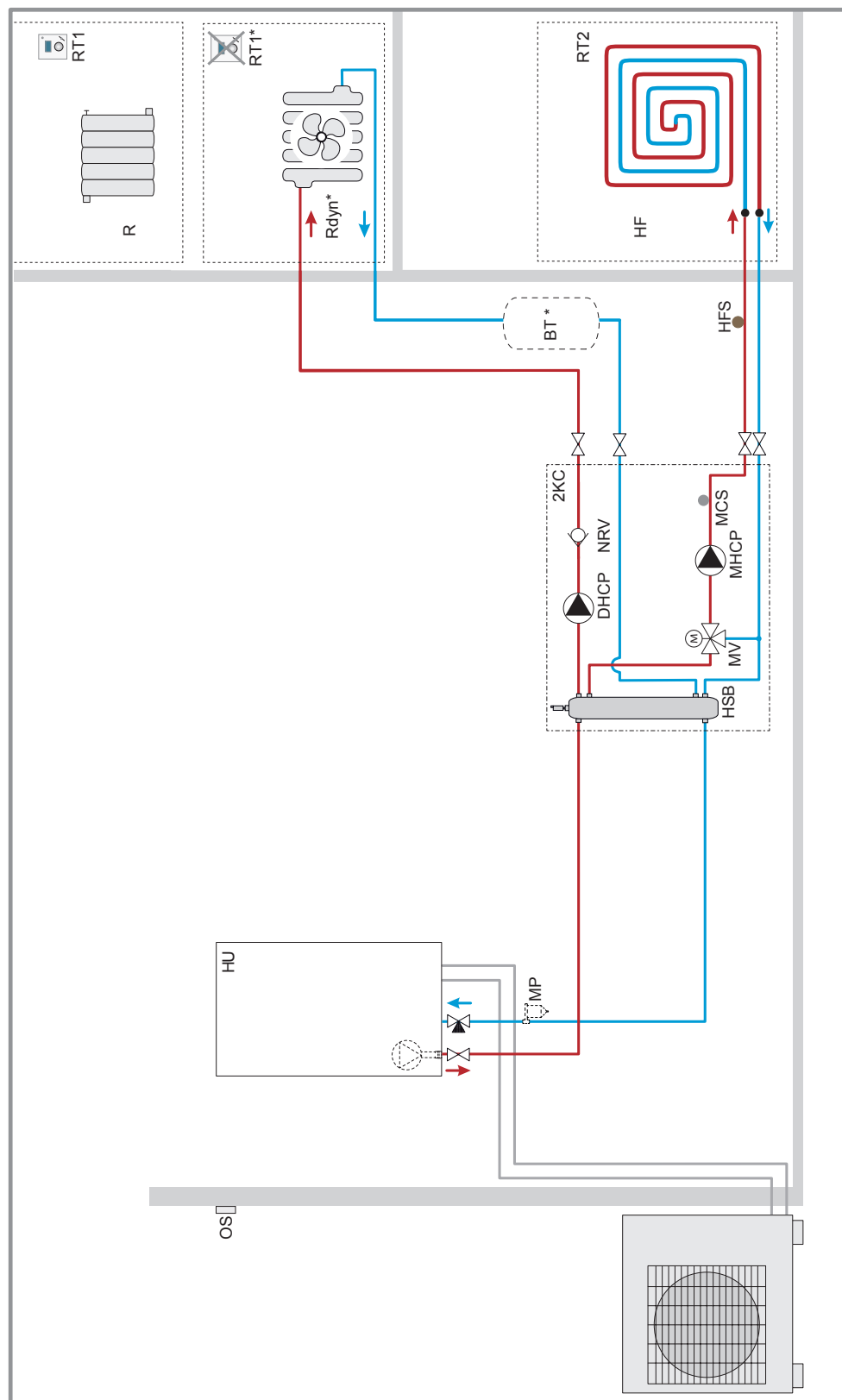
- Configuration 1 : 1 heating circuit

Installation of configuration, see parameter  3 - Pre-selection ... (§ 4.4.2, page 40) of installation manual.



- Configuration 3 : 2 heating circuits with hydraulic separator bottle

Installation of configuration, see parameter  3 - Pre-selection ... (§ 4.4.2, page 40) of installation manual.



Caption :

HSB - Hydraulic separator bottle

BT* - Buffer tank (required with Rdyn)

Necessary if the volume of the installation is smaller than the volume recommended.

NRV - Non return valve

DHCP - Direct heating circuit pump

MHCP - Mixing heating circuit pump

OS - Outdoor sensor

2KC - 2nd circuit kit

HU - Hydraulic unit

HF - Heating floor

R - Radiators

RT1 / RT2 - Room thermostat circuit (option / not compatible with Rdyn) - Circuit 1 / Circuit 2

Rdyn* - Dynamic radiators

MCS - Mixing circuit sensor

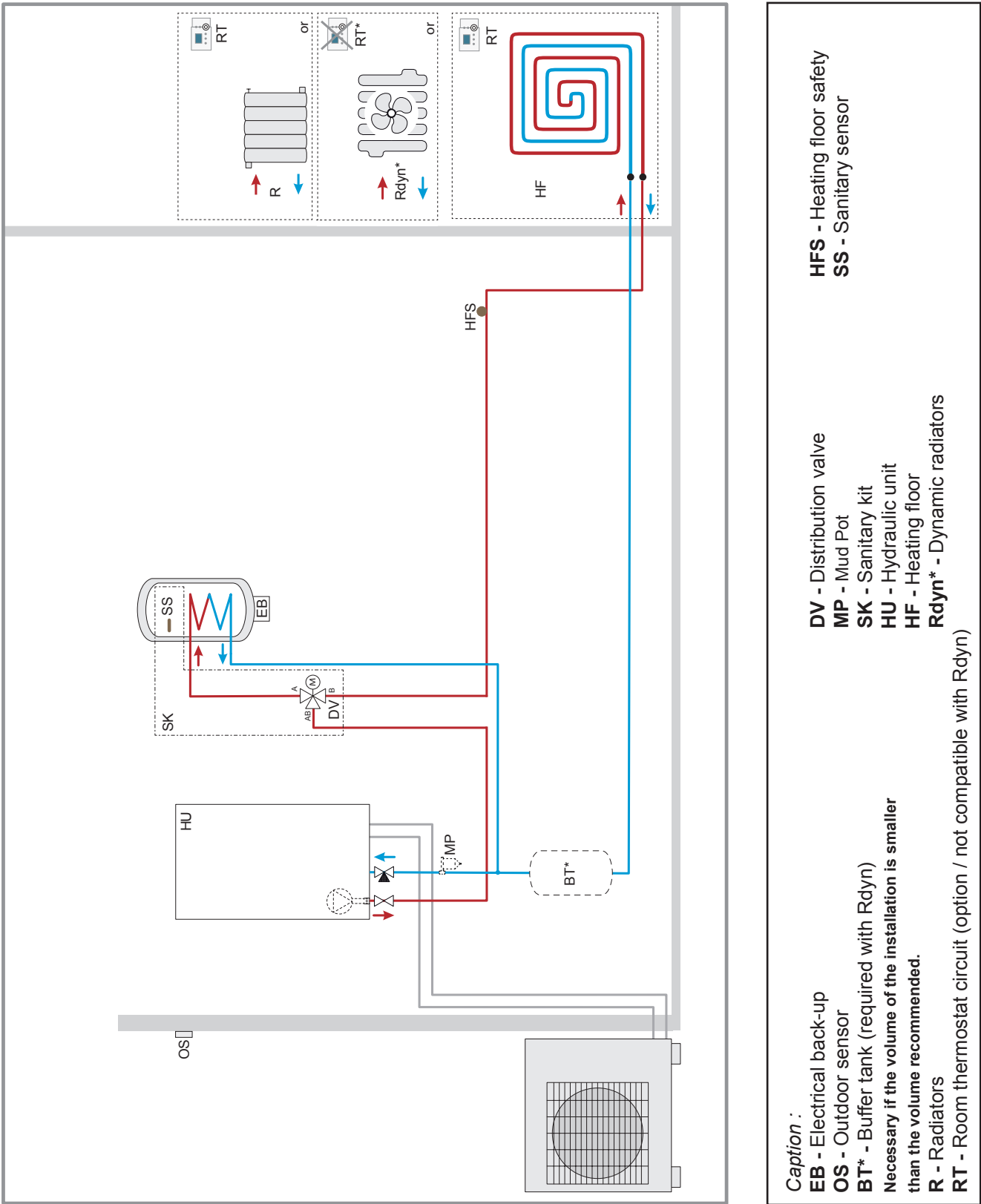
HFS - Heating floor safety

MV - Mixer valve

MP - Mud Pot

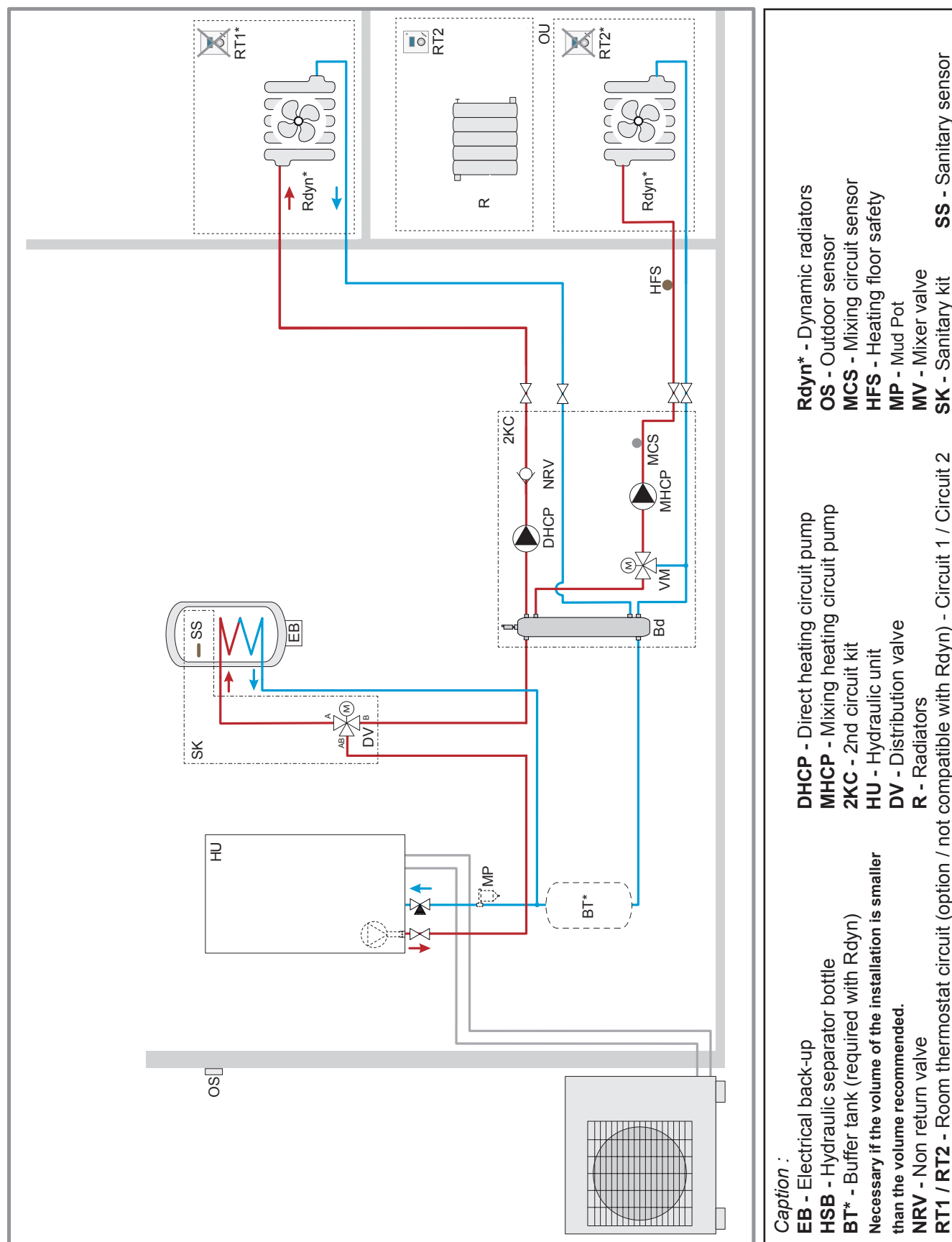
• Configuration 4 : 1 heating circuit and DHW tank

Installation of configuration, see parameter 3 - Pre-selection ... (§ 4.4.2, page 40) of installation manual.



- Configuration 6 : 2 heating circuits with hydraulic separator bottle and DHW tank

Installation of configuration, see parameter  3 - Pre-selection ... (§ 4.4.2, page 40) of installation manual.



4. Options

Function	Name	Reference
Ambient sensor	Wired Room thermostat UA55	076 310
DHW	DHW kit	076 312
2 Zones	2 Zones kit	076 311
Cooling	Cooling kit*	076 313
Measurement of consumption	PAC kit	602 231
Backsplash*		076 314
Modem compatibility beam *		075 120
Accessories for outdoor unit ⁽¹⁾	Anti-vibration blocks (x4)	523 574
	Floor support 450mm (x2)	809 532
	Black rubber floor support (x2)	809 536
	Floor support plug (par 4)	809 540
	Floor support 650 mm (par 2)	809 550
	Heater for drain pan	809 644
	Drain pan	074 008
Refrigerant pipes ⁽³⁾	KM1 5M 1/2"-1/4"	809 155
	KM1 7M 1/2"-1/4"	809 157
	KM1 10M 1/2"-1/4"	809 160
	KM1 25M 1/2"-1/4"	809 165
	KM1 5M 5/8"-1/4"	809 255
	KM1 7M 5/8"-1/4"	809 257
	KM1 10M 5/8"-1/4"	809 260
	KM1 25M 5/8"-1/4"	809 265
Protective chutes PVC for refrigerant pipes	GO 80x60 (8 length of 2m)	809 709
	GO 80x60 (2 length of 2m)	809 716
	CGO 80x60 (x5)	809 723
	PMC 80x60 (x5)	809 729
Other	Mud Pot	075 100

* Product available for the first half 2015.

⁽¹⁾ Installer has to make sure that the wall bracket installation will not transmit vibration (ground position is being preferred).

⁽²⁾ For a better protection of insulation against UV, Atlantic recommend the installation of protection pipes together with refrigerant pipes.



Complies with :

- Low Voltage Directive 2006/95/CE under standard in EN 60335-1, EN 60335-2-40.
- Electromagnetic Compatibility Directive 2004/108/CE.
- Machinery Directive 2006/42/CE.
- Directive for pressure equipment 97/23/CE.
- Eco-design directive 2009/125/CE.
- Labeling directive 2010/30/CE.

This appliance also conforms to :

- Ordinance n° 92-1271 (and its amendments) for some refrigerants used in refrigeration and air conditioning equipment.
- Regulation 842/2006 of the European parliament on some fluorinated greenhouse gases.
- The standards relating to the product and the testing methods used: Air-conditioners, refrigeration units and heat pumps with compressor driven by electric motor for heating and refrigeration in EN 14511-1, EN 14511-2, EN 14511-3, EN 14511-4.
- To standard EN 12102 : Air-conditioners, heat pumps and dehumidifiers with compressor driven by electric motor. Measurement of airborne noise. Determination of acoustic power level.



This appliance is marked with this symbol. This means that electrical and electronic products shall not be mixed with general household waste.

European Community countries(*), Norway, Iceland and Liechtenstein should have a dedicated collection system for these products.

Do not try to dismantle the system yourself as this could have harmful effects on your health and on the environment.

The dismantling and treatment of refrigerant, oil and other parts must be done by a qualified installer in accordance with relevant local and national regulations.

This appliance must be treated at a specialized treatment facility for re-use, recycling and other forms of recovery and shall not be disposed of in the municipal waste stream.

Please contact the installer or local authority for more information.

* subject to the national law of each member state.



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