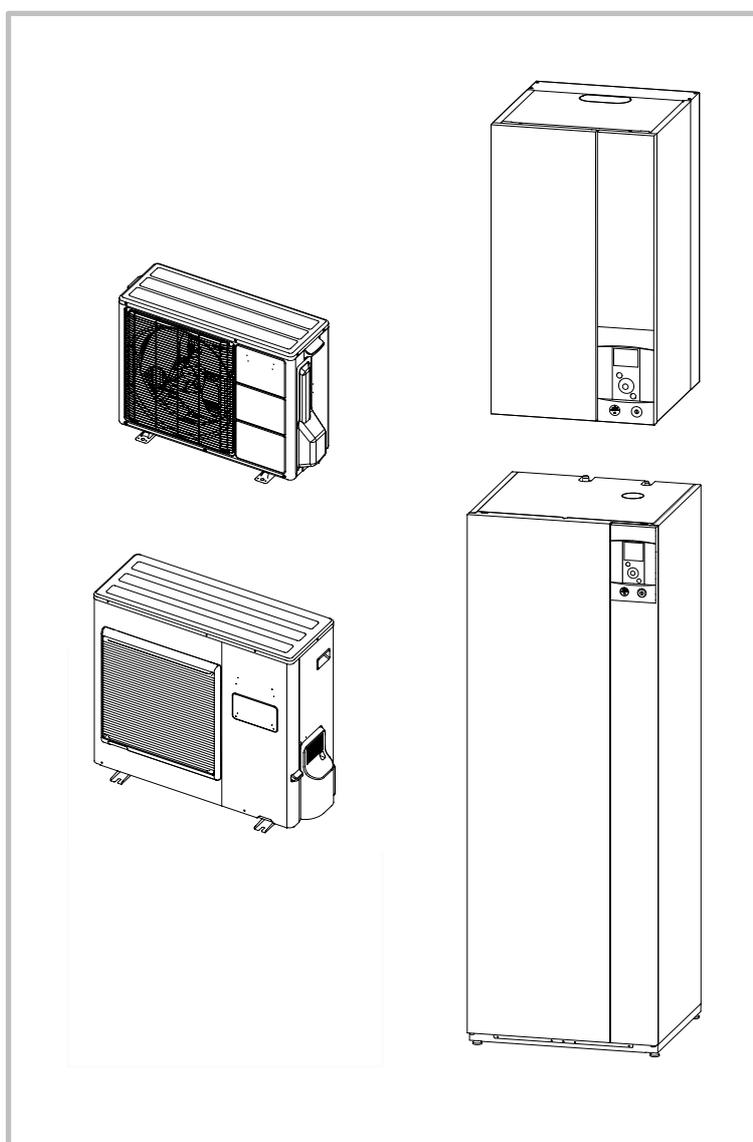


alféa extensa A.I and alféa extensa duo A.I.

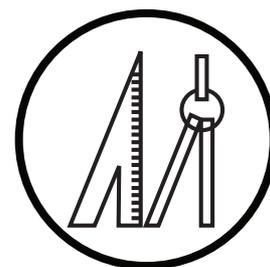
**Split air / water heat pumps
heating only or heating + DHW**



Document n°1874-3~ 18/06/2018

FR

EN



Technical data
Intended for professionals.
Completed by the
installation
manuals 1872 and 1873.

www.atlantic-comfort.com

Subject to modifications without notice.
Non contractual document.

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1. General description

For more information, please refer to the installation manuals 1872 (alféa extensa A.I.) and 1873 (alféa extensa duo A.I.).

• Table of dimensions and weight

	alféa extensa A.I. 5	alféa extensa A.I. 6	alféa extensa A.I. 8	alféa extensa A.I. 10
Reference	526 230	526 231	526 232	526 233
Outdoor unit name	WOYA060LFCA		WOYA080LFCA	WOYA100LFTA
Outdoor unit code	700 171		700 172	700 173
Dimensions H x W x D (mm)	622 x 790 x 290			830 x 900 x 330
Weight (kg)	41		42	60
Hydraulic unit	024 124	024 125		
Dimensions H x W x D (mm)	842 x 448 x 477			
Weight empty / water (kg)	42 / 58			

	alféa extensa A.I. 13	alféa extensa A.I. 16
Reference France / International	526 234	526 235
Outdoor unit name	WOYG112LHT	WOYG140LCTA
Outdoor unit code	700 197	700 175
Dimensions H x W x D (mm)	1290 x 970 x 400	
Weight (kg)	92	
Hydraulic unit	024 126	
Dimensions H x W x D (mm)	842 x 448 x 477	
Weight empty / water (kg)	42 / 58	

	alféa extensa duo A.I. 5	alféa extensa duo A.I. 6	alféa extensa duo A.I. 8	alféa extensa duo A.I. 10
Reference	526 236	526 237	526 238	526 239
Outdoor unit name	WOYA060LFCA		WOYA080LFCA	WOYA100LFTA
Outdoor unit code	700 171		700 172	700 173
Dimensions H x W x D (mm)	622 x 790 x 290			830 x 900 x 330
Weight (kg)	41		42	60
Hydraulic unit	024 127	024 128		
Dimensions H x W x D (mm)	1851 x 648 x 684			
Weight empty / water (kg)	152 / 370			

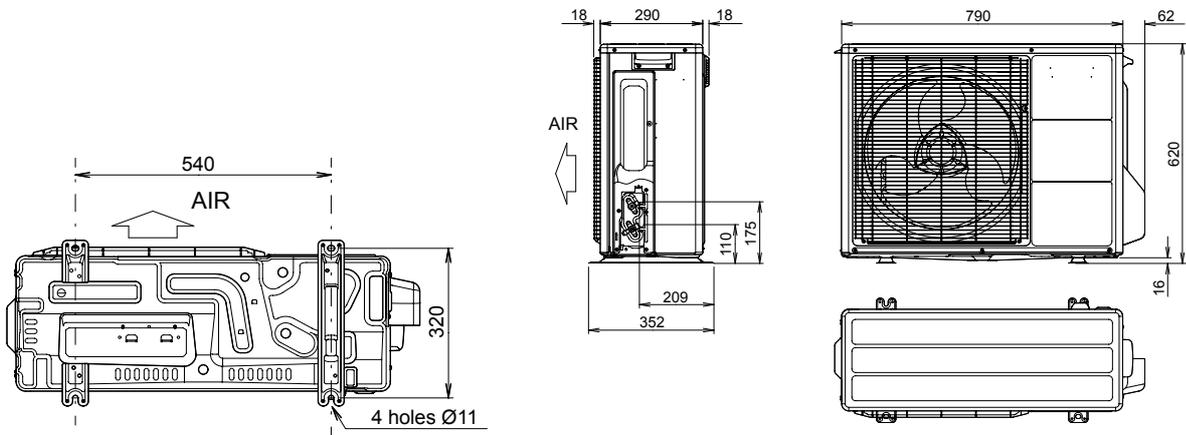
• Calculation of buffer volumes

Model	Outdoor Unit	Minimum volume in liters BY CIRCUIT (without HP)		
		Fan-coil	Radiators	Heating-cooling floor
alféa extensa A.I. 5,6 / alféa extensa duo A.I. 5,6	WOYA060LFCA	23	12	23
alféa extensa A.I. 8 / alféa extensa duo A.I. 8	WOYA080LFCA	36	33	36
alféa extensa A.I. 10 / alféa extensa duo A.I. 10	WOYA100LFTA	49	44	49
alféa extensa A.I. 13	WOYG112LHT	55	50	55
alféa extensa A.I. 16	WOYG140LCTA	74	66	74

• Drawing

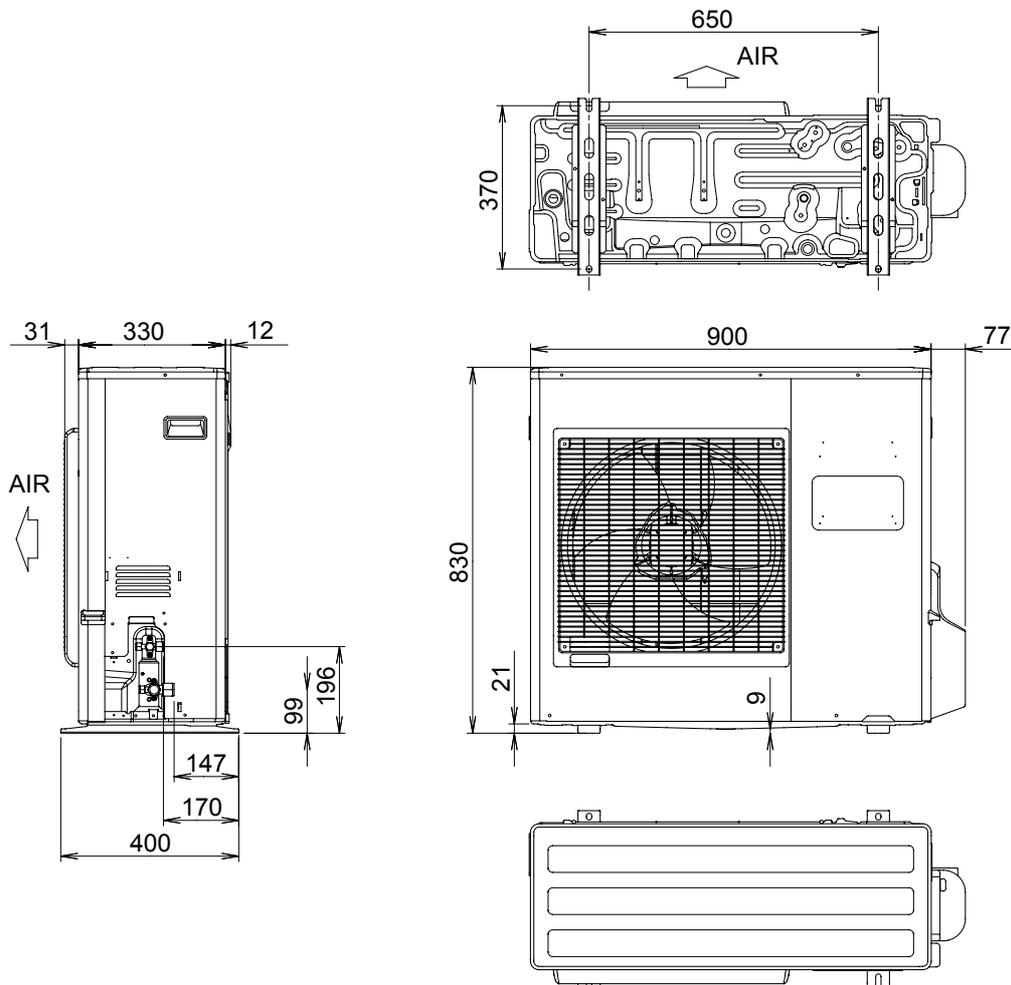
Outdoor unit :

- Models size 5, 6 and 8



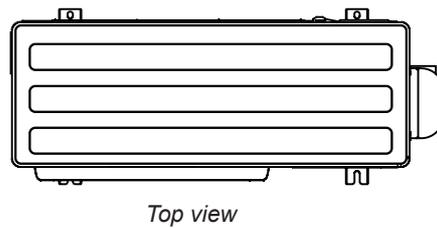
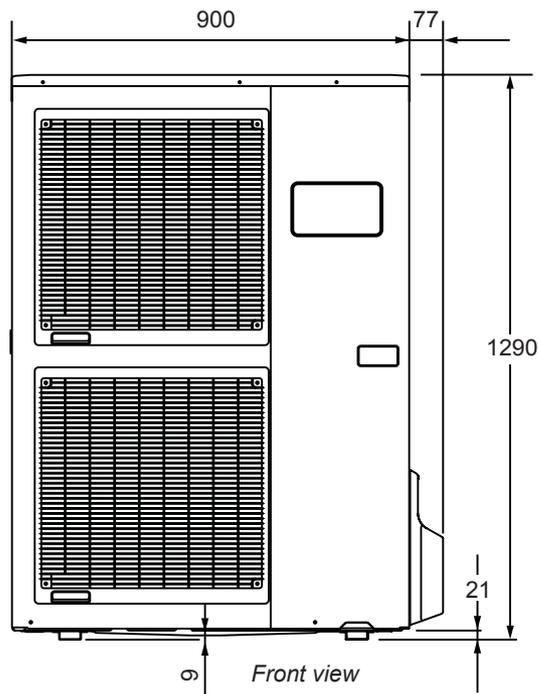
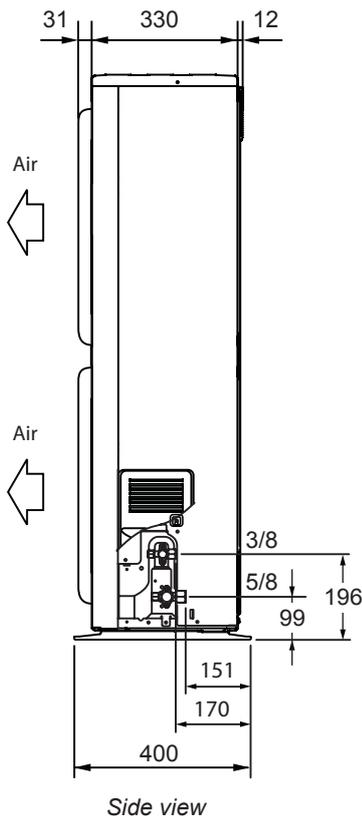
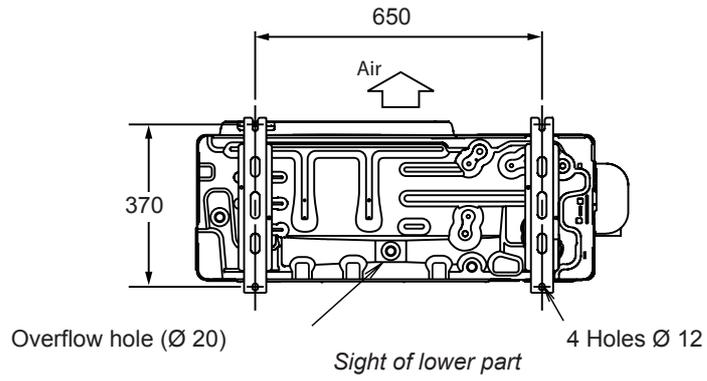
Unit = mm

- Model size 10



Unit = mm

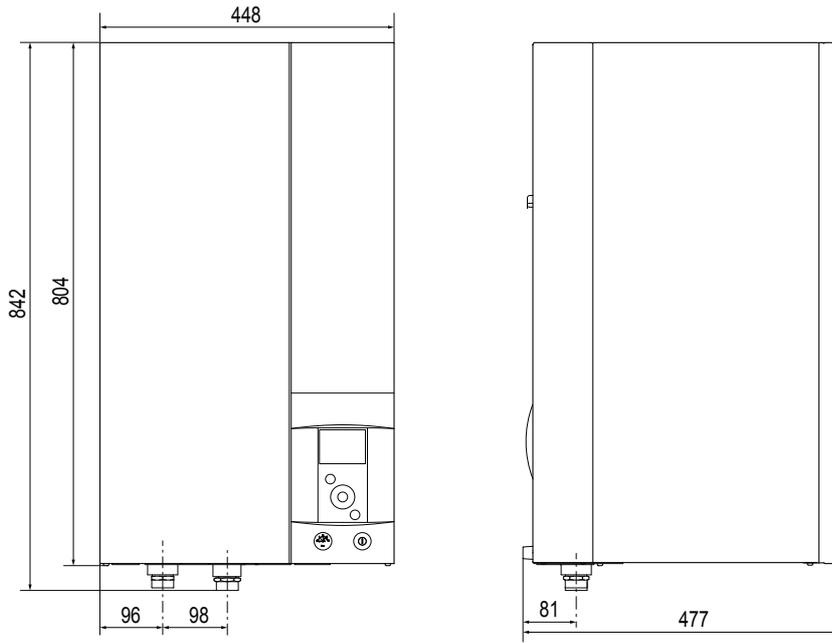
- Models size 13 and 16



Unit = mm

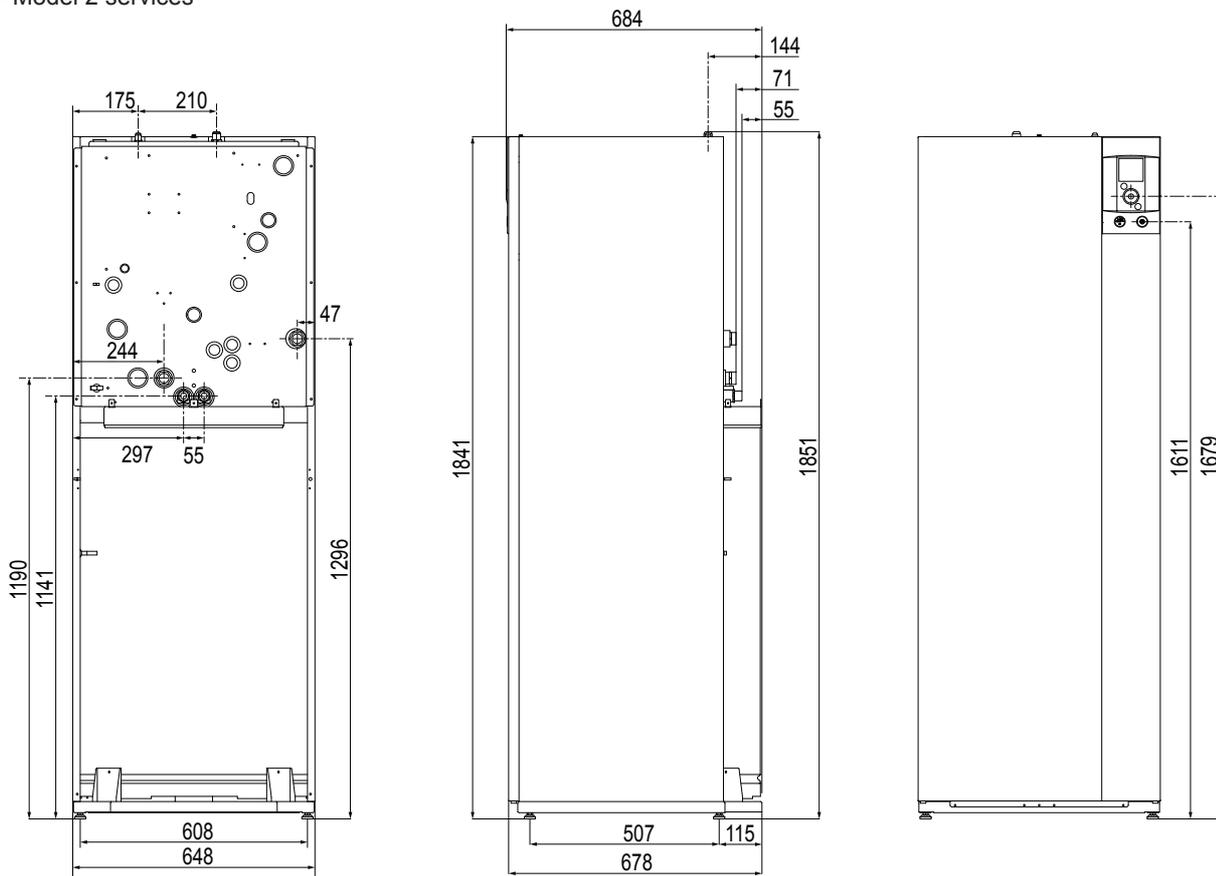
Hydraulic unit :

- Model 1 service



Unit = mm

- Model 2 services



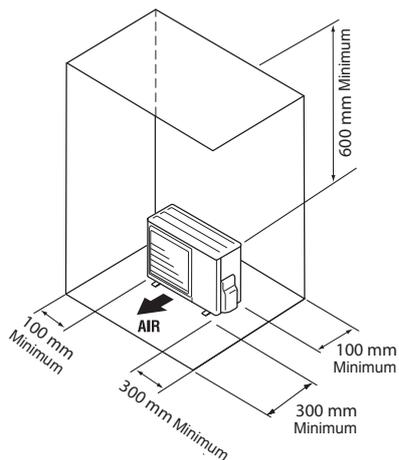
Unit = mm

• **Installation area**

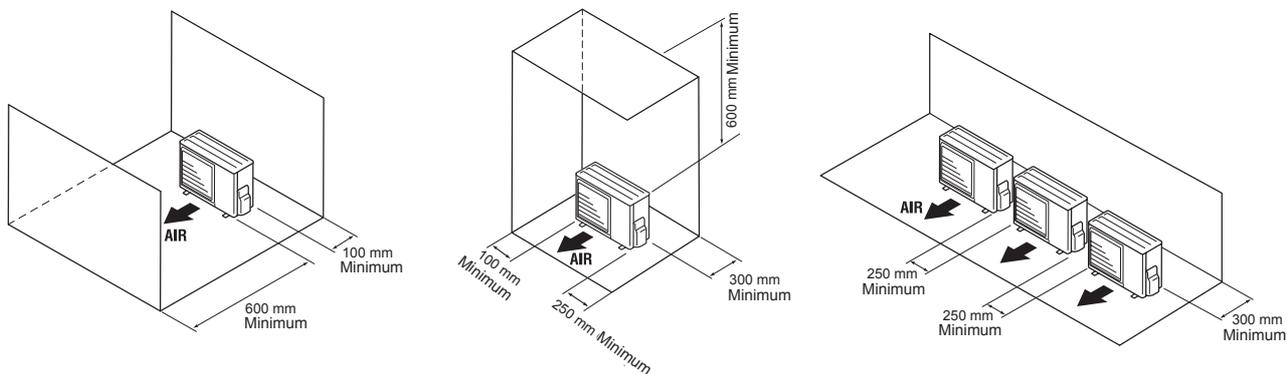
Outdoor unit :

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.

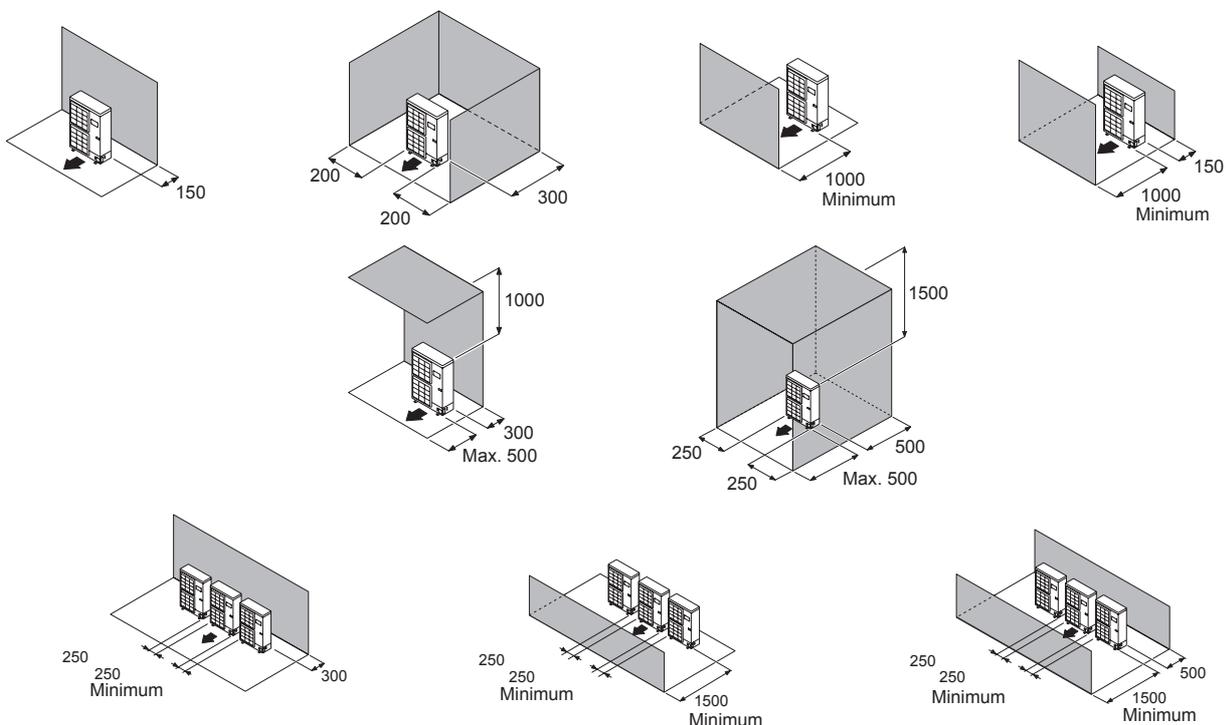
- Models size 5, 6 and 8



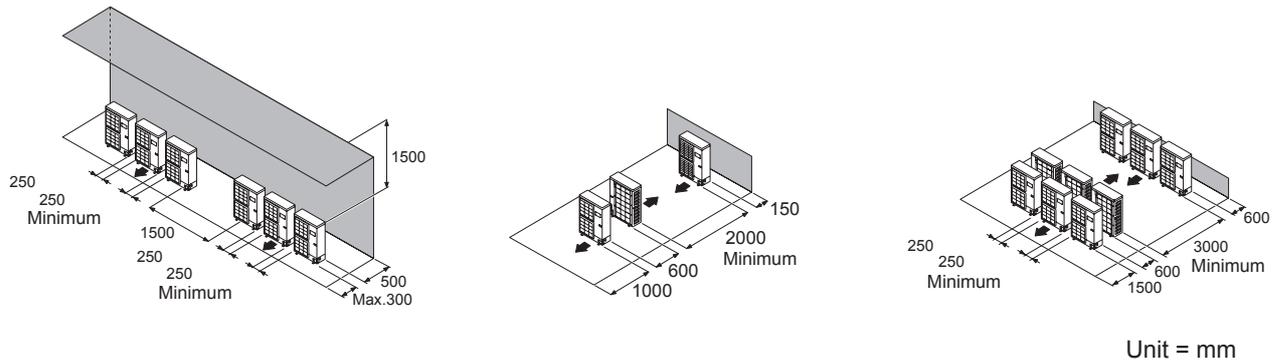
- Model size 10



- Models size 13 and 16

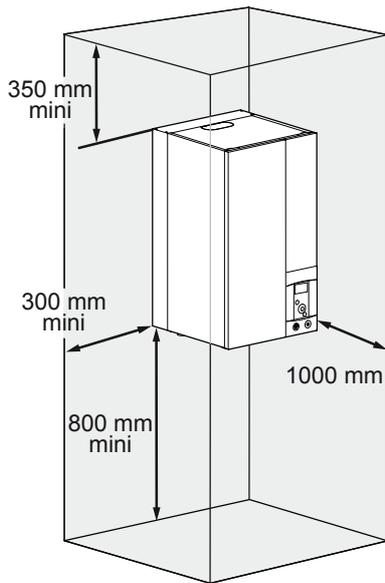


Unit = mm

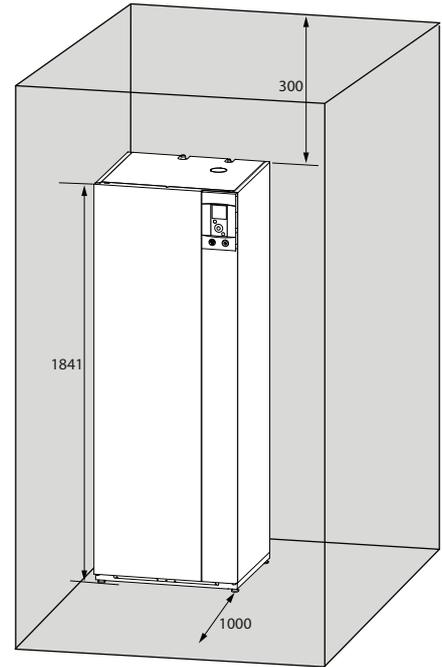


Hydraulic unit :

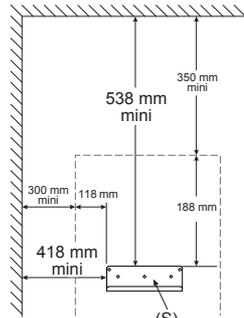
- Model 1 service



- Model 2 services



Unit = mm



Hydraulic module installation

In accordance with EN 378-1 -2017 standard

(Refrigerating systems and heat pumps - Safety and environmental requirements), the system's hydraulic unit and all refrigeration connections passing through inhabited areas must comply with the minimum room volume requirements shown hereafter.

The minimum volume of a room (in m³) is calculated using the formula: «fluid fill load» (in kg) / 0.39.

Alternatively, you must ensure that

- the location has natural ventilation through another room where the combined volume of the two rooms is greater than «liquid fill load» (in kg) / 0.39 kg/m³. The opening between the two rooms must have a door clearance of at least 1 cm.

- or that the location is mechanically ventilated.

- Pipe connections**

		alféa extensa A.I. 5	alféa extensa A.I. 6	alféa extensa A.I. 8	alféa extensa A.I. 10	alféa extensa A.I. 13	alféa extensa A.I. 16
Input and Output heating diameters (male thread) circuit (inch)	pouce	1"	1"	1"	1"	1"	1"
Diameter of «Gas» pipes (inch)		1/2	1/2	5/8	5/8	5/8	5/8
Diameter of «Liquid» pipes (inch)		1/4	1/4	1/4	3/8	3/8	3/8

		alféa extensa duo A.I. 5	alféa extensa duo A.I. 6	alféa extensa duo A.I. 8	alféa extensa duo A.I. 10
Input and Output heating diameters (male thread) circuit (inch)	pouce	1"	1"	1"	1"
Diameter of «Gas» pipes (inch)		1/2	1/2	5/8	5/8
Diameter of «Liquid» pipes (inch)		1/4	1/4	1/4	3/8

- ERP datas**

	alféa extensa A.I. 5	alféa extensa A.I. 6	alféa extensa A.I. 8	alféa extensa A.I. 10	alféa extensa A.I. 13	alféa extensa A.I. 16
Energy class - heating (35°/55°)	A++ / A+	A++ / A+	A++ / A+	A++ / A+	A++ / A+	A+ / A+
Rated heat output (kW)	4 / 4	5 / 5	7 / 6	8 / 8	11 / 9	13 / 11
Energy seasonal efficiency - heating (35°/55°) (%)	171 / 117	171 / 117	158 / 120	157 / 115	153 / 114	150 / 115
Annual energy consumption - heating (35°/55°) (kWh)	2160 / 3027	2505 / 3180	3375 / 3886	4415 / 5415	6062 / 6623	6824 / 8041
Acoustic power (indoor / outdoor) (dBa)	46 / 63	46 / 63	46 / 69	46 / 69	46 / 69	46 / 70

	alféa extensa duo A.I. 5	alféa extensa duo A.I. 6	alféa extensa duo A.I. 8	alféa extensa duo A.I. 10
Energy class - heating (35°/55°)	A++ / A+	A++ / A+	A++ / A+	A++ / A+
Rated heat output (kW)	4 / 4	5 / 5	7 / 6	8 / 8
Energy seasonal efficiency - heating (35°/55°) (%)	171 / 117	171 / 117	158 / 120	157 / 115
Annual energy consumption - heating (35°/55°) (kWh)	2160 / 3027	2505 / 3180	3375 / 3886	4415 / 5415
Acoustic power (indoor / outdoor) (dBa)	46 / 63	46 / 63	46 / 69	46 / 69
Declared load profile - DHW	L	L	L	L
Energy class - DHW	A+	A+	A+	A+
Annual energy consumption - DHW (kWh)	880	880	880	880
Efficacité énergétique saisonnière - DHW (%)	120	120	120	120

2. Performances

2.1 Nominal performances and sound power

		alféa extensa A.I. 5	alféa extensa A.I. 6	alféa extensa A.I. 8	alféa extensa A.I. 10	alféa extensa A.I. 13	alféa extensa A.I. 16
+7°C/+35°C Floor heating	Heating capacity (kW)	4.50	6,00	7,50	10,00	14,01	16,06
	Input power (kW)	1.00	1,41	1,84	2,49	3,50	4,37
	COP	4.52	4,26	4,08	4,02	4,00	3,68
+2°C/+35°C Floor heating	Heating capacity (kW)	4.50	4,95	5,65	7,70	6,97	6,97
	Input power (kW)	1.39	1,53	1,78	2,47	2,24	2,24
	COP	3.24	3,24	3,17	3,12	3,11	3,11
-7°C/+35°C Floor heating	Heating capacity (kW)	4.10	4,60	5,70	7,40	9,45	12,93
	Input power (kW)	1.47	1,74	2,23	2,97	3,92	5,32
	COP	2.79	2,64	2,56	2,49	2,41	2,43
+7°C/+45°C Radiator low voltage	Heating capacity (kW)	4.50	5,10	6,20	8,27	10,43	13,60
	Input power (kW)	1.31	1,50	1,87	2,53	3,19	4,38
	COP	3.44	3,40	3,32	3,27	3,27	3,11
+2°C/+45°C Radiator low voltage	Heating capacity (kW)	4.00	4,50	5,00	6,80	5,82	5,82
	Input power (kW)	1.48	1,69	1,92	2,62	2,24	2,24
	COP	2.70	2,66	2,60	2,60	2,60	2,60
-7°C/+45°C Radiator low voltage	Heating capacity (kW)	4.10	4,45	5,05	7,40	9,25	11,20
	Input power (kW)	1.86	2,04	2,47	3,70	4,38	5,22
	COP	2.20	2,18	2,04	2,00	2,12	2,15
+7°C/+55°C Radiator high voltage	Heating capacity (kW)	4.50	4,50	5,00	7,00	7,84	10,03
	Input power (kW)	1.79	1,79	1,94	2,86	3,25	4,01
	COP	2.51	2,51	2,58	2,45	2,41	2,50
-7°C/+55°C Radiator high voltage	Heating capacity (kW)	3.70	3,85	5,20	7,00	7,29	8,65
	Input power (kW)	2.20	2,33	3,34	4,15	4,45	5,20
	COP	1.68	1,65	1,56	1,69	1,64	1,66
Sound power* (dBA)	Outdoor unit	63	63	69	69	69	70
	Hydraulic unit	46	46	46	46	46	46

Test conditions comply with EN 14-511.

* Sound power at 7/55°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.

		alféa extensa duo A.I. 5	alféa extensa duo A.I. 6	alféa extensa duo A.I. 8	alféa extensa duo A.I. 10
+7°C/+35°C Floor heating	Heating capacity (kW)	4,50	6,00	7,50	10,00
	Input power (kW)	1,00	1,41	1,84	2,49
	COP	4,52	4,26	4,08	4,02
+2°C/+35°C Floor heating	Heating capacity (kW)	4,50	4,95	5,65	7,70
	Input power (kW)	1,39	1,53	1,78	2,47
	COP	3,24	3,24	3,17	3,12
-7°C/+35°C Floor heating	Heating capacity (kW)	4,10	4,60	5,70	7,40
	Input power (kW)	1,47	1,74	2,23	2,97
	COP	2,79	2,64	2,56	2,49
+7°C/+45°C Radiator low voltage	Heating capacity (kW)	4,50	5,10	6,20	8,27
	Input power (kW)	1,31	1,50	1,87	2,53
	COP	3,44	3,40	3,32	3,27
+2°C/+45°C Radiator low voltage	Heating capacity (kW)	4,00	4,50	5,00	6,80
	Input power (kW)	1,48	1,69	1,92	2,62
	COP	2,70	2,66	2,60	2,60
-7°C/+45°C Radiator low voltage	Heating capacity (kW)	4,10	4,45	5,05	7,40
	Input power (kW)	1,86	2,04	2,47	3,70
	COP	2,20	2,18	2,04	2,00
+7°C/+55°C Radiator high voltage	Heating capacity (kW)	4,50	4,50	5,00	7,00
	Input power (kW)	1,79	1,79	1,94	2,86
	COP	2,51	2,51	2,58	2,45
-7°C/+55°C Radiator high voltage	Heating capacity (kW)	3,70	3,85	5,20	7,00
	Input power (kW)	2,20	2,33	3,34	4,15
	COP	1,68	1,65	1,56	1,69
Sound power* (dBA)	Hydraulic unit	46	46	46	46
	Outdoor unit	63	63	69	69

Test conditions comply with EN 14-511.

* Sound power at 7/55°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)

HC : Heating capacity (kW)

IP : Input power (kW)

COP : Coefficient of performance

2.2.1 alféa extensa A.I. 5 and alféa extensa duo A.I. 5

	Starting temperature																					
	25°C			30°C			35°C			40°C			45°C			50°C			55°C			
	IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP	
Outdoor temperature	35°C	0.46	4.50	9.78	0.53	4.50	8.49	0.60	4.50	7.50	0.71	4.50	6.34	0.84	4.50	5.36	1.02	4.50	4.41	1.25	4.50	3.60
	34°C	0.45	4.50	10.00	0.53	4.50	8.49	0.61	4.50	7.38	0.71	4.50	6.34	0.85	4.50	5.29	1.03	4.50	4.37	1.26	4.50	3.57
	33°C	0.47	4.50	9.57	0.54	4.50	8.33	0.61	4.50	7.38	0.72	4.50	6.25	0.86	4.50	5.23	1.03	4.50	4.37	1.27	4.50	3.54
	32°C	0.46	4.50	9.78	0.54	4.50	8.33	0.62	4.50	7.26	0.73	4.50	6.16	0.86	4.50	5.23	1.04	4.50	4.33	1.28	4.50	3.52
	31°C	0.47	4.50	9.57	0.55	4.50	8.18	0.63	4.50	7.14	0.74	4.50	6.08	0.87	4.50	5.17	1.05	4.50	4.29	1.29	4.50	3.49
	30°C	0.49	4.50	9.18	0.56	4.50	8.04	0.63	4.50	7.14	0.74	4.50	6.08	0.88	4.50	5.11	1.06	4.50	4.25	1.30	4.50	3.46
	29°C	0.48	4.50	9.38	0.56	4.50	8.04	0.64	4.50	7.03	0.75	4.50	6.00	0.89	4.50	5.06	1.07	4.50	4.21	1.31	4.50	3.44
	28°C	0.49	4.50	9.18	0.57	4.50	7.89	0.65	4.50	6.92	0.76	4.50	5.92	0.90	4.50	5.00	1.08	4.50	4.17	1.32	4.50	3.41
	27°C	0.49	4.50	9.18	0.57	4.50	7.89	0.65	4.50	6.92	0.77	4.50	5.84	0.91	4.50	4.95	1.09	4.50	4.13	1.33	4.50	3.38
	26°C	0.50	4.50	9.00	0.58	4.50	7.76	0.66	4.50	6.82	0.77	4.50	5.84	0.91	4.50	4.95	1.10	4.50	4.09	1.34	4.50	3.36
	25°C	0.51	4.50	8.82	0.59	4.50	7.63	0.67	4.50	6.72	0.78	4.50	5.77	0.92	4.50	4.89	1.11	4.50	4.05	1.35	4.50	3.33
	24°C	0.50	4.50	9.00	0.59	4.50	7.63	0.68	4.50	6.62	0.79	4.50	5.70	0.93	4.50	4.84	1.12	4.50	4.02	1.36	4.50	3.31
	23°C	0.51	4.50	8.82	0.60	4.50	7.50	0.69	4.50	6.52	0.80	4.50	5.63	0.94	4.50	4.79	1.13	4.50	3.98	1.37	4.50	3.28
	22°C	0.51	4.50	8.82	0.60	4.50	7.50	0.69	4.50	6.52	0.81	4.50	5.56	0.95	4.50	4.74	1.14	4.50	3.95	1.38	4.50	3.26
	21°C	0.52	4.50	8.65	0.61	4.50	7.38	0.70	4.50	6.43	0.82	4.50	5.49	0.96	4.50	4.69	1.15	4.50	3.91	1.39	4.50	3.24
	20°C	0.53	4.50	8.49	0.62	4.50	7.26	0.71	4.50	6.34	0.83	4.50	5.42	0.97	4.50	4.64	1.16	4.50	3.88	1.41	4.50	3.19
	19°C	0.53	4.50	8.49	0.63	4.50	7.14	0.73	4.50	6.16	0.84	4.50	5.36	0.99	4.50	4.55	1.18	4.50	3.81	1.43	4.50	3.15
	18°C	0.56	4.50	8.04	0.65	4.50	6.92	0.74	4.50	6.08	0.86	4.50	5.23	1.01	4.50	4.46	1.20	4.50	3.75	1.46	4.50	3.08
	17°C	0.56	4.50	8.04	0.66	4.50	6.82	0.76	4.50	5.92	0.88	4.50	5.11	1.03	4.50	4.37	1.23	4.50	3.66	1.48	4.50	3.04
	16°C	0.58	4.50	7.76	0.68	4.50	6.62	0.78	4.50	5.77	0.90	4.50	5.00	1.05	4.50	4.29	1.25	4.50	3.60	1.51	4.50	2.98
	15°C	0.60	4.50	7.50	0.70	4.50	6.43	0.80	4.50	5.63	0.92	4.50	4.89	1.08	4.50	4.17	1.27	4.50	3.54	1.54	4.50	2.92
14°C	0.62	4.50	7.26	0.72	4.50	6.25	0.82	4.50	5.49	0.94	4.50	4.79	1.10	4.50	4.09	1.30	4.50	3.46	1.56	4.50	2.88	
13°C	0.64	4.50	7.03	0.74	4.50	6.08	0.84	4.50	5.36	0.97	4.50	4.64	1.13	4.50	3.98	1.32	4.50	3.41	1.59	4.50	2.83	
12°C	0.66	4.50	6.82	0.76	4.50	5.92	0.86	4.50	5.23	0.99	4.50	4.55	1.15	4.50	3.91	1.35	4.50	3.33	1.62	4.50	2.78	
11°C	0.67	4.50	6.72	0.78	4.50	5.77	0.89	4.50	5.06	1.02	4.50	4.41	1.18	4.50	3.81	1.38	4.50	3.26	1.65	4.50	2.73	
10°C	0.69	4.50	6.52	0.80	4.50	5.63	0.91	4.50	4.95	1.04	4.50	4.33	1.21	4.50	3.72	1.41	4.50	3.19	1.69	4.50	2.66	
9°C	0.72	4.50	6.25	0.83	4.50	5.42	0.94	4.50	4.79	1.07	4.50	4.21	1.24	4.50	3.63	1.44	4.50	3.13	1.72	4.50	2.62	
8°C	0.73	4.50	6.16	0.85	4.50	5.29	0.97	4.50	4.64	1.10	4.50	4.09	1.27	4.50	3.54	1.48	4.50	3.04	1.76	4.50	2.56	
7°C	0.76	4.50	5.92	0.88	4.50	5.11	1.00	4.50	4.50	1.13	4.50	3.98	1.30	4.50	3.46	1.51	4.50	2.98	1.79	4.50	2.51	
6°C	0.79	4.50	5.70	0.91	4.50	4.95	1.03	4.50	4.37	1.16	4.50	3.88	1.34	4.50	3.36	1.54	4.50	2.92	1.83	4.50	2.46	
5°C	0.82	4.50	5.49	0.94	4.50	4.79	1.06	4.50	4.25	1.20	4.50	3.75	1.37	4.50	3.28	1.58	4.50	2.85	1.88	4.50	2.39	
4°C	0.99	4.50	4.55	1.10	4.50	4.09	1.21	4.50	3.72	1.29	4.38	3.40	1.41	4.25	3.01	1.61	4.25	2.64	1.91	4.25	2.23	
3°C	1.10	4.50	4.09	1.20	4.50	3.75	1.30	4.50	3.46	1.36	4.31	3.17	1.45	4.13	2.85	1.65	4.13	2.50	1.94	4.13	2.13	
2°C	1.19	4.50	3.78	1.29	4.50	3.49	1.39	4.50	3.24	1.42	4.25	2.99	1.48	4.00	2.70	1.68	4.00	2.38	1.98	4.00	2.02	
1°C	1.18	4.46	3.78	1.29	4.46	3.46	1.40	4.46	3.19	1.45	4.24	2.92	1.52	4.01	2.64	1.72	3.99	2.32	2.00	3.97	1.99	
0°C	1.19	4.41	3.71	1.30	4.41	3.39	1.41	4.41	3.13	1.49	4.22	2.83	1.56	4.02	2.58	1.76	3.98	2.26	2.03	3.93	1.94	
-1°C	1.18	4.37	3.70	1.30	4.37	3.36	1.42	4.37	3.08	1.52	4.20	2.76	1.61	4.03	2.50	1.79	3.97	2.22	2.05	3.90	1.90	
-2°C	1.17	4.32	3.69	1.30	4.32	3.32	1.43	4.32	3.02	1.54	4.18	2.71	1.65	4.04	2.45	1.83	3.96	2.16	2.08	3.87	1.86	
-3°C	1.18	4.28	3.63	1.31	4.28	3.27	1.44	4.28	2.97	1.57	4.17	2.66	1.69	4.06	2.40	1.87	3.94	2.11	2.10	3.83	1.82	
-4°C	1.18	4.23	3.58	1.31	4.23	3.23	1.44	4.23	2.94	1.59	4.15	2.61	1.73	4.07	2.35	1.91	3.93	2.06	2.13	3.80	1.78	
-5°C	1.17	4.19	3.58	1.31	4.19	3.20	1.45	4.19	2.89	1.62	4.14	2.56	1.78	4.08	2.29	1.94	3.92	2.02	2.15	3.77	1.75	
-6°C	1.18	4.14	3.51	1.32	4.14	3.14	1.46	4.14	2.84	1.64	4.12	2.51	1.82	4.09	2.25	1.98	3.91	1.97	2.18	3.73	1.71	
-7°C	1.17	4.10	3.50	1.32	4.10	3.11	1.47	4.10	2.79	1.65	4.10	2.48	1.86	4.10	2.20	2.02	3.90	1.93	2.20	3.70	1.68	
-8°C	1.17	4.05	3.46	1.32	4.05	3.07	1.47	4.05	2.76	1.65	4.03	2.44	1.83	4.00	2.19	1.99	3.80	1.91	2.22	3.67	1.65	
-9°C	1.17	3.99	3.41	1.32	3.99	3.02	1.47	3.99	2.71	1.64	3.95	2.41	1.81	3.90	2.15	1.97	3.70	1.88	2.24	3.64	1.63	
-10°C	1.17	3.94	3.37	1.32	3.94	2.98	1.47	3.94	2.68	1.63	3.88	2.38	1.78	3.81	2.14	1.94	3.61	1.86	2.26	3.61	1.60	
-11°C	1.17	3.89	3.32	1.32	3.89	2.95	1.47	3.89	2.65	1.61	3.80	2.36	1.75	3.71	2.12	1.91	3.51	1.84	0.00	0.00	0.00	
-12°C	1.18	3.83	3.25	1.32	3.83	2.90	1.46	3.83	2.62	1.59	3.73	2.35	1.72	3.61	2.10	1.88	3.41	1.81	0.00	0.00	0.00	
-13°C	1.18	3.78	3.20	1.32	3.78	2.86	1.46	3.78	2.59	1.58	3.65	2.31	1.70	3.51	2.06	1.85	3.31	1.79	0.00	0.00	0.00	
-14°C	1.18	3.71	3.14	1.32	3.72	2.82	1.46	3.73	2.55	1.57	3.58	2.28	1.67	3.42	2.05	1.82	3.21	1.76	0.00	0.00	0.00	
-15°C	1.18	3.67	3.11	1.32	3.67	2.78	1.46	3.67	2.51	1.56	3.50	2.24	1.64	3.32	2.02	0.00	0.00	0.00	0.00	0.00	0.00	
-16°C	1.18	3.51	2.97	1.31	3.51	2.68	1.44	3.51	2.44	1.54	3.35	2.18	1.61	3.22	2.00	0.00	0.00	0.00	0.00	0.00	0.00	
-17°C	1.15	3.35	2.91	1.29	3.35	2.60	1.43	3.35	2.34	1.52	3.19	2.10	1.58	3.12	1.97	0.00	0.00	0.00	0.00	0.00	0.00	
-18°C	1.15	3.19	2.77	1.28	3.19	2.49	1.41	3.19	2.26	1.50	3.04	2.03	1.55	3.02	1.95	0.00	0.00	0.00	0.00	0.00	0.00	
-19°C	1.13	3.03	2.68	1.26	3.03	2.40	1.39	3.03	2.18	1.48	2.88	1.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
-20°C	1.13	2.87	2.54	1.25	2.87	2.30	1.37	2.87	2.09	1.46	2.73	1.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

2.2.2 alféa extensa A.I. 6 and alféa extensa duo A.I. 6

		Starting temperature																				
		25°C			30°C			35°C			40°C			45°C			50°C			55°C		
		IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP
Outdoor temperature	35°C	0.85	6.90	8.12	0.88	6.45	7.33	0.91	6.00	6.59	0.95	5.55	5.84	1.01	5.10	5.05	1.11	4.80	4.32	1.25	4.50	3.60
	34°C	0.84	6.90	8.21	0.88	6.45	7.33	0.92	6.00	6.52	0.96	5.55	5.78	1.01	5.10	5.05	1.12	4.80	4.29	1.26	4.50	3.57
	33°C	0.86	6.90	8.02	0.89	6.45	7.25	0.92	6.00	6.52	0.97	5.55	5.72	1.02	5.10	5.00	1.13	4.80	4.25	1.27	4.50	3.54
	32°C	0.87	6.90	7.93	0.90	6.45	7.17	0.93	6.00	6.45	0.98	5.55	5.66	1.03	5.10	4.95	1.13	4.80	4.25	1.28	4.50	3.52
	31°C	0.88	6.90	7.84	0.91	6.45	7.09	0.94	6.00	6.38	0.99	5.55	5.61	1.04	5.10	4.90	1.14	4.80	4.21	1.29	4.50	3.49
	30°C	0.87	6.90	7.93	0.91	6.45	7.09	0.95	6.00	6.32	0.99	5.55	5.61	1.05	5.10	4.86	1.15	4.80	4.17	1.30	4.50	3.46
	29°C	0.88	6.90	7.84	0.92	6.45	7.01	0.96	6.00	6.25	1.00	5.55	5.55	1.06	5.10	4.81	1.16	4.80	4.14	1.31	4.50	3.44
	28°C	0.89	6.90	7.75	0.93	6.45	6.94	0.97	6.00	6.19	1.01	5.55	5.50	1.06	5.10	4.81	1.17	4.80	4.10	1.32	4.50	3.41
	27°C	0.90	6.90	7.67	0.94	6.45	6.86	0.98	6.00	6.12	1.02	5.55	5.44	1.07	5.10	4.77	1.18	4.80	4.07	1.33	4.50	3.38
	26°C	0.92	6.90	7.50	0.95	6.45	6.79	0.98	6.00	6.12	1.03	5.55	5.39	1.08	5.10	4.72	1.19	4.80	4.03	1.34	4.50	3.36
	25°C	0.93	6.90	7.42	0.96	6.45	6.72	0.99	6.00	6.06	1.04	5.55	5.34	1.09	5.10	4.68	1.20	4.80	4.00	1.35	4.50	3.33
	24°C	0.94	6.90	7.34	0.97	6.45	6.65	1.00	6.00	6.00	1.05	5.55	5.29	1.10	5.10	4.64	1.21	4.80	3.97	1.36	4.50	3.31
	23°C	0.95	6.90	7.26	0.98	6.45	6.58	1.01	6.00	5.94	1.06	5.55	5.24	1.11	5.10	4.59	1.22	4.80	3.93	1.37	4.50	3.28
	22°C	0.94	6.90	7.34	0.98	6.45	6.58	1.02	6.00	5.88	1.07	5.55	5.19	1.12	5.10	4.55	1.23	4.80	3.90	1.38	4.50	3.26
	21°C	0.97	6.90	7.11	1.00	6.45	6.45	1.03	6.00	5.83	1.08	5.55	5.14	1.13	5.10	4.51	1.24	4.80	3.87	1.39	4.50	3.24
	20°C	0.96	6.90	7.19	1.00	6.45	6.45	1.04	6.00	5.77	1.09	5.55	5.09	1.14	5.10	4.47	1.25	4.80	3.84	1.41	4.50	3.19
	19°C	1.00	6.90	6.90	1.03	6.45	6.26	1.06	6.00	5.66	1.11	5.55	5.00	1.16	5.10	4.40	1.28	4.80	3.75	1.43	4.50	3.15
	18°C	1.02	6.90	6.76	1.05	6.45	6.14	1.08	6.00	5.56	1.13	5.55	4.91	1.18	5.10	4.32	1.30	4.80	3.69	1.46	4.50	3.08
	17°C	1.03	6.90	6.70	1.07	6.45	6.03	1.11	6.00	5.41	1.15	5.55	4.83	1.21	5.10	4.21	1.32	4.80	3.64	1.48	4.50	3.04
	16°C	1.07	6.90	6.45	1.10	6.45	5.86	1.13	6.00	5.31	1.18	5.55	4.70	1.23	5.10	4.15	1.35	4.80	3.56	1.51	4.50	2.98
	15°C	1.08	6.90	6.39	1.12	6.45	5.76	1.16	6.00	5.17	1.20	5.55	4.63	1.26	5.10	4.05	1.37	4.80	3.50	1.54	4.50	2.92
14°C	1.12	6.90	6.16	1.15	6.45	5.61	1.18	6.00	5.08	1.23	5.55	4.51	1.28	5.10	3.98	1.40	4.80	3.43	1.56	4.50	2.88	
13°C	1.15	6.90	6.00	1.18	6.45	5.47	1.21	6.00	4.96	1.26	5.55	4.40	1.31	5.10	3.89	1.43	4.80	3.36	1.59	4.50	2.83	
12°C	1.18	6.90	5.85	1.21	6.45	5.33	1.24	6.00	4.84	1.28	5.55	4.34	1.34	5.10	3.81	1.46	4.80	3.29	1.62	4.50	2.78	
11°C	1.21	6.90	5.70	1.24	6.45	5.20	1.27	6.00	4.72	1.32	5.55	4.20	1.37	5.10	3.72	1.49	4.80	3.22	1.65	4.50	2.73	
10°C	1.24	6.90	5.56	1.27	6.45	5.08	1.30	6.00	4.62	1.34	5.55	4.14	1.40	5.10	3.64	1.52	4.80	3.16	1.69	4.50	2.66	
9°C	1.29	6.90	5.35	1.31	6.45	4.92	1.33	6.00	4.51	1.38	5.55	4.02	1.43	5.10	3.57	1.55	4.80	3.10	1.72	4.50	2.62	
8°C	1.31	6.90	5.27	1.34	6.45	4.81	1.37	6.00	4.38	1.41	5.55	3.94	1.47	5.10	3.47	1.58	4.80	3.04	1.76	4.50	2.56	
7°C	1.35	6.90	5.11	1.38	6.45	4.67	1.41	6.00	4.26	1.45	5.55	3.83	1.50	5.10	3.40	1.62	4.80	2.96	1.79	4.50	2.51	
6°C	1.40	6.90	4.93	1.42	6.45	4.54	1.44	6.00	4.17	1.49	5.55	3.72	1.54	5.10	3.31	1.66	4.80	2.89	1.83	4.50	2.46	
5°C	1.45	6.90	4.76	1.47	6.45	4.39	1.49	6.00	4.03	1.53	5.55	3.63	1.57	5.10	3.25	1.70	4.80	2.82	1.88	4.50	2.39	
4°C	1.45	6.16	4.25	1.47	5.82	3.96	1.49	5.48	3.68	1.55	5.14	3.32	1.62	4.80	2.96	1.80	4.65	2.58	2.05	4.50	2.20	
3°C	1.47	5.79	3.94	1.49	5.50	3.69	1.51	5.21	3.45	1.57	4.93	3.14	1.65	4.65	2.82	1.86	4.58	2.46	2.15	4.50	2.09	
2°C	1.49	5.41	3.63	1.51	5.18	3.43	1.53	4.95	3.24	1.60	4.73	2.96	1.69	4.50	2.66	1.93	4.50	2.33	2.26	4.50	1.99	
1°C	1.51	5.33	3.53	1.53	5.12	3.35	1.55	4.91	3.17	1.63	4.70	2.88	1.73	4.49	2.60	1.96	4.46	2.28	2.27	4.43	1.95	
0°C	1.50	5.27	3.51	1.54	5.07	3.29	1.58	4.87	3.08	1.66	4.68	2.82	1.77	4.49	2.54	1.98	4.42	2.23	2.28	4.36	1.91	
-1°C	1.52	5.19	3.41	1.56	5.01	3.21	1.60	4.83	3.02	1.69	4.66	2.76	1.81	4.48	2.48	2.01	4.38	2.18	2.28	4.28	1.88	
-2°C	1.52	5.13	3.38	1.57	4.96	3.16	1.62	4.79	2.96	1.72	4.64	2.70	1.85	4.48	2.42	2.03	4.34	2.14	2.29	4.21	1.84	
-3°C	1.53	5.04	3.29	1.59	4.90	3.08	1.65	4.76	2.88	1.75	4.62	2.64	1.88	4.47	2.38	2.06	4.31	2.09	2.30	4.14	1.80	
-4°C	1.53	4.98	3.25	1.60	4.85	3.03	1.67	4.72	2.83	1.78	4.60	2.58	1.92	4.47	2.33	2.08	4.27	2.05	2.31	4.07	1.76	
-5°C	1.55	4.90	3.16	1.62	4.79	2.96	1.69	4.68	2.77	1.81	4.57	2.52	1.96	4.46	2.28	2.11	4.23	2.00	2.31	3.99	1.73	
-6°C	1.54	4.84	3.14	1.63	4.74	2.91	1.72	4.64	2.70	1.84	4.55	2.47	2.00	4.46	2.23	2.13	4.19	1.97	2.32	3.92	1.69	
-7°C	1.56	4.76	3.05	1.65	4.68	2.84	1.74	4.60	2.64	1.87	4.53	2.42	2.04	4.45	2.18	2.16	4.15	1.92	2.33	3.85	1.65	
-8°C	1.55	4.69	3.03	1.64	4.61	2.81	1.73	4.53	2.62	1.86	4.46	2.40	2.03	4.38	2.16	2.15	4.08	1.90	2.34	3.78	1.62	
-9°C	1.54	4.62	3.00	1.63	4.54	2.79	1.72	4.46	2.59	1.85	4.39	2.37	2.02	4.32	2.14	2.14	4.02	1.88	2.35	3.71	1.58	
-10°C	1.53	4.53	2.96	1.62	4.46	2.75	1.71	4.39	2.57	1.85	4.32	2.34	2.01	4.25	2.11	2.13	3.95	1.85	2.36	3.64	1.54	
-11°C	1.52	4.46	2.93	1.61	4.39	2.73	1.70	4.32	2.54	1.84	4.25	2.31	2.00	4.18	2.09	2.12	3.88	1.83	0.00	0.00	0.00	
-12°C	1.51	4.39	2.91	1.60	4.32	2.70	1.69	4.25	2.51	1.83	4.18	2.28	1.99	4.11	2.07	2.11	3.81	1.81	0.00	0.00	0.00	
-13°C	1.51	4.32	2.86	1.60	4.25	2.66	1.69	4.18	2.47	1.82	4.11	2.26	1.98	4.05	2.05	2.10	3.74	1.78	0.00	0.00	0.00	
-14°C	1.50	4.23	2.82	1.59	4.17	2.62	1.68	4.11	2.45	1.81	4.04	2.23	1.97	3.98	2.02	2.09	3.67	1.76	0.00	0.00	0.00	
-15°C	1.49	4.16	2.79	1.58	4.10	2.59	1.67	4.04	2.42	1.80	3.97	2.21	1.96	3.91	1.99	0.00	0.00	0.00	0.00	0.00	0.00	
-16°C	1.51	4.07	2.70	1.60	4.02	2.51	1.69	3.97	2.35	1.83	3.90	2.13	1.95	3.84	1.97	0.00	0.00	0.00	0.00	0.00	0.00	
-17°C	1.53	4.01	2.62	1.62	3.95	2.44	1.71	3.89	2.27	1.85	3.82	2.06	1.94	3.77	1.94	0.00	0.00	0.00	0.00	0.00	0.00	
-18°C	1.55	3.92	2.53	1.64	3.87	2.36	1.73	3.82	2.21	1.88	3.75	1.99	1.93	3.70	1.92	0.00	0.00	0.00	0.00	0.00	0.00	
-19°C	1.56	3.84	2.46	1.66	3.79	2.28	1.76	3.74	2.13	1.90	3.67	1.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
-20°C	1.58	3.77	2.39	1.68	3.72	2.21	1.78	3.67	2.06	1.92	3.60	1.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

2.2.3 alféa extensa A.I. 8 and alféa extensa duo A.I. 8

	Outdoor temperature	Starting temperature																				
		25°C			30°C			35°C			40°C			45°C			50°C			55°C		
		IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP
35°C	1.05	8.80	8.38	1.11	8.15	7.34	1.17	7.50	6.41	1.24	6.85	5.52	1.31	6.20	4.73	1.39	5.60	4.03	1.49	5.00	3.36	
34°C	1.06	8.80	8.30	1.12	8.15	7.28	1.18	7.50	6.36	1.25	6.85	5.48	1.32	6.20	4.70	1.40	5.60	4.00	1.51	5.00	3.31	
33°C	1.07	8.80	8.22	1.13	8.15	7.21	1.19	7.50	6.30	1.26	6.85	5.44	1.33	6.20	4.66	1.42	5.60	3.94	1.52	5.00	3.29	
32°C	1.08	8.80	8.15	1.14	8.15	7.15	1.20	7.50	6.25	1.27	6.85	5.39	1.34	6.20	4.63	1.43	5.60	3.92	1.53	5.00	3.27	
31°C	1.09	8.80	8.07	1.15	8.15	7.09	1.21	7.50	6.20	1.28	6.85	5.35	1.35	6.20	4.59	1.44	5.60	3.89	1.54	5.00	3.25	
30°C	1.10	8.80	8.00	1.16	8.15	7.03	1.22	7.50	6.15	1.29	6.85	5.31	1.36	6.20	4.56	1.45	5.60	3.86	1.56	5.00	3.21	
29°C	1.11	8.80	7.93	1.17	8.15	6.97	1.23	7.50	6.10	1.30	6.85	5.27	1.37	6.20	4.53	1.47	5.60	3.81	1.57	5.00	3.18	
28°C	1.12	8.80	7.86	1.18	8.15	6.91	1.24	7.50	6.05	1.31	6.85	5.23	1.39	6.20	4.46	1.48	5.60	3.78	1.59	5.00	3.14	
27°C	1.12	8.80	7.86	1.19	8.15	6.85	1.26	7.50	5.95	1.32	6.85	5.19	1.40	6.20	4.43	1.49	5.60	3.76	1.60	5.00	3.13	
26°C	1.13	8.80	7.79	1.20	8.15	6.79	1.27	7.50	5.91	1.34	6.85	5.11	1.41	6.20	4.40	1.51	5.60	3.71	1.61	5.00	3.11	
25°C	1.14	8.80	7.72	1.21	8.15	6.74	1.28	7.50	5.86	1.35	6.85	5.07	1.43	6.20	4.34	1.52	5.60	3.68	1.63	5.00	3.07	
24°C	1.17	8.80	7.52	1.23	8.15	6.63	1.29	7.50	5.81	1.36	6.85	5.04	1.44	6.20	4.31	1.53	5.60	3.66	1.64	5.00	3.05	
23°C	1.18	8.80	7.46	1.24	8.15	6.57	1.30	7.50	5.77	1.37	6.85	5.00	1.45	6.20	4.28	1.55	5.60	3.61	1.66	5.00	3.01	
22°C	1.19	8.80	7.39	1.25	8.15	6.52	1.31	7.50	5.73	1.39	6.85	4.93	1.47	6.20	4.22	1.56	5.60	3.59	1.67	5.00	2.99	
21°C	1.19	8.80	7.39	1.26	8.15	6.47	1.33	7.50	5.64	1.40	6.85	4.89	1.48	6.20	4.19	1.58	5.60	3.54	1.69	5.00	2.96	
20°C	1.20	8.80	7.33	1.27	8.15	6.42	1.34	7.50	5.60	1.41	6.85	4.86	1.49	6.20	4.16	1.60	5.60	3.50	1.71	5.00	2.92	
19°C	1.23	8.80	7.15	1.30	8.15	6.27	1.37	7.50	5.47	1.44	6.85	4.76	1.52	6.20	4.08	1.61	5.60	3.48	1.72	5.00	2.91	
18°C	1.28	8.80	6.88	1.34	8.15	6.08	1.40	7.50	5.36	1.47	6.85	4.66	1.54	6.20	4.03	1.64	5.60	3.41	1.74	5.00	2.87	
17°C	1.31	8.80	6.72	1.37	8.15	5.95	1.43	7.50	5.24	1.50	6.85	4.57	1.57	6.20	3.95	1.66	5.60	3.37	1.75	5.00	2.86	
16°C	1.34	8.80	6.57	1.40	8.15	5.82	1.46	7.50	5.14	1.53	6.85	4.48	1.59	6.20	3.90	1.68	5.60	3.33	1.77	5.00	2.82	
15°C	1.39	8.80	6.33	1.44	8.15	5.66	1.49	7.50	5.03	1.56	6.85	4.39	1.62	6.20	3.83	1.70	5.60	3.29	1.79	5.00	2.79	
14°C	1.43	8.80	6.15	1.48	8.15	5.51	1.53	7.50	4.90	1.59	6.85	4.31	1.65	6.20	3.76	1.72	5.60	3.26	1.81	5.00	2.76	
13°C	1.47	8.80	5.99	1.52	8.15	5.36	1.57	7.50	4.78	1.62	6.85	4.23	1.68	6.20	3.69	1.74	5.60	3.22	1.82	5.00	2.75	
12°C	1.51	8.80	5.83	1.56	8.15	5.22	1.61	7.50	4.66	1.66	6.85	4.13	1.71	6.20	3.63	1.77	5.60	3.16	1.85	5.00	2.70	
11°C	1.57	8.80	5.61	1.61	8.15	5.06	1.65	7.50	4.55	1.70	6.85	4.03	1.74	6.20	3.56	1.79	5.60	3.13	1.86	5.00	2.69	
10°C	1.63	8.80	5.40	1.66	8.15	4.91	1.69	7.50	4.44	1.73	6.85	3.96	1.77	6.20	3.50	1.82	5.60	3.08	1.88	5.00	2.66	
9°C	1.68	8.80	5.24	1.71	8.15	4.77	1.74	7.50	4.31	1.77	6.85	3.87	1.80	6.20	3.44	1.84	5.60	3.04	1.90	5.00	2.63	
8°C	1.73	8.80	5.09	1.76	8.15	4.63	1.79	7.50	4.19	1.82	6.85	3.76	1.84	6.20	3.37	1.87	5.60	2.99	1.92	5.00	2.60	
7°C	1.80	8.80	4.89	1.82	8.15	4.48	1.84	7.50	4.08	1.86	6.85	3.68	1.87	6.20	3.32	1.90	5.60	2.95	1.94	5.00	2.58	
6°C	1.87	8.80	4.71	1.88	8.15	4.34	1.89	7.50	3.97	1.91	6.85	3.59	1.91	6.20	3.25	1.92	5.60	2.92	1.96	5.00	2.55	
5°C	1.84	8.18	4.45	1.85	7.61	4.11	1.86	7.04	3.78	1.89	6.47	3.42	1.95	6.20	3.18	1.96	5.60	2.86	1.98	5.00	2.53	
4°C	1.80	7.56	4.20	1.82	7.07	3.88	1.84	6.58	3.58	1.88	6.09	3.24	1.92	5.60	2.92	2.10	5.40	2.57	2.26	5.00	2.21	
3°C	1.77	6.93	3.92	1.79	6.52	3.64	1.81	6.11	3.38	1.86	5.71	3.07	1.92	5.30	2.76	2.19	5.30	2.42	2.41	5.00	2.07	
2°C	1.74	6.31	3.63	1.76	5.98	3.40	1.78	5.65	3.17	1.84	5.33	2.90	1.92	5.00	2.60	2.29	5.20	2.27	2.56	5.00	1.95	
1°C	1.77	6.32	3.57	1.80	5.99	3.33	1.83	5.66	3.09	1.90	5.33	2.81	1.98	5.01	2.53	2.34	5.18	2.21	2.64	5.00	1.89	
0°C	1.80	6.32	3.51	1.84	5.99	3.26	1.88	5.66	3.01	1.95	5.34	2.74	2.04	5.01	2.46	2.40	5.16	2.15	2.71	5.00	1.85	
-1°C	1.83	6.33	3.46	1.88	6.00	3.19	1.93	5.67	2.94	2.01	5.34	2.66	2.10	5.02	2.39	2.46	5.14	2.09	2.78	5.00	1.80	
-2°C	1.86	6.33	3.40	1.92	6.00	3.13	1.98	5.67	2.86	2.06	5.35	2.60	2.16	5.02	2.32	2.51	5.12	2.04	2.85	5.00	1.75	
-3°C	1.91	6.34	3.32	1.97	6.01	3.05	2.03	5.68	2.80	2.12	5.36	2.53	2.23	5.03	2.26	2.57	5.11	1.99	2.92	5.00	1.71	
-4°C	1.94	6.34	3.27	2.01	6.01	2.99	2.08	5.68	2.73	2.17	5.36	2.47	2.29	5.03	2.20	2.63	5.09	1.94	2.99	5.00	1.67	
-5°C	1.97	6.35	3.22	2.05	6.02	2.94	2.13	5.69	2.67	2.23	5.37	2.41	2.35	5.04	2.14	2.69	5.07	1.88	3.06	5.00	1.63	
-6°C	2.00	6.35	3.18	2.09	6.02	2.88	2.18	5.69	2.61	2.28	5.37	2.36	2.41	5.04	2.09	2.74	5.05	1.84	3.13	5.00	1.60	
-7°C	2.03	6.36	3.13	2.13	6.03	2.83	2.23	5.70	2.56	2.34	5.38	2.30	2.47	5.05	2.04	2.80	5.03	1.80	3.21	5.00	1.56	
-8°C	2.08	6.32	3.04	2.18	6.00	2.75	2.28	5.68	2.49	2.39	5.36	2.24	2.51	5.03	2.00	2.84	5.01	1.76	3.29	5.00	1.52	
-9°C	2.11	6.29	2.98	2.22	5.97	2.69	2.33	5.65	2.42	2.44	5.34	2.19	2.56	5.01	1.96	2.89	4.99	1.73	3.37	5.00	1.48	
-10°C	2.16	6.25	2.89	2.27	5.94	2.62	2.38	5.63	2.37	2.48	5.31	2.14	2.60	4.99	1.92	2.93	4.98	1.70	3.45	5.00	1.45	
-11°C	2.20	6.24	2.84	2.31	5.92	2.56	2.42	5.60	2.31	2.53	5.29	2.09	2.64	4.98	1.89	2.97	4.96	1.67	0.00	0.00	0.00	
-12°C	2.25	6.20	2.76	2.36	5.89	2.50	2.47	5.58	2.26	2.58	5.27	2.04	2.69	4.96	1.84	3.01	4.94	1.64	0.00	0.00	0.00	
-13°C	2.28	6.17	2.71	2.40	5.86	2.44	2.52	5.55	2.20	2.63	5.25	2.00	2.73	4.94	1.81	3.05	4.92	1.61	0.00	0.00	0.00	
-14°C	2.33	6.13	2.63	2.45	5.83	2.38	2.57	5.53	2.15	2.67	5.22	1.96	2.77	4.92	1.78	3.09	4.90	1.59	0.00	0.00	0.00	
-15°C	2.36	6.10	2.58	2.49	5.80	2.33	2.62	5.50	2.10	2.72	5.20	1.91	2.82	4.90	1.74	0.00	0.00	0.00	0.00	0.00	0.00	
-16°C	2.41	6.06	2.51	2.54	5.77	2.27	2.67	5.48	2.05	2.77	5.18	1.87	2.87	4.88	1.70	0.00	0.00	0.00	0.00	0.00	0.00	
-17°C	2.44	6.03	2.47	2.58	5.74	2.22	2.72	5.45	2.00	2.82	5.16	1.83	2.92	4.86	1.66	0.00	0.00	0.00	0.00	0.00	0.00	
-18°C	2.28	5.59	2.45	2.40	5.32	2.22	2.52	5.05	2.00	2.62	4.78	1.82	2.97	4.84	1.63	0.00	0.00	0.00	0.00	0.00	0.00	
-19°C	2.09	5.16	2.47	2.21	4.91	2.22	2.33	4.66	2.00	2.42	4.40	1.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
-20°C	1.93	4.72	2.45	2.03	4.49	2.21	2.13	4.26	2.00	2.21	4.03	1.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

2.2.4 alféa extensa A.I. 10 and alféa extensa duo A.I. 10

		Starting temperature																				
		25°C			30°C			35°C			40°C			45°C			50°C			55°C		
		IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP
Outdoor temperature	35°C	1.68	11.74	6.99	1.69	10.87	6.43	1.70	10.00	5.88	1.73	9.14	5.28	1.76	8.27	4.70	1.87	7.64	4.09	2.03	7.00	3.45
	34°C	1.51	11.74	7.77	1.61	10.87	6.75	1.71	10.00	5.85	1.74	9.14	5.25	1.77	8.27	4.67	1.89	7.64	4.04	2.04	7.00	3.43
	33°C	1.52	11.74	7.72	1.62	10.87	6.71	1.72	10.00	5.81	1.75	9.14	5.22	1.79	8.27	4.62	1.90	7.64	4.02	2.06	7.00	3.40
	32°C	1.53	11.74	7.67	1.63	10.87	6.67	1.73	10.00	5.78	1.76	9.14	5.19	1.80	8.27	4.59	1.91	7.64	4.00	2.07	7.00	3.38
	31°C	1.54	11.74	7.62	1.64	10.87	6.63	1.74	10.00	5.75	1.77	9.14	5.16	1.81	8.27	4.57	1.92	7.64	3.98	2.09	7.00	3.35
	30°C	1.55	11.74	7.57	1.65	10.87	6.59	1.75	10.00	5.71	1.78	9.14	5.13	1.82	8.27	4.54	1.94	7.64	3.94	2.10	7.00	3.33
	29°C	1.58	11.74	7.43	1.67	10.87	6.51	1.76	10.00	5.68	1.79	9.14	5.11	1.83	8.27	4.52	1.95	7.64	3.92	2.12	7.00	3.30
	28°C	1.59	11.74	7.38	1.68	10.87	6.47	1.77	10.00	5.65	1.80	9.14	5.08	1.85	8.27	4.47	1.96	7.64	3.90	2.13	7.00	3.29
	27°C	1.60	11.74	7.34	1.69	10.87	6.43	1.78	10.00	5.62	1.81	9.14	5.05	1.85	8.27	4.47	1.98	7.64	3.86	2.15	7.00	3.26
	26°C	1.61	11.74	7.29	1.70	10.87	6.39	1.79	10.00	5.59	1.82	9.14	5.02	1.87	8.27	4.42	1.99	7.64	3.84	2.17	7.00	3.23
	25°C	1.64	11.74	7.16	1.72	10.87	6.32	1.80	10.00	5.56	1.84	9.14	4.97	1.88	8.27	4.40	2.01	7.64	3.80	2.19	7.00	3.20
	24°C	1.65	11.74	7.12	1.73	10.87	6.28	1.81	10.00	5.52	1.85	9.14	4.94	1.89	8.27	4.38	2.02	7.64	3.78	2.20	7.00	3.18
	23°C	1.66	11.74	7.07	1.74	10.87	6.25	1.82	10.00	5.49	1.86	9.14	4.91	1.91	8.27	4.33	2.04	7.64	3.75	2.22	7.00	3.15
	22°C	1.69	11.74	6.95	1.76	10.87	6.18	1.83	10.00	5.46	1.87	9.14	4.89	1.92	8.27	4.31	2.05	7.64	3.73	2.24	7.00	3.13
	21°C	1.70	11.74	6.91	1.77	10.87	6.14	1.84	10.00	5.43	1.88	9.14	4.86	1.93	8.27	4.28	2.06	7.64	3.71	2.26	7.00	3.10
	20°C	1.79	11.74	6.56	1.82	10.87	5.97	1.85	10.00	5.41	1.89	9.14	4.84	1.95	8.27	4.24	2.08	7.64	3.67	2.27	7.00	3.08
	19°C	1.75	11.74	6.71	1.82	10.87	5.97	1.89	10.00	5.29	1.93	9.14	4.74	1.98	8.27	4.18	2.12	7.64	3.60	2.31	7.00	3.03
	18°C	1.79	11.74	6.56	1.86	10.87	5.84	1.93	10.00	5.18	1.97	9.14	4.64	2.02	8.27	4.09	2.15	7.64	3.55	2.35	7.00	2.98
	17°C	1.85	11.74	6.35	1.91	10.87	5.69	1.97	10.00	5.08	2.00	9.14	4.57	2.06	8.27	4.01	2.19	7.64	3.49	2.39	7.00	2.93
	16°C	1.89	11.74	6.21	1.95	10.87	5.57	2.01	10.00	4.98	2.04	9.14	4.48	2.09	8.27	3.96	2.23	7.64	3.43	2.42	7.00	2.89
	15°C	1.95	11.74	6.02	2.00	10.87	5.44	2.05	10.00	4.88	2.09	9.14	4.37	2.14	8.27	3.86	2.27	7.64	3.37	2.46	7.00	2.85
14°C	2.00	11.74	5.87	2.05	10.87	5.30	2.10	10.00	4.76	2.13	9.14	4.29	2.18	8.27	3.79	2.32	7.64	3.29	2.51	7.00	2.79	
13°C	2.05	11.74	5.73	2.10	10.87	5.18	2.15	10.00	4.65	2.18	9.14	4.19	2.22	8.27	3.73	2.36	7.64	3.24	2.55	7.00	2.75	
12°C	2.12	11.74	5.54	2.16	10.87	5.03	2.20	10.00	4.55	2.22	9.14	4.12	2.27	8.27	3.64	2.40	7.64	3.18	2.60	7.00	2.69	
11°C	2.19	11.74	5.36	2.22	10.87	4.90	2.25	10.00	4.44	2.27	9.14	4.03	2.32	8.27	3.56	2.45	7.64	3.12	2.65	7.00	2.64	
10°C	2.26	11.74	5.19	2.28	10.87	4.77	2.30	10.00	4.35	2.33	9.14	3.92	2.36	8.27	3.50	2.50	7.64	3.06	2.69	7.00	2.60	
9°C	2.32	11.74	5.06	2.34	10.87	4.65	2.36	10.00	4.24	2.38	9.14	3.84	2.42	8.27	3.42	2.56	7.64	2.98	2.75	7.00	2.55	
8°C	2.42	11.74	4.85	2.42	10.87	4.49	2.42	10.00	4.13	2.44	9.14	3.75	2.47	8.27	3.35	2.61	7.64	2.93	2.80	7.00	2.50	
7°C	2.49	11.74	4.71	2.49	10.87	4.37	2.49	10.00	4.02	2.50	9.14	3.66	2.53	8.27	3.27	2.66	7.64	2.87	2.86	7.00	2.45	
6°C	2.56	11.74	4.59	2.56	10.87	4.25	2.56	10.00	3.91	2.56	9.14	3.57	2.59	8.27	3.19	2.72	7.64	2.81	2.92	7.00	2.40	
5°C	2.54	10.95	4.31	2.54	10.19	4.01	2.54	9.43	3.71	2.55	8.67	3.40	2.60	7.90	3.04	2.80	7.43	2.65	3.11	6.95	2.23	
4°C	2.52	10.17	4.04	2.52	9.51	3.77	2.52	8.85	3.51	2.54	8.20	3.23	2.61	7.54	2.89	2.87	7.22	2.52	3.31	6.90	2.08	
3°C	2.51	9.38	3.74	2.50	8.83	3.53	2.49	8.28	3.33	2.52	7.72	3.06	2.61	7.17	2.75	2.95	7.01	2.38	3.50	6.85	1.96	
2°C	2.49	8.60	3.45	2.48	8.15	3.29	2.47	7.70	3.12	2.51	7.25	2.89	2.62	6.80	2.60	3.02	6.80	2.25	3.70	6.80	1.84	
1°C	2.47	8.47	3.43	2.50	8.07	3.23	2.53	7.67	3.03	2.60	7.27	2.80	2.74	6.87	2.51	3.12	6.84	2.19	3.75	6.82	1.82	
0°C	2.46	8.33	3.39	2.52	7.98	3.17	2.58	7.63	2.96	2.69	7.28	2.71	2.86	6.93	2.42	3.23	6.89	2.13	3.80	6.84	1.80	
-1°C	2.42	8.20	3.39	2.53	7.90	3.12	2.64	7.60	2.88	2.78	7.30	2.63	2.98	7.00	2.35	3.33	6.93	2.08	3.85	6.87	1.78	
-2°C	2.41	8.07	3.35	2.55	7.82	3.07	2.69	7.57	2.81	2.87	7.32	2.55	3.10	7.07	2.28	3.43	6.98	2.03	3.90	6.89	1.77	
-3°C	2.39	7.93	3.32	2.57	7.73	3.01	2.75	7.53	2.74	2.97	7.33	2.47	3.22	7.13	2.21	3.54	7.02	1.98	3.95	6.91	1.75	
-4°C	2.38	7.80	3.28	2.59	7.65	2.95	2.80	7.50	2.68	3.06	7.35	2.40	3.34	7.20	2.16	3.64	7.07	1.94	4.00	6.93	1.73	
-5°C	2.34	7.67	3.28	2.60	7.57	2.91	2.86	7.47	2.61	3.15	7.37	2.34	3.46	7.27	2.10	3.74	7.11	1.90	4.05	6.96	1.72	
-6°C	2.33	7.53	3.23	2.62	7.48	2.85	2.91	7.43	2.55	3.24	7.38	2.28	3.58	7.33	2.05	3.85	7.16	1.86	4.10	6.98	1.70	
-7°C	2.31	7.40	3.20	2.64	7.40	2.80	2.97	7.40	2.49	3.33	7.40	2.22	3.70	7.40	2.00	3.95	7.20	1.82	4.15	7.00	1.69	
-8°C	2.35	7.40	3.15	2.68	7.39	2.76	3.01	7.38	2.45	3.35	7.33	2.19	3.69	7.29	1.98	3.95	7.25	1.84	4.20	7.02	1.67	
-9°C	2.38	7.41	3.11	2.71	7.38	2.72	3.04	7.35	2.42	3.37	7.26	2.15	3.69	7.17	1.94	3.94	7.08	1.80	4.25	7.04	1.66	
-10°C	2.42	7.39	3.05	2.75	7.36	2.68	3.08	7.33	2.38	3.39	7.19	2.12	3.68	7.06	1.92	3.94	6.93	1.76	4.30	7.06	1.64	
-11°C	2.47	7.40	3.00	2.79	7.35	2.63	3.11	7.30	2.35	3.40	7.13	2.10	3.68	6.95	1.89	3.93	6.77	1.72	0.00	0.00	0.00	
-12°C	2.49	7.40	2.97	2.82	7.34	2.60	3.15	7.28	2.31	3.42	7.06	2.06	3.67	6.84	1.86	3.92	6.61	1.69	0.00	0.00	0.00	
-13°C	2.53	7.41	2.93	2.86	7.33	2.56	3.19	7.25	2.27	3.44	6.99	2.03	3.66	6.72	1.84	3.91	6.45	1.65	0.00	0.00	0.00	
-14°C	2.58	7.39	2.86	2.90	7.31	2.52	3.22	7.23	2.25	3.46	6.92	2.00	3.66	6.61	1.81	3.90	6.29	1.61	0.00	0.00	0.00	
-15°C	2.60	7.40	2.85	2.93	7.30	2.49	3.26	7.20	2.21	3.48	6.85	1.97	3.65	6.50	1.78	0.00	0.00	0.00	0.00	0.00	0.00	
-16°C	2.65	7.40	2.79	2.97	7.29	2.45	3.29	7.18	2.18	3.50	6.78	1.94	3.64	6.39	1.76	0.00	0.00	0.00	0.00	0.00	0.00	
-17°C	2.69	7.41	2.75	3.01	7.28	2.42	3.33	7.15	2.15	3.51	6.71	1.91	3.63	6.28	1.73	0.00	0.00	0.00	0.00	0.00	0.00	
-18°C	2.55	6.95	2.73	2.86	6.84	2.39	3.17	6.73	2.12	3.36	6.34	1.89	3.62	6.17	1.70	0.00	0.00	0.00	0.00	0.00	0.00	
-19°C	2.43	6.51	2.68	2.72	6.41	2.36	3.01	6.31	2.10	3.20	5.97	1.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
-20°C	2.28	6.05	2.65	2.57	5.97	2.32	2.86	5.89	2.06	3.05	5.60	1.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

2.2.5 alféa extensa A.I. 13

	Starting temperature																				
	25°C			30°C			35°C			40°C			45°C			50°C			55°C		
	IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP
35°C	1.46	14.44	9.89	1.60	13.67	8.54	1.74	12.90	7.41	1.93	11.50	5.95	2.15	10.45	4.86	2.36	9.15	3.88	2.56	7.85	3.07
34°C	1.53	14.44	9.44	1.66	13.67	8.23	1.79	12.90	7.21	1.97	11.50	5.83	2.18	10.45	4.79	2.38	9.15	3.84	2.58	7.85	3.04
33°C	1.60	14.44	9.05	1.72	13.67	7.96	1.84	12.90	7.01	2.02	11.50	5.70	2.22	10.45	4.71	2.42	9.15	3.79	2.60	7.85	3.01
32°C	1.65	14.44	8.73	1.77	13.67	7.71	1.89	12.90	6.81	2.07	11.50	5.55	2.27	10.45	4.60	2.46	9.15	3.72	2.64	7.85	2.98
31°C	1.71	14.44	8.44	1.83	13.67	7.48	1.95	12.90	6.63	2.13	11.50	5.40	2.34	10.45	4.47	2.52	9.15	3.64	2.67	7.85	2.94
30°C	1.76	14.44	8.19	1.88	13.67	7.26	2.00	12.90	6.45	2.20	11.50	5.24	2.40	10.45	4.36	2.58	9.15	3.55	2.71	7.85	2.90
29°C	1.81	14.44	7.97	1.93	13.67	7.07	2.06	12.90	6.27	2.27	11.50	5.07	2.45	10.45	4.27	2.65	9.15	3.46	2.75	7.85	2.85
28°C	1.86	14.44	7.77	1.99	13.67	6.88	2.11	12.90	6.11	2.34	11.50	4.91	2.49	10.45	4.19	2.72	9.15	3.36	2.80	7.85	2.81
27°C	1.91	14.44	7.57	2.04	13.67	6.71	2.17	12.90	5.95	2.42	11.50	4.76	2.54	10.45	4.12	2.80	9.15	3.27	2.84	7.85	2.76
26°C	1.95	14.44	7.39	2.09	13.67	6.54	2.23	12.90	5.79	2.50	11.50	4.61	2.57	10.45	4.06	2.88	9.15	3.18	2.89	7.85	2.71
25°C	2.00	14.44	7.21	2.14	13.67	6.38	2.28	12.90	5.65	2.57	11.50	4.47	2.61	10.45	4.00	2.96	9.15	3.09	2.94	7.85	2.67
24°C	2.05	14.44	7.04	2.20	13.67	6.22	2.34	12.90	5.51	2.65	11.50	4.33	2.65	10.45	3.95	3.04	9.15	3.01	2.99	7.85	2.62
23°C	2.11	14.44	6.86	2.25	13.67	6.07	2.40	12.90	5.38	2.73	11.50	4.21	2.68	10.45	3.90	3.13	9.15	2.93	3.04	7.85	2.58
22°C	2.16	14.44	6.68	2.31	13.67	5.92	2.46	12.90	5.25	2.81	11.50	4.09	2.72	10.45	3.84	3.20	9.15	2.86	3.09	7.85	2.54
21°C	2.23	14.44	6.49	2.37	13.67	5.77	2.52	12.90	5.13	2.88	11.50	3.99	2.76	10.45	3.79	3.28	9.15	2.79	3.14	7.85	2.50
20°C	2.29	14.44	6.30	2.43	13.67	5.62	2.57	12.90	5.01	2.96	11.50	3.89	2.79	10.45	3.74	3.35	9.15	2.73	3.18	7.85	2.47
19°C	2.37	14.44	6.10	2.50	13.67	5.47	2.63	12.90	4.91	3.02	11.50	3.81	2.83	10.45	3.69	3.42	9.15	2.68	3.22	7.85	2.44
18°C	2.45	14.44	5.90	2.57	13.67	5.32	2.69	12.90	4.80	3.08	11.50	3.73	2.87	10.45	3.64	3.47	9.15	2.63	3.26	7.85	2.41
17°C	2.54	14.44	5.69	2.64	13.67	5.18	2.74	12.90	4.70	3.14	11.50	3.67	2.91	10.45	3.59	3.52	9.15	2.60	3.29	7.85	2.38
16°C	2.64	14.44	5.47	2.72	13.67	5.03	2.80	12.90	4.61	3.18	11.50	3.61	2.96	10.45	3.54	3.56	9.15	2.57	3.32	7.85	2.36
15°C	2.75	14.44	5.26	2.80	13.67	4.88	2.85	12.90	4.52	3.22	11.50	3.57	3.00	10.45	3.48	3.59	9.15	2.55	3.34	7.85	2.35
14°C	2.87	14.44	5.04	2.89	13.67	4.74	2.91	12.90	4.44	3.25	11.50	3.54	3.05	10.45	3.43	3.60	9.15	2.54	3.36	7.85	2.34
13°C	2.98	14.44	4.85	2.97	13.67	4.60	2.96	12.90	4.36	3.27	11.50	3.51	3.10	10.45	3.38	3.60	9.15	2.54	3.37	7.85	2.33
12°C	3.08	14.44	4.69	3.04	13.67	4.49	3.01	12.90	4.29	3.29	11.50	3.50	3.15	10.45	3.32	3.58	9.15	2.55	3.37	7.85	2.33
11°C	3.14	14.44	4.60	3.10	13.67	4.41	3.06	12.90	4.22	3.29	11.50	3.49	3.20	10.45	3.27	3.55	9.15	2.58	3.37	7.85	2.33
10°C	3.15	14.44	4.58	3.13	13.67	4.37	3.11	12.90	4.15	3.29	11.50	3.49	3.25	10.45	3.21	3.49	9.15	2.62	3.35	7.85	2.34
9°C	3.10	14.44	4.65	3.13	13.67	4.37	3.15	12.90	4.09	3.29	11.50	3.50	3.28	10.45	3.18	3.42	9.15	2.68	3.33	7.85	2.36
8°C	2.98	14.44	4.85	3.09	13.67	4.43	3.20	12.90	4.03	3.28	11.50	3.51	3.27	10.45	3.20	3.32	9.15	2.76	3.29	7.85	2.38
7°C	2.79	14.48	5.20	3.00	13.67	4.56	3.22	12.86	4.00	3.24	11.46	3.53	3.19	10.43	3.27	3.20	9.15	2.86	3.25	7.84	2.41
6°C	2.63	13.68	5.20	2.86	12.70	4.44	3.10	11.71	3.78	3.11	10.85	3.49	3.04	10.03	3.30	3.08	8.92	2.90	3.20	7.79	2.44
5°C	2.53	12.46	4.93	2.70	11.12	4.12	2.87	9.78	3.41	2.89	9.78	3.38	2.89	9.31	3.22	2.98	8.51	2.86	3.14	7.70	2.45
4°C	2.47	11.43	4.62	2.53	9.63	3.81	2.59	7.84	3.03	2.65	8.55	3.22	2.75	8.49	3.09	2.91	8.04	2.77	3.10	7.60	2.45
3°C	2.46	10.41	4.22	2.37	8.53	3.59	2.28	6.65	2.91	2.41	7.48	3.10	2.65	7.77	2.93	2.87	7.64	2.66	3.08	7.51	2.44
2°C	2.48	9.43	3.80	2.30	8.00	3.48	2.12	6.57	3.10	2.28	6.89	3.02	2.61	7.38	2.83	2.88	7.41	2.57	3.10	7.46	2.41
1°C	2.50	9.62	3.85	2.35	8.12	3.46	2.20	6.63	3.01	2.30	6.93	3.01	2.65	7.41	2.80	2.95	7.43	2.52	3.16	7.45	2.36
0°C	2.51	10.23	4.07	2.38	8.52	3.58	2.25	6.81	3.02	2.35	7.20	3.07	2.75	7.60	2.76	3.06	7.55	2.47	3.26	7.44	2.28
-1°C	2.59	10.45	4.03	2.44	8.80	3.60	2.29	7.15	3.12	2.45	7.55	3.08	2.91	7.86	2.70	3.22	7.72	2.40	3.39	7.43	2.19
-2°C	2.78	10.43	3.76	2.59	9.01	3.47	2.41	7.59	3.15	2.67	7.94	2.97	3.12	8.15	2.61	3.40	7.90	2.33	3.55	7.40	2.09
-3°C	2.89	10.48	3.63	2.78	9.28	3.34	2.67	8.07	3.02	2.94	8.35	2.84	3.35	8.45	2.52	3.60	8.09	2.25	3.72	7.38	1.98
-4°C	3.01	10.61	3.53	2.99	9.58	3.20	2.97	8.55	2.87	3.25	8.73	2.69	3.61	8.74	2.42	3.82	8.25	2.16	3.91	7.35	1.88
-5°C	3.13	10.78	3.44	3.21	9.88	3.07	3.29	8.97	2.72	3.57	9.05	2.54	3.88	8.99	2.32	4.04	8.36	2.07	4.10	7.33	1.79
-6°C	3.26	10.93	3.35	3.44	10.11	2.94	3.62	9.29	2.57	3.89	9.27	2.39	4.14	9.17	2.22	4.25	8.40	1.97	4.28	7.31	1.71
-7°C	3.38	11.01	3.26	3.65	10.23	2.80	3.92	9.45	2.41	4.18	9.36	2.24	4.38	9.25	2.11	4.45	8.34	1.87	4.45	7.29	1.64
-8°C	3.56	11.01	3.09	3.87	10.23	2.65	4.17	9.45	2.27	4.44	9.32	2.10	4.56	9.24	2.03	4.57	8.20	1.79	4.60	7.29	1.58
-9°C	3.80	11.01	2.90	4.08	10.23	2.51	4.36	9.45	2.17	4.65	9.32	2.01	4.68	9.24	1.97	4.64	8.04	1.73	4.74	7.29	1.54
-10°C	4.06	11.01	2.71	4.28	10.23	2.39	4.50	9.45	2.10	4.79	9.32	1.95	4.76	9.24	1.94	4.69	7.87	1.68	4.75	7.15	1.51
-11°C	4.33	11.01	2.54	4.46	10.23	2.29	4.60	9.45	2.05	4.85	9.32	1.92	4.80	9.21	1.92	4.76	7.70	1.62	4.80	6.99	1.46
-12°C	4.56	11.01	2.41	4.62	10.23	2.22	4.67	9.45	2.02	4.85	9.32	1.92	4.82	9.16	1.90	4.82	7.52	1.56	4.85	6.84	1.41
-13°C	4.72	11.01	2.33	4.73	10.23	2.16	4.74	9.45	1.99	4.86	9.32	1.92	4.83	9.16	1.90	4.88	7.39	1.51	4.91	6.72	1.37
-14°C	4.80	11.01	2.29	4.80	10.23	2.13	4.80	9.45	1.97	4.86	9.32	1.92	4.85	9.16	1.89	4.94	7.30	1.48	4.95	6.63	1.34
-15°C	4.83	11.01	2.28	4.84	10.23	2.11	4.85	9.45	1.95	4.86	9.32	1.92	4.86	9.16	1.88	5.00	7.27	1.45	5.00	6.60	1.32
-16°C	4.84	11.01	2.27	4.86	10.23	2.10	4.88	9.45	1.94	4.87	9.32	1.91	4.87	9.09	1.87	5.04	7.23	1.43	5.04	6.58	1.31
-17°C	4.87	11.01	2.26	4.88	10.23	2.10	4.89	9.45	1.93	4.87	9.32	1.91	4.87	8.91	1.83	5.06	7.16	1.42	5.07	6.52	1.29
-18°C	4.85	11.01	2.27	4.87	10.23	2.10	4.89	9.45	1.93	4.86	9.32	1.92	4.87	8.65	1.78	5.09	7.07	1.39	5.10	6.45	1.26
-19°C	4.86	10.90	2.24	4.87	10.17	2.09	4.88	9.45	1.94	4.85	9.03	1.86	4.86	8.37	1.72	5.10	6.97	1.37	5.12	6.37	1.24
-20°C	4.84	10.64	2.20	4.86	10.02	2.06	4.88	9.40	1.93	4.85	8.74	1.80	4.86	8.11	1.67	5.13	6.88	1.34	5.15	6.30	1.22

2.2.6 alféa extensa A.I. 16

		Starting temperature																				
		25°C			30°C			35°C			40°C			45°C			50°C			55°C		
		IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP	IP	HC	COP
Outdoor temperature	35°C	2.19	18.06	8.23	2.40	17.06	7.10	2.61	16.06	6.15	2.97	14.56	4.91	3.21	13.60	4.24	2.82	8.97	3.18	2.99	8.15	2.73
	34°C	2.21	18.06	8.17	2.42	17.06	7.05	2.63	16.06	6.11	2.99	14.56	4.87	3.22	13.60	4.22	2.83	9.06	3.20	3.00	8.24	2.75
	33°C	2.23	18.06	8.09	2.44	17.06	6.98	2.66	16.06	6.05	3.02	14.56	4.82	3.24	13.60	4.20	2.85	9.17	3.22	3.00	8.33	2.78
	32°C	2.26	18.06	7.99	2.47	17.06	6.90	2.69	16.06	5.98	3.05	14.56	4.77	3.26	13.60	4.17	2.85	9.27	3.25	3.01	8.43	2.80
	31°C	2.29	18.06	7.88	2.51	17.06	6.80	2.73	16.06	5.89	3.09	14.56	4.71	3.29	13.60	4.14	2.86	9.37	3.28	3.02	8.52	2.82
	30°C	2.33	18.06	7.74	2.55	17.06	6.68	2.77	16.06	5.79	3.13	14.56	4.65	3.32	13.60	4.10	2.88	9.48	3.29	3.02	8.62	2.85
	29°C	2.38	18.06	7.60	2.60	17.06	6.56	2.82	16.06	5.69	3.17	14.56	4.59	3.36	13.60	4.05	2.88	9.59	3.33	3.03	8.71	2.87
	28°C	2.43	18.06	7.45	2.65	17.06	6.43	2.88	16.06	5.57	3.22	14.56	4.52	3.40	13.60	4.00	2.89	9.69	3.35	3.03	8.81	2.91
	27°C	2.48	18.06	7.28	2.71	17.06	6.29	2.94	16.06	5.46	3.27	14.56	4.45	3.44	13.60	3.95	2.90	9.79	3.38	3.04	8.90	2.93
	26°C	2.54	18.06	7.12	2.77	17.06	6.15	3.01	16.06	5.34	3.33	14.56	4.38	3.49	13.60	3.90	2.91	9.90	3.40	3.05	9.00	2.95
	25°C	2.60	18.06	6.95	2.84	17.06	6.01	3.08	16.06	5.21	3.38	14.56	4.31	3.54	13.60	3.85	2.92	9.99	3.42	3.06	9.09	2.97
	24°C	2.66	18.06	6.78	2.91	17.06	5.87	3.15	16.06	5.09	3.44	14.56	4.23	3.59	13.60	3.79	2.94	10.09	3.43	3.07	9.17	2.99
	23°C	2.73	18.06	6.62	2.98	17.06	5.73	3.23	16.06	4.97	3.50	14.56	4.16	3.64	13.60	3.74	2.96	10.18	3.44	3.08	9.26	3.01
	22°C	2.80	18.06	6.45	3.05	17.06	5.59	3.31	16.06	4.85	3.56	14.56	4.09	3.69	13.60	3.68	2.97	10.27	3.46	3.10	9.34	3.01
	21°C	2.87	18.06	6.29	3.13	17.06	5.45	3.39	16.06	4.74	3.62	14.56	4.02	3.75	13.60	3.63	3.01	10.35	3.44	3.12	9.41	3.02
	20°C	2.94	18.06	6.14	3.21	17.06	5.32	3.47	16.06	4.63	3.68	14.56	3.95	3.81	13.60	3.57	3.03	10.43	3.44	3.14	9.48	3.02
	19°C	3.02	18.06	5.99	3.29	17.06	5.19	3.55	16.06	4.52	3.74	14.56	3.89	3.86	13.60	3.52	3.08	10.47	3.40	3.19	9.56	3.00
	18°C	3.09	18.06	5.84	3.36	17.06	5.07	3.64	16.06	4.42	3.81	14.56	3.82	3.92	13.60	3.47	3.15	10.48	3.33	3.27	9.65	2.95
	17°C	3.17	18.06	5.70	3.44	17.06	4.95	3.72	16.06	4.32	3.87	14.56	3.76	3.97	13.60	3.42	3.24	10.46	3.23	3.36	9.73	2.90
	16°C	3.24	18.06	5.57	3.52	17.06	4.84	3.80	16.06	4.22	3.93	14.56	3.70	4.03	13.60	3.38	3.31	10.44	3.15	3.46	9.82	2.84
	15°C	3.32	18.06	5.45	3.60	17.06	4.74	3.88	16.06	4.14	3.99	14.56	3.65	4.08	13.60	3.33	3.38	10.43	3.09	3.53	9.90	2.80
14°C	3.39	18.06	5.33	3.68	17.06	4.64	3.96	16.06	4.05	4.05	14.56	3.59	4.13	13.60	3.29	3.43	10.43	3.04	3.60	9.96	2.77	
13°C	3.46	18.06	5.22	3.75	17.06	4.55	4.04	16.06	3.98	4.11	14.56	3.54	4.18	13.60	3.25	3.45	10.43	3.02	3.65	10.01	2.74	
12°C	3.53	18.06	5.11	3.82	17.06	4.46	4.11	16.06	3.91	4.17	14.56	3.49	4.23	13.60	3.22	3.46	10.43	3.01	3.70	10.03	2.71	
11°C	3.60	18.06	5.02	3.89	17.06	4.38	4.18	16.06	3.84	4.22	14.56	3.45	4.27	13.60	3.18	3.46	10.43	3.01	3.75	10.03	2.67	
10°C	3.67	18.06	4.92	3.96	17.06	4.31	4.25	16.06	3.78	4.28	14.56	3.40	4.31	13.60	3.15	3.49	10.43	2.99	3.80	10.03	2.64	
9°C	3.73	18.06	4.84	4.02	17.06	4.24	4.31	16.06	3.72	4.33	14.25	3.29	4.35	13.60	3.13	3.54	10.43	2.95	3.85	10.03	2.61	
8°C	3.79	18.06	4.77	4.08	17.06	4.18	4.37	16.06	3.68	4.38	13.62	3.11	4.38	13.60	3.11	3.63	10.43	2.87	3.90	10.03	2.57	
7°C	3.82	18.06	4.72	4.10	17.06	4.16	4.38	16.06	3.67	4.39	12.77	2.91	4.39	13.60	3.10	4.21	10.34	2.46	4.01	10.03	2.50	
6°C	3.75	17.87	4.76	3.96	16.29	4.12	4.16	14.71	3.53	4.23	11.80	2.79	4.29	13.02	3.03	4.50	10.13	2.25	4.13	9.99	2.42	
5°C	3.60	17.24	4.79	3.68	14.80	4.02	3.77	12.35	3.28	3.95	10.81	2.74	4.12	11.96	2.91	4.43	9.87	2.23	4.13	9.90	2.40	
4°C	3.41	15.94	4.68	3.36	12.93	3.85	3.31	9.92	3.00	3.60	9.88	2.74	3.90	10.75	2.76	4.18	9.60	2.30	4.08	9.74	2.39	
3°C	3.24	13.73	4.23	3.06	11.02	3.60	2.89	8.31	2.88	3.27	9.12	2.79	3.69	9.72	2.63	3.96	9.37	2.37	4.02	9.53	2.37	
2°C	3.15	11.43	3.63	2.88	9.76	3.39	2.61	8.09	3.10	3.02	8.63	2.86	3.53	9.19	2.60	3.91	9.26	2.37	4.02	9.31	2.32	
1°C	3.17	12.15	3.83	2.87	10.34	3.61	2.56	8.53	3.33	2.91	8.47	2.91	3.46	9.31	2.69	3.95	9.28	2.35	4.11	9.27	2.26	
0°C	3.29	13.29	4.04	3.00	11.22	3.74	2.71	9.15	3.37	2.95	8.61	2.92	3.48	9.58	2.76	4.06	9.36	2.30	4.24	9.24	2.18	
-1°C	3.48	13.99	4.02	3.25	11.92	3.66	3.02	9.84	3.26	3.09	8.98	2.90	3.57	9.86	2.76	4.23	9.46	2.24	4.39	9.18	2.09	
-2°C	3.73	14.33	3.85	3.58	12.45	3.48	3.43	10.57	3.08	3.34	9.50	2.85	3.73	10.14	2.72	4.43	9.58	2.16	4.55	9.09	2.00	
-3°C	3.99	14.38	3.61	3.94	12.83	3.25	3.90	11.27	2.89	3.65	10.12	2.77	3.95	10.41	2.64	4.65	9.71	2.09	4.71	8.99	1.91	
-4°C	4.24	14.21	3.35	4.31	13.06	3.03	4.37	11.91	2.72	4.03	10.76	2.67	4.22	10.66	2.53	4.85	9.84	2.03	4.87	8.88	1.83	
-5°C	4.47	13.87	3.10	4.63	13.16	2.84	4.80	12.44	2.59	4.43	11.35	2.56	4.52	10.88	2.41	5.03	9.95	1.98	5.01	8.79	1.75	
-6°C	4.64	13.46	2.90	4.88	13.13	2.69	5.13	12.81	2.50	4.84	11.84	2.44	4.86	11.07	2.28	5.16	10.04	1.95	5.12	8.70	1.70	
-7°C	4.72	13.07	2.77	5.02	13.00	2.59	5.32	12.93	2.43	5.25	12.14	2.31	5.22	11.20	2.15	5.21	10.09	1.94	5.20	8.65	1.66	
-8°C	4.76	12.94	2.72	5.05	12.77	2.53	5.34	12.61	2.36	5.62	12.22	2.17	5.58	11.27	2.02	5.20	10.06	1.94	5.24	8.63	1.65	
-9°C	4.93	12.96	2.63	5.10	12.48	2.45	5.27	11.99	2.27	5.91	12.10	2.05	5.88	11.28	1.92	5.20	9.95	1.91	5.25	8.63	1.64	
-10°C	5.05	12.97	2.57	5.13	12.14	2.37	5.21	11.32	2.17	6.07	11.83	1.95	6.05	11.19	1.85	5.21	9.79	1.88	5.25	8.63	1.64	
-11°C	5.12	12.76	2.49	5.17	11.80	2.28	5.22	10.85	2.08	6.10	11.48	1.88	6.08	11.02	1.81	5.22	9.62	1.84	5.24	8.62	1.65	
-12°C	5.14	12.29	2.39	5.19	11.49	2.21	5.24	10.69	2.04	6.14	11.08	1.80	6.12	10.82	1.77	5.24	9.44	1.80	5.24	8.59	1.64	
-13°C	5.18	11.94	2.31	5.22	11.23	2.15	5.26	10.52	2.00	6.17	10.69	1.73	6.15	10.62	1.73	5.26	9.28	1.76	5.26	8.52	1.62	
-14°C	5.23	11.72	2.24	5.25	11.03	2.10	5.27	10.34	1.96	6.20	10.36	1.67	6.17	10.41	1.69	5.30	9.17	1.73	5.29	8.43	1.59	
-15°C	5.26	11.48	2.18	5.27	10.81	2.05	5.28	10.14	1.92	6.22	10.13	1.63	6.20	10.21	1.65	5.32	9.12	1.71	5.31	8.39	1.58	
-16°C	5.27	11.23	2.13	5.28	10.58	2.00	5.29	9.93	1.88	6.24	9.98	1.60	6.21	10.00	1.61	5.34	9.04	1.69	5.33	8.31	1.56	
-17°C	5.27	10.98	2.08	5.28	10.34	1.96	5.29	9.70	1.83	6.23	9.89	1.59	6.22	9.76	1.57	5.34	8.84	1.66	5.33	8.12	1.52	
-18°C	5.26	10.69	2.03	5.27	10.07	1.91	5.28	9.45	1.79	6.24	9.83	1.58	6.22	9.50	1.53	5.37	8.56	1.59	5.34	7.86	1.47	
-19°C	5.27	10.42	1.98	5.27	9.81	1.86	5.27	9.20	1.75	6.23	9.77	1.57	6.22	9.24	1.49	5.37	8.26	1.54	5.34	7.58	1.42	
-20°C	5.25	10.14	1.93	5.26	9.55	1.82	5.27	8.96	1.70	6.23	9.68	1.55	6.22	8.99	1.45	5.38	8.00	1.49	5.35	7.33	1.37	

2.3 Nominal performances tables (Cooling mode)

Test conditions comply with EN 14-511.

CC : Cooling capacity (kW)
IP : Input power (kW)
EER : Energy Efficiency Rating

2.3.1 alféa extensa A.I. 5 and alféa extensa duo A.I. 5

		Starting temperature																				
		6°C			7°C			10°C			13°C			15°C			18°C			22°C		
		CC	IP	EER	CC	IP	EER	CC	IP	EER	CC	IP	EER	CC	IP	EER	CC	IP	EER	CC	IP	EER
Outdoor temperature	20°C	2.96	1.27	2.33	3.17	1.29	2.46	3.80	1.30	2.91	4.43	1.34	3.31	4.85	1.34	3.62	5.48	1.38	3.98	6.32	1.42	4.46
	21°C	2.96	1.28	2.31	3.17	1.31	2.42	3.80	1.32	2.87	4.43	1.36	3.26	4.85	1.37	3.54	5.48	1.41	3.90	6.32	1.45	4.37
	22°C	2.96	1.30	2.27	3.17	1.32	2.41	3.80	1.34	2.83	4.43	1.38	3.21	4.85	1.39	3.49	5.48	1.44	3.81	6.32	1.48	4.28
	23°C	2.96	1.32	2.24	3.17	1.34	2.37	3.80	1.36	2.79	4.43	1.41	3.14	4.85	1.41	3.44	5.48	1.47	3.74	6.32	1.52	4.16
	24°C	2.96	1.33	2.22	3.17	1.36	2.33	3.80	1.38	2.75	4.43	1.43	3.10	4.85	1.44	3.37	5.48	1.49	3.69	6.32	1.55	4.08
	25°C	2.96	1.35	2.19	3.17	1.38	2.30	3.80	1.40	2.71	4.43	1.45	3.06	4.85	1.46	3.32	5.48	1.52	3.61	6.32	1.58	4.01
	26°C	2.96	1.37	2.16	3.17	1.40	2.27	3.80	1.42	2.67	4.43	1.48	2.99	4.85	1.49	3.25	5.48	1.56	3.52	6.32	1.62	3.91
	27°C	2.96	1.39	2.13	3.17	1.42	2.24	3.80	1.44	2.63	4.43	1.51	2.93	4.85	1.52	3.19	5.48	1.59	3.45	6.32	1.66	3.81
	28°C	2.96	1.42	2.08	3.17	1.44	2.20	3.80	1.47	2.58	4.43	1.53	2.90	4.85	1.55	3.13	5.48	1.62	3.39	6.32	1.69	3.74
	29°C	2.96	1.44	2.05	3.17	1.47	2.16	3.80	1.50	2.53	4.43	1.56	2.84	4.85	1.57	3.09	5.48	1.64	3.35	6.32	1.71	3.70
	30°C	2.96	1.47	2.01	3.17	1.50	2.12	3.80	1.52	2.49	4.43	1.59	2.79	4.85	1.60	3.03	5.48	1.67	3.29	6.32	1.73	3.66
	31°C	2.96	1.50	1.97	3.17	1.52	2.09	3.80	1.55	2.45	4.43	1.61	2.75	4.85	1.63	2.97	5.48	1.69	3.25	6.32	1.76	3.60
	32°C	2.96	1.53	1.93	3.17	1.55	2.05	3.80	1.58	2.40	4.43	1.64	2.70	4.85	1.66	2.92	5.48	1.72	3.19	6.32	1.78	3.56
	33°C	2.96	1.55	1.91	3.17	1.58	2.01	3.80	1.61	2.35	4.43	1.67	2.65	4.85	1.69	2.87	5.48	1.75	3.14	6.32	1.81	3.50
	34°C	2.96	1.59	1.86	3.17	1.61	1.97	3.80	1.64	2.31	4.43	1.70	2.61	4.85	1.72	2.82	5.48	1.77	3.10	6.32	1.83	3.46
	35°C	2.96	1.62	1.82	3.17	1.64	1.94	3.80	1.68	2.26	4.43	1.73	2.56	4.85	1.76	2.76	5.48	1.81	3.03	6.32	1.87	3.38
	36°C	2.89	1.62	1.78	3.10	1.64	1.89	3.74	1.69	2.21	4.38	1.75	2.51	4.80	1.78	2.70	5.44	1.83	2.96	6.29	1.91	3.30
	37°C	2.81	1.62	1.74	3.03	1.64	1.84	3.67	1.70	2.16	4.33	1.76	2.46	4.75	1.80	2.64	5.39	1.86	2.89	6.25	1.94	3.21
	38°C	2.74	1.62	1.69	2.95	1.65	1.79	3.61	1.71	2.11	4.27	1.78	2.41	4.70	1.82	2.58	5.35	1.89	2.83	6.22	1.98	3.14
	39°C	2.67	1.62	1.65	2.88	1.65	1.75	3.54	1.72	2.06	4.22	1.79	2.36	4.64	1.84	2.52	5.30	1.92	2.76	6.18	2.02	3.06
40°C	2.59	1.61	1.61	2.81	1.65	1.70	3.48	1.73	2.01	4.17	1.81	2.31	4.59	1.86	2.47	5.26	1.95	2.70	6.15	2.06	2.99	
41°C	2.52	1.61	1.56	2.74	1.66	1.65	3.41	1.74	1.96	4.12	1.82	2.26	4.54	1.88	2.42	5.21	1.97	2.64	6.11	2.10	2.91	
42°C	2.44	1.61	1.52	2.67	1.66	1.61	3.35	1.75	1.92	4.07	1.84	2.22	4.49	1.90	2.36	5.17	2.00	2.58	6.08	2.14	2.85	
43°C	2.37	1.61	1.47	2.59	1.66	1.56	3.28	1.76	1.87	4.01	1.85	2.17	4.43	1.92	2.31	5.12	2.03	2.52	6.04	2.17	2.78	

2.3.2 alféa extensa A.I. 6 and alféa extensa duo A.I. 6

		Starting temperature																				
		6°C			7°C			10°C			13°C			15°C			18°C			22°C		
		CC	IP	EER	CC	IP	EER	CC	IP	EER	CC	IP	EER	CC	IP	EER	CC	IP	EER	CC	IP	EER
Outdoor temperature	20°C	4.07	1.33	3.06	4.22	1.34	3.15	4.64	1.28	3.62	5.07	1.23	4.13	5.35	1.17	4.56	5.77	1.13	5.12	6.34	1.16	5.47
	21°C	4.07	1.36	3.00	4.22	1.36	3.10	4.64	1.31	3.54	5.07	1.26	4.03	5.35	1.21	4.41	5.77	1.16	4.99	6.34	1.20	5.29
	22°C	4.07	1.38	2.95	4.22	1.38	3.06	4.64	1.33	3.48	5.07	1.29	3.94	5.35	1.24	4.30	5.77	1.20	4.82	6.34	1.23	5.16
	23°C	4.07	1.40	2.91	4.22	1.40	3.02	4.64	1.36	3.41	5.07	1.32	3.85	5.35	1.27	4.20	5.77	1.23	4.71	6.34	1.27	5.00
	24°C	4.07	1.43	2.85	4.22	1.43	2.95	4.64	1.38	3.36	5.07	1.35	3.76	5.35	1.31	4.07	5.77	1.27	4.56	6.34	1.31	4.84
	25°C	4.07	1.45	2.81	4.22	1.45	2.91	4.64	1.41	3.29	5.07	1.38	3.68	5.35	1.34	3.98	5.77	1.31	4.42	6.34	1.35	4.70
	26°C	4.07	1.48	2.75	4.22	1.48	2.85	4.64	1.44	3.22	5.07	1.41	3.60	5.35	1.38	3.87	5.77	1.35	4.29	6.34	1.39	4.56
	27°C	4.07	1.51	2.70	4.22	1.51	2.80	4.64	1.48	3.13	5.07	1.45	3.50	5.35	1.42	3.76	5.77	1.40	4.13	6.34	1.44	4.41
	28°C	4.07	1.55	2.63	4.22	1.54	2.74	4.64	1.51	3.07	5.07	1.49	3.41	5.35	1.47	3.63	5.77	1.44	4.02	6.34	1.48	4.29
	29°C	4.07	1.58	2.58	4.22	1.58	2.67	4.64	1.55	2.99	5.07	1.53	3.32	5.35	1.51	3.54	5.77	1.49	3.88	6.34	1.52	4.17
	30°C	4.07	1.62	2.52	4.22	1.61	2.62	4.64	1.59	2.91	5.07	1.57	3.23	5.35	1.55	3.44	5.77	1.53	3.78	6.34	1.56	4.07
	31°C	4.07	1.65	2.47	4.22	1.65	2.56	4.64	1.63	2.84	5.07	1.62	3.13	5.35	1.60	3.34	5.77	1.58	3.66	6.34	1.60	3.96
	32°C	4.07	1.69	2.41	4.22	1.69	2.50	4.64	1.67	2.78	5.07	1.66	3.06	5.35	1.65	3.24	5.77	1.63	3.55	6.34	1.64	3.87
	33°C	4.07	1.73	2.36	4.22	1.73	2.44	4.64	1.72	2.69	5.07	1.71	2.97	5.35	1.69	3.16	5.77	1.68	3.44	6.34	1.69	3.75
	34°C	4.07	1.77	2.30	4.22	1.77	2.38	4.64	1.76	2.63	5.07	1.76	2.88	5.35	1.74	3.07	5.77	1.74	3.32	6.34	1.74	3.65
	35°C	4.07	1.82	2.24	4.22	1.82	2.32	4.64	1.81	2.56	5.07	1.81	2.80	5.35	1.80	2.97	5.77	1.80	3.21	6.34	1.79	3.54
	36°C	3.87	1.76	2.19	4.01	1.77	2.27	4.43	1.76	2.51	4.85	1.76	2.76	5.11	1.76	2.91	5.53	1.75	3.16	6.09	1.75	3.47
	37°C	3.66	1.71	2.14	3.81	1.72	2.22	4.21	1.71	2.46	4.63	1.70	2.72	4.88	1.71	2.85	5.28	1.70	3.11	5.84	1.72	3.39
	38°C	3.46	1.65	2.09	3.60	1.66	2.16	4.00	1.66	2.41	4.41	1.65	2.67	4.64	1.67	2.78	5.03	1.65	3.06	5.58	1.68	3.32
	39°C	3.25	1.60	2.03	3.40	1.61	2.11	3.78	1.61	2.35	4.19	1.60	2.62	4.41	1.62	2.72	4.79	1.60	3.00	5.33	1.65	3.23
40°C	3.04	1.54	1.97	3.19	1.56	2.04	3.57	1.56	2.29	3.98	1.55	2.57	4.17	1.58	2.65	4.54	1.55	2.93	5.08	1.61	3.15	
41°C	2.84	1.49	1.90	2.99	1.51	1.98	3.35	1.51	2.22	3.76	1.50	2.51	3.94	1.53	2.57	4.29	1.50	2.87	4.83	1.58	3.06	
42°C	2.63	1.43	1.83	2.78	1.46	1.91	3.14	1.46	2.15	3.54	1.45	2.45	3.70	1.49	2.49	4.05	1.45	2.80	4.58	1.54	2.96	
43°C	2.42	1.38	1.76	2.58	1.41	1.83	2.92	1.41	2.08	3.32	1.40	2.38	3.47	1.44	2.40	3.80	1.40	2.72	4.32	1.51	2.86	

2.3.3 alféa extensa A.I. 8 and alféa extensa duo A.I. 8

		Starting temperature																				
		6°C			7°C			10°C			13°C			15°C			18°C			22°C		
		CC	IP	EER	CC	IP	EER	CC	IP	EER	CC	IP	EER	CC	IP	EER	CC	IP	EER	CC	IP	EER
Outdoor temperature	20°C	5.78	1.93	2.99	5.95	1.92	3.10	6.48	1.85	3.51	7.01	1.80	3.90	7.36	1.76	4.17	7.89	1.71	4.61	8.60	1.67	5.15
	21°C	5.78	1.95	2.96	5.95	1.94	3.07	6.48	1.89	3.43	7.01	1.84	3.82	7.36	1.80	4.08	7.89	1.76	4.48	8.60	1.72	5.00
	22°C	5.78	1.98	2.92	5.95	1.97	3.02	6.48	1.92	3.38	7.01	1.87	3.76	7.36	1.84	3.99	7.89	1.80	4.38	8.60	1.77	4.86
	23°C	5.78	2.01	2.87	5.95	2.00	2.98	6.48	1.95	3.33	7.01	1.91	3.68	7.36	1.89	3.89	7.89	1.85	4.26	8.60	1.83	4.70
	24°C	5.78	2.03	2.84	5.95	2.03	2.93	6.48	1.99	3.26	7.01	1.95	3.60	7.36	1.93	3.81	7.89	1.90	4.15	8.60	1.88	4.57
	25°C	5.78	2.06	2.80	5.95	2.06	2.89	6.48	2.03	3.20	7.01	2.00	3.51	7.36	1.98	3.71	7.89	1.96	4.02	8.60	1.94	4.43
	26°C	5.78	2.09	2.76	5.95	2.09	2.85	6.48	2.06	3.15	7.01	2.04	3.44	7.36	2.03	3.62	7.89	2.01	3.92	8.60	2.00	4.30
	27°C	5.78	2.12	2.72	5.95	2.13	2.79	6.48	2.11	3.07	7.01	2.09	3.36	7.36	2.09	3.52	7.89	2.07	3.81	8.60	2.08	4.13
	28°C	5.78	2.18	2.65	5.95	2.19	2.72	6.48	2.17	2.99	7.01	2.15	3.27	7.36	2.15	3.42	7.89	2.14	3.68	8.60	2.14	4.02
	29°C	5.78	2.24	2.58	5.95	2.24	2.66	6.48	2.23	2.91	7.01	2.22	3.16	7.36	2.21	3.32	7.89	2.20	3.58	8.60	2.20	3.91
	30°C	5.78	2.30	2.51	5.95	2.30	2.59	6.48	2.29	2.83	7.01	2.28	3.08	7.36	2.28	3.22	7.89	2.26	3.49	8.60	2.27	3.79
	31°C	5.78	2.36	2.45	5.95	2.36	2.52	6.48	2.35	2.76	7.01	2.35	2.99	7.36	2.34	3.14	7.89	2.33	3.38	8.60	2.33	3.69
	32°C	5.78	2.43	2.38	5.95	2.43	2.45	6.48	2.42	2.68	7.01	2.42	2.90	7.36	2.41	3.05	7.89	2.40	3.28	8.60	2.40	3.58
	33°C	5.78	2.49	2.32	5.95	2.49	2.39	6.48	2.49	2.61	7.01	2.49	2.82	7.36	2.48	2.96	7.89	2.47	3.19	8.60	2.47	3.48
	34°C	5.78	2.56	2.26	5.95	2.56	2.33	6.48	2.56	2.53	7.01	2.56	2.74	7.36	2.55	2.88	7.89	2.54	3.10	8.60	2.55	3.37
	35°C	5.78	2.64	2.19	5.95	2.64	2.25	6.48	2.64	2.46	7.01	2.64	2.66	7.36	2.63	2.79	7.89	2.63	3.00	8.60	2.63	3.27
	36°C	5.60	2.62	2.14	5.77	2.61	2.21	6.28	2.59	2.42	6.79	2.58	2.63	7.12	2.58	2.76	7.63	2.57	2.97	8.31	2.56	3.25
	37°C	5.43	2.59	2.10	5.58	2.57	2.17	6.07	2.55	2.38	6.56	2.53	2.60	6.87	2.52	2.73	7.36	2.50	2.94	8.02	2.48	3.23
	38°C	5.26	2.57	2.05	5.39	2.54	2.12	5.87	2.51	2.34	6.34	2.47	2.56	6.63	2.46	2.70	7.09	2.43	2.92	7.73	2.41	3.20
	39°C	5.08	2.54	2.00	5.20	2.50	2.08	5.66	2.46	2.30	6.12	2.42	2.53	6.38	2.40	2.66	6.83	2.37	2.89	7.43	2.34	3.18
40°C	4.91	2.52	1.95	5.01	2.47	2.03	5.46	2.42	2.26	5.90	2.37	2.49	6.14	2.34	2.62	6.56	2.30	2.85	7.14	2.26	3.15	
41°C	4.74	2.49	1.90	4.83	2.44	1.98	5.25	2.37	2.21	5.67	2.31	2.45	5.89	2.28	2.58	6.29	2.23	2.82	6.85	2.19	3.13	
42°C	4.56	2.47	1.85	4.64	2.40	1.93	5.05	2.33	2.17	5.45	2.26	2.41	5.65	2.22	2.54	6.03	2.17	2.78	6.56	2.12	3.10	
43°C	4.39	2.44	1.80	4.45	2.37	1.88	4.84	2.29	2.12	5.23	2.20	2.37	5.40	2.16	2.50	5.76	2.10	2.75	6.27	2.04	3.07	

2.3.4 alféa extensa A.I. 10 and alféa extensa duo A.I. 10

		Starting temperature																				
		6°C			7°C			10°C			13°C			15°C			18°C			22°C		
		CC	IP	EER	CC	IP	EER	CC	IP	EER	CC	IP	EER	CC	IP	EER	CC	IP	EER	CC	IP	EER
Outdoor temperature	20°C	7.05	2.29	3.08	7.28	2.30	3.17	7.98	2.23	3.58	8.68	2.24	3.88	9.14	2.20	4.16	9.84	2.18	4.51	10.77	2.18	4.95
	21°C	7.05	2.33	3.03	7.28	2.33	3.13	7.98	2.27	3.51	8.68	2.29	3.79	9.14	2.25	4.07	9.84	2.23	4.41	10.77	2.24	4.82
	22°C	7.05	2.36	2.99	7.28	2.37	3.08	7.98	2.31	3.45	8.68	2.34	3.71	9.14	2.31	3.97	9.84	2.29	4.29	10.77	2.30	4.69
	23°C	7.05	2.39	2.95	7.28	2.40	3.04	7.98	2.35	3.39	8.68	2.39	3.63	9.14	2.36	3.88	9.84	2.35	4.18	10.77	2.36	4.57
	24°C	7.05	2.43	2.91	7.28	2.44	2.99	7.98	2.39	3.34	8.68	2.44	3.56	9.14	2.41	3.80	9.84	2.40	4.10	10.77	2.42	4.46
	25°C	7.05	2.47	2.86	7.28	2.48	2.94	7.98	2.44	3.27	8.68	2.50	3.47	9.14	2.47	3.71	9.84	2.47	3.98	10.77	2.49	4.33
	26°C	7.05	2.50	2.82	7.28	2.52	2.90	7.98	2.48	3.22	8.68	2.55	3.41	9.14	2.53	3.62	9.84	2.53	3.89	10.77	2.56	4.21
	27°C	7.05	2.55	2.77	7.28	2.56	2.85	7.98	2.54	3.14	8.68	2.62	3.32	9.14	2.60	3.52	9.84	2.60	3.78	10.77	2.64	4.08
	28°C	7.05	2.62	2.69	7.28	2.63	2.77	7.98	2.61	3.06	8.68	2.68	3.24	9.14	2.66	3.44	9.84	2.66	3.70	10.77	2.69	4.01
	29°C	7.05	2.68	2.63	7.28	2.69	2.71	7.98	2.67	2.99	8.68	2.74	3.17	9.14	2.72	3.37	9.84	2.72	3.62	10.77	2.75	3.92
	30°C	7.05	2.75	2.57	7.28	2.76	2.64	7.98	2.74	2.91	8.68	2.79	3.11	9.14	2.78	3.29	9.84	2.78	3.54	10.77	2.80	3.85
	31°C	7.05	2.82	2.50	7.28	2.83	2.58	7.98	2.81	2.84	8.68	2.85	3.05	9.14	2.85	3.21	9.84	2.84	3.46	10.77	2.86	3.77
	32°C	7.05	2.89	2.44	7.28	2.90	2.52	7.98	2.88	2.77	8.68	2.92	2.97	9.14	2.91	3.15	9.84	2.90	3.39	10.77	2.92	3.69
	33°C	7.05	2.97	2.38	7.28	2.98	2.45	7.98	2.96	2.69	8.68	2.98	2.91	9.14	2.98	3.07	9.84	2.97	3.31	10.77	2.98	3.62
	34°C	7.05	3.05	2.31	7.28	3.05	2.39	7.98	3.04	2.62	8.68	3.05	2.85	9.14	3.05	3.00	9.84	3.04	3.24	10.77	3.04	3.55
	35°C	7.05	3.14	2.25	7.28	3.14	2.32	7.98	3.13	2.55	8.68	3.13	2.77	9.14	3.13	2.93	9.84	3.12	3.15	10.77	3.12	3.46
	36°C	6.75	3.07	2.20	6.96	3.09	2.25	7.63	3.07	2.49	8.30	3.07	2.71	8.74	3.07	2.85	9.41	3.06	3.07	10.31	3.07	3.36
	37°C	6.44	2.99	2.15	6.63	3.05	2.17	7.28	3.00	2.43	7.93	3.01	2.64	8.33	3.01	2.77	8.97	3.01	2.99	9.84	3.03	3.25
	38°C	6.14	2.92	2.10	6.30	3.01	2.10	6.93	2.93	2.36	7.55	2.94	2.56	7.93	2.95	2.69	8.54	2.95	2.90	9.37	2.98	3.15
	39°C	5.84	2.85	2.05	5.98	2.96	2.02	6.58	2.87	2.29	7.17	2.88	2.49	7.52	2.89	2.60	8.10	2.89	2.80	8.91	2.93	3.04
40°C	5.53	2.78	1.99	5.65	2.92	1.94	6.23	2.80	2.22	6.79	2.82	2.41	7.12	2.83	2.52	7.67	2.83	2.71	8.44	2.89	2.92	
41°C	5.23	2.71	1.93	5.32	2.88	1.85	5.87	2.74	2.15	6.42	2.76	2.32	6.71	2.77	2.42	7.23	2.77	2.61	7.97	2.84	2.81	
42°C	4.93	2.64	1.87	5.00	2.83	1.76	5.52	2.67	2.07	6.04	2.70	2.24	6.31	2.71	2.33	6.80	2.71	2.50	7.51	2.79	2.69	
43°C	4.62	2.57	1.80	4.67	2.79	1.67	5.17	2.60	1.99	5.66	2.64	2.15	5.90	2.65	2.23	6.36	2.66	2.40	7.04	2.75	2.56	

2.3.5 alféa extensa A.I. 13

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

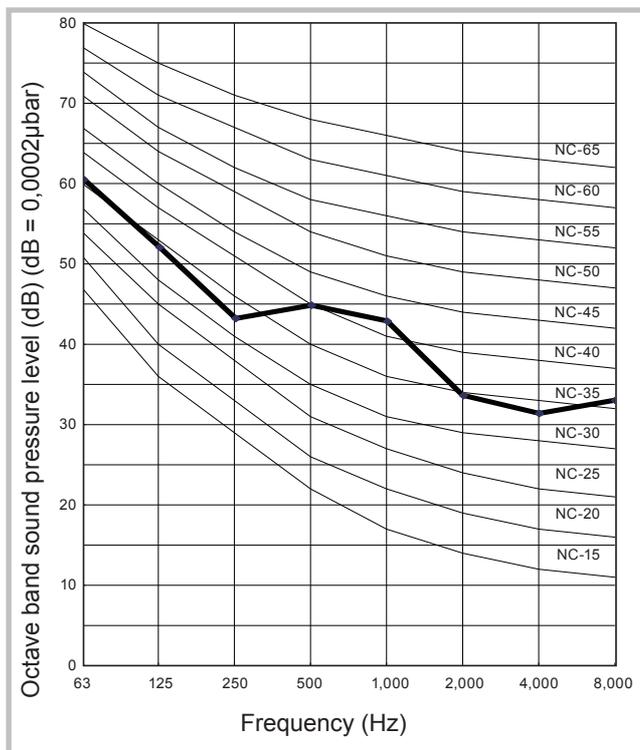
2.3.6 alféa extensa A.I.16

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

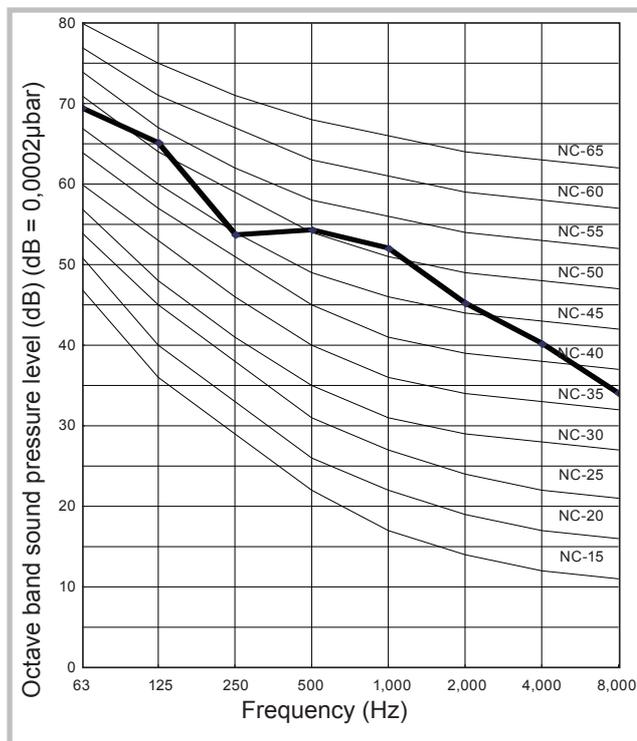
2.4 Sound power of the outdoor unit

2.4.1 Sound power curves in heating mode

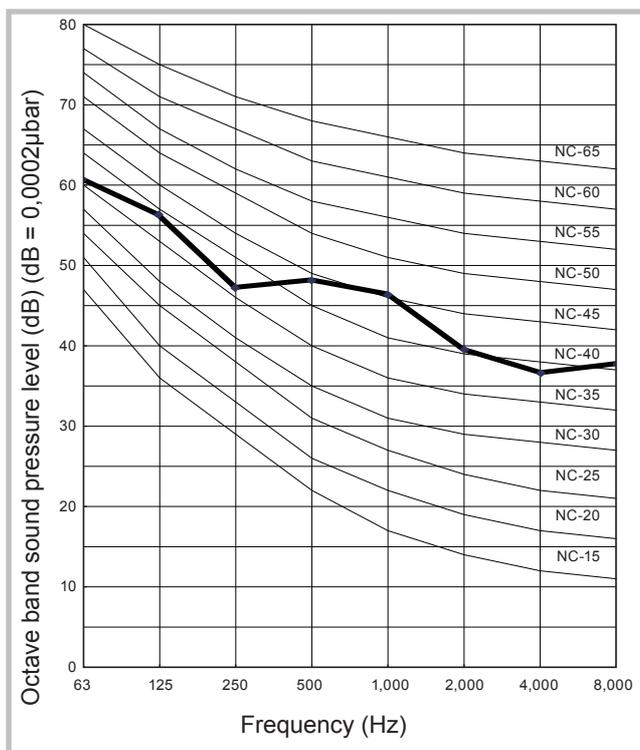
alféa extensa A.I. 5 / duo A.I. 5



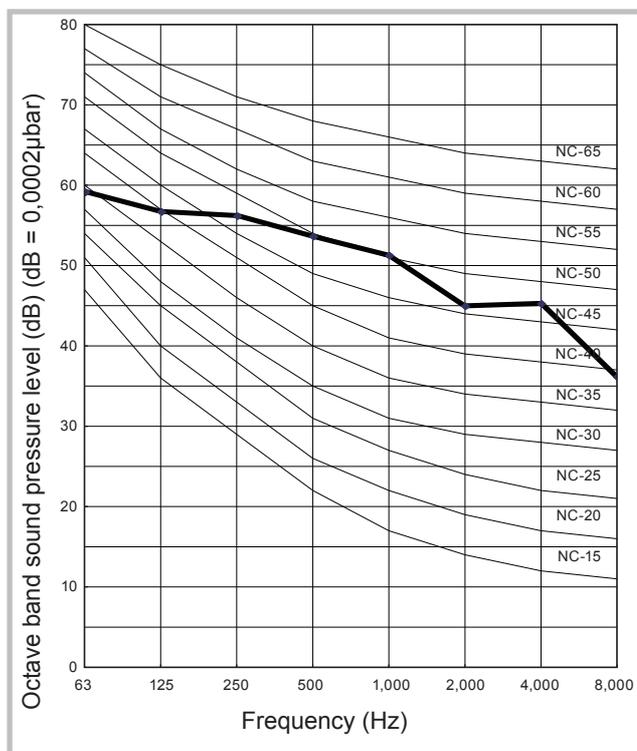
alféa extensa A.I. 8 / duo A.I. 8



alféa extensa A.I. 6 / duo A.I. 6

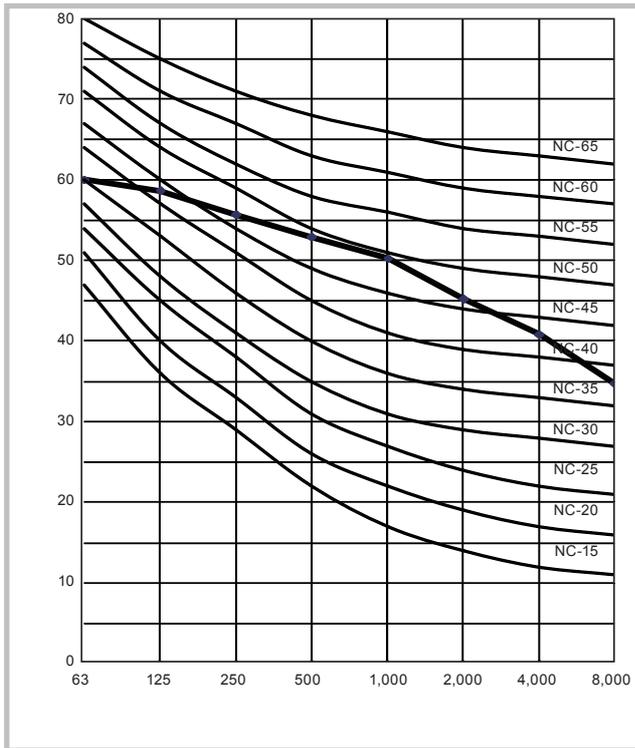


alféa extensa A.I. 10 / duo A.I. 10

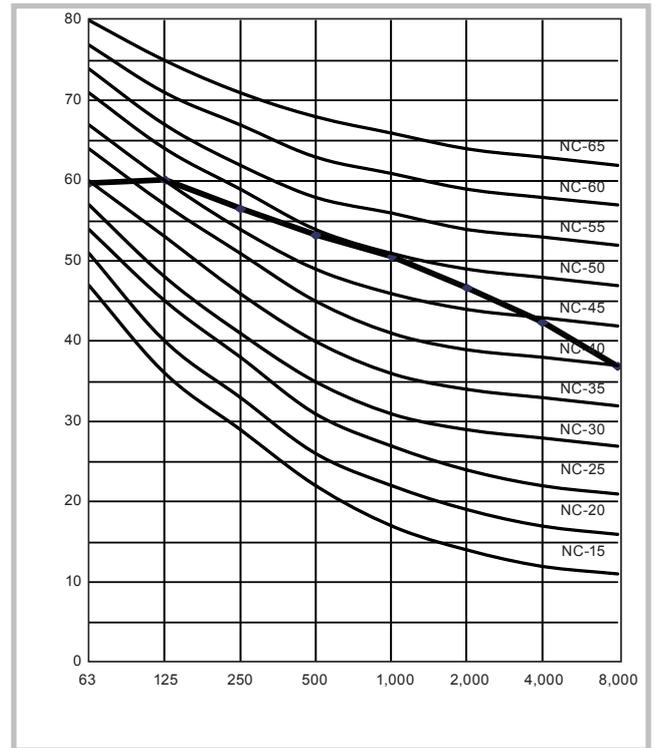


NC : Level of acoustic comfort

alféa extensa A.I. 13

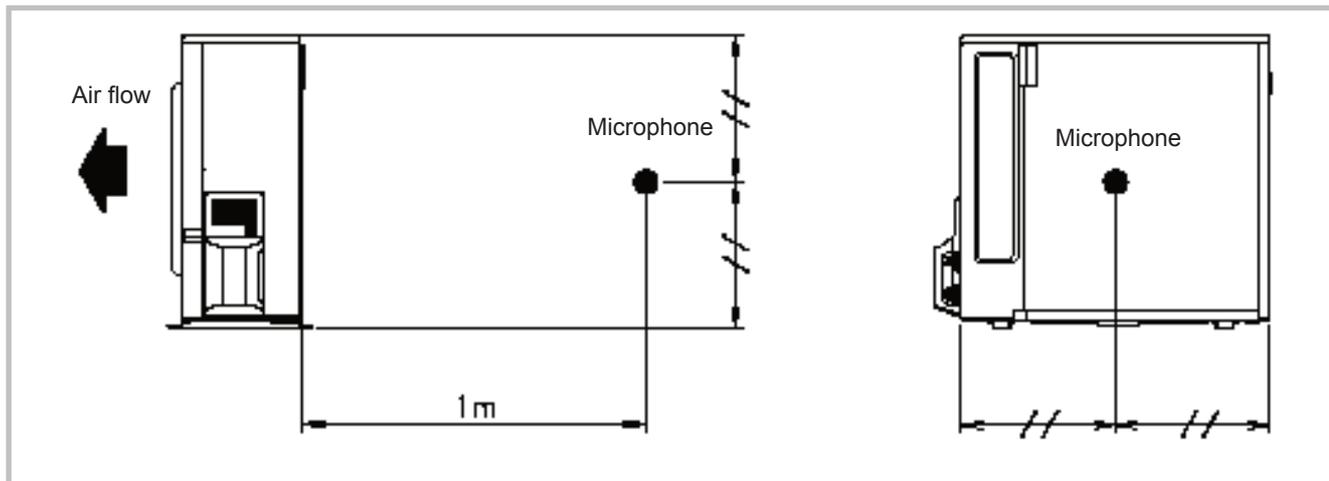


alféa extensa A.I. 16

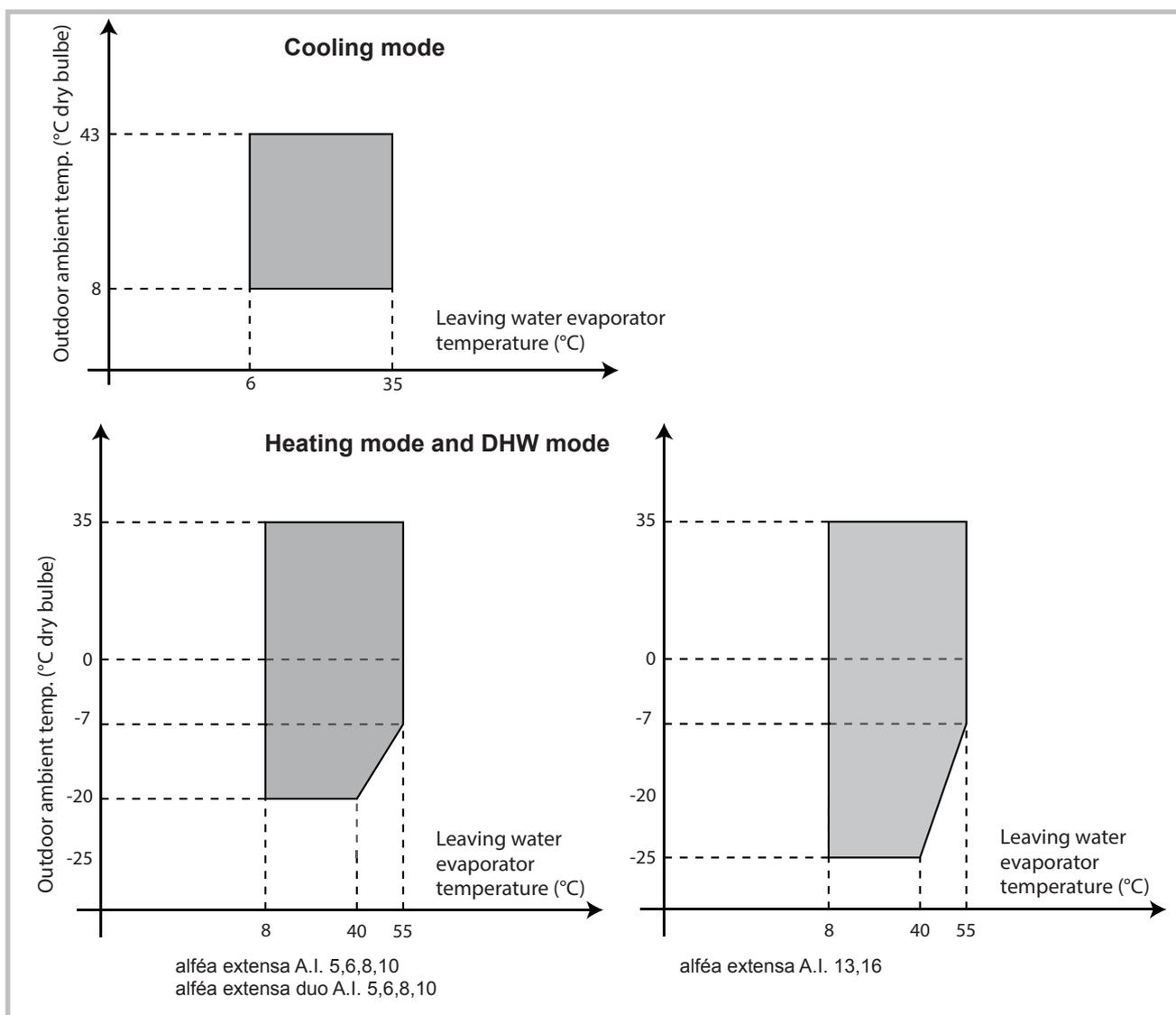


NC : Level of acoustic comfort

2.4.2 Sound level check point



2.5 Recommended operation range



2.6 Safety devices

2.6.1 Outdoor unit

		alféa extensa A.I. 5 / alféa extensa duo A.I. 5	alféa extensa A.I. 6 / alféa extensa duo A.I. 6	alféa extensa A.I. 8 / alféa extensa duo A.I. 8	alféa extensa A.I. 10 / alféa extensa duo A.I. 10	alféa extensa A.I. 13 / alféa extensa duo A.I. 16
Calibre curve C breaker		16 A		20 A		32 A
Circuit protection	Fuse (near power supply)	20 A 250 V		25 A 250 V		-
		5 A 250 V				
	Fuse (Main PCB)	15 A 250 V		3,15 A 250 V		5 A 250 V
		10 A 250 V				3.15 A 250 V
		3.15 A 250 V				10 A 250 V
Fan protection	Thermal protector	OFF : 100 ±10°C ON : 95 ±10°C			OFF : 150 ±15°C ON : 120 ±15°C	OFF : 150 ±15°C ON : 120 ±15°C
Compressor protection	Thermal protection program (Compressor temp.)	OFF : 108°C ON : 80°C				OFF : 112°C ON : 80°C
	Thermal protection program (Discharge temp.)	OFF : 110°C ON : after 7 minutes				OFF : 115°C ON : after 7 minutes
High pressure protection	Thermal protection program (Heat exchanger temp.)	OFF : 67°C ON : 63°C				OFF : 68°C ON : 63°C
	Pressure sensor	OFF : 4.2 MPa ON : 3.0 MPa				
Low pressure protection (cool mode)	Pressure sensor	OFF : 0.12 MPa ON : 0.15 MPa				

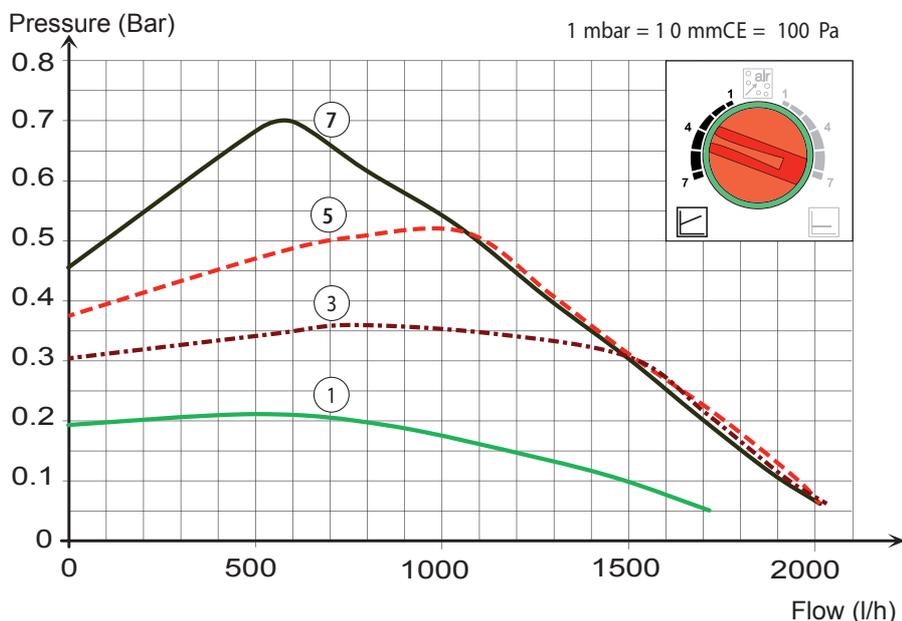
2.6.2 Hydraulic unit

			alféa extensa A.I.	alféa extensa duo A.I.
Circuit protection back-ups PAC curve C		If back-up 6kW (accessory)	32 A	
High pressure protection		Safety valve	3 bar	
Outgoing temperature max. protection	Back-up single phase	Regulator	+80 °C	

3. Hydraulic circuit

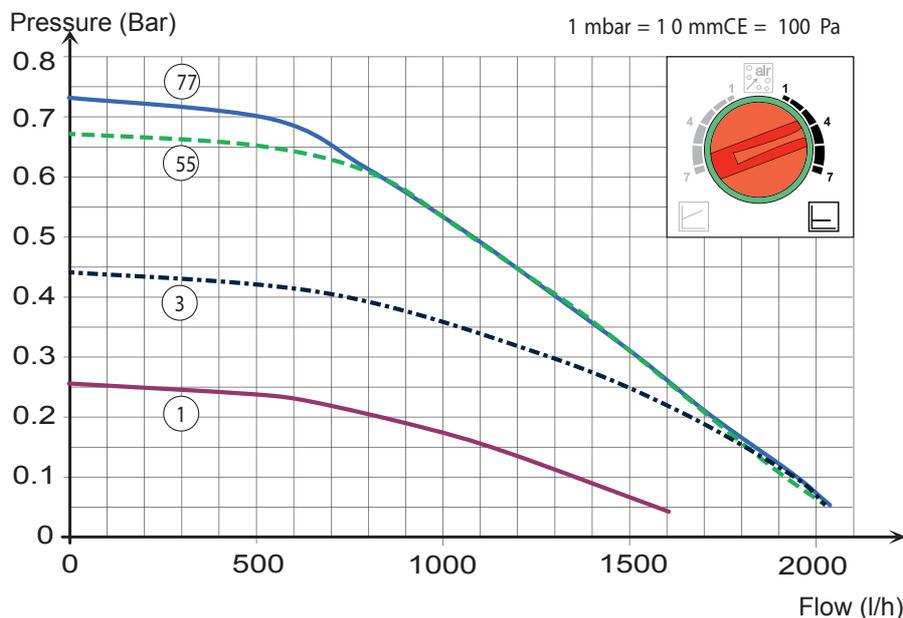
3.1 Available pressures

Variable pressure



Recommended for an installation radiators equipped (especially any system with thermostatic heads or solenoid zone).

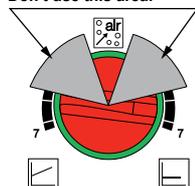
Constant pressure



Recommended for an installation at floor heating at constant pressure drop.

Warning :

Don't use this area.



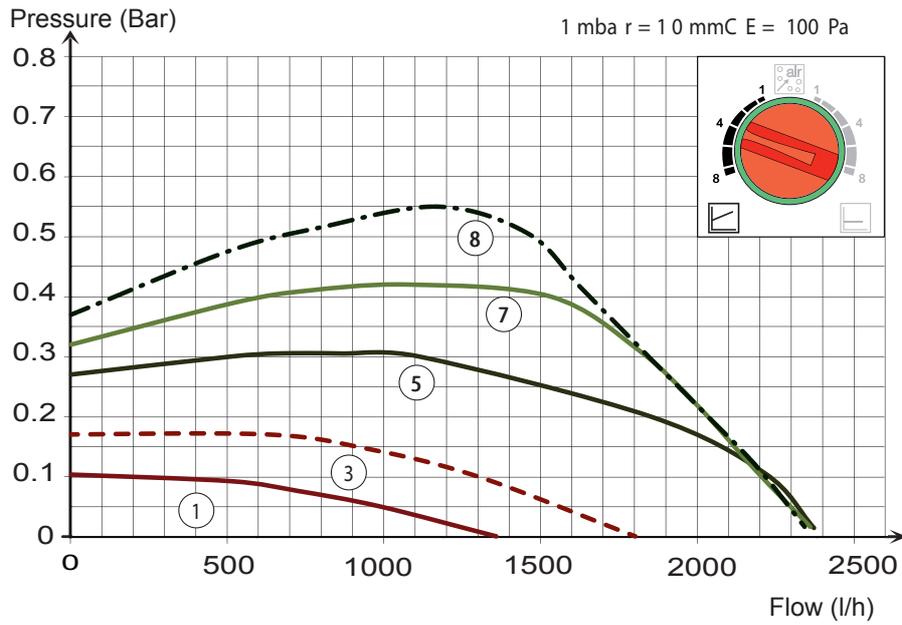
 Variable pressure

 Venting

 Constant pressure

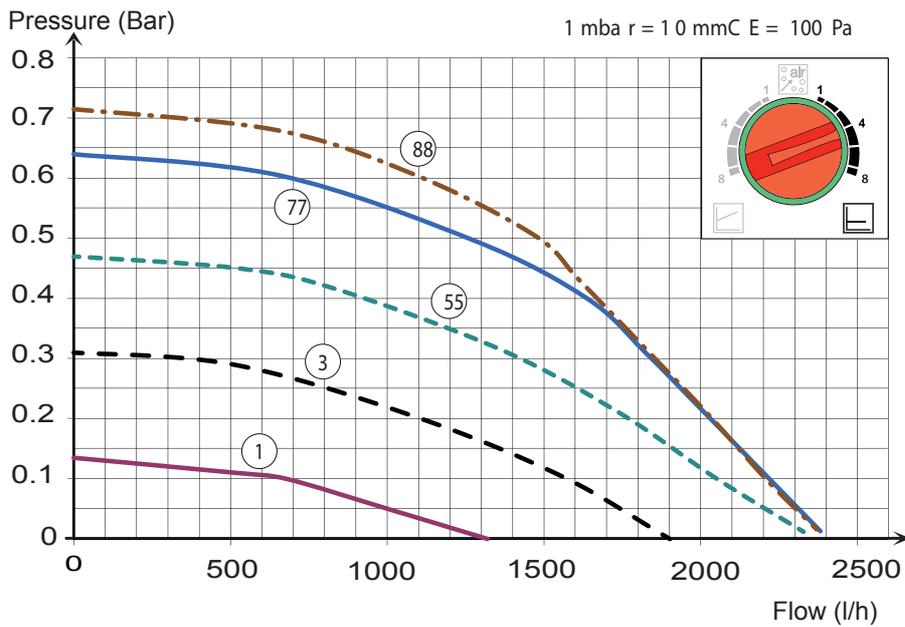
alféa extensa A.I. 13 and 16

Variable pressure



Recommended for an installation radiators equipped (especially any system with thermostatic heads or solenoid zone).

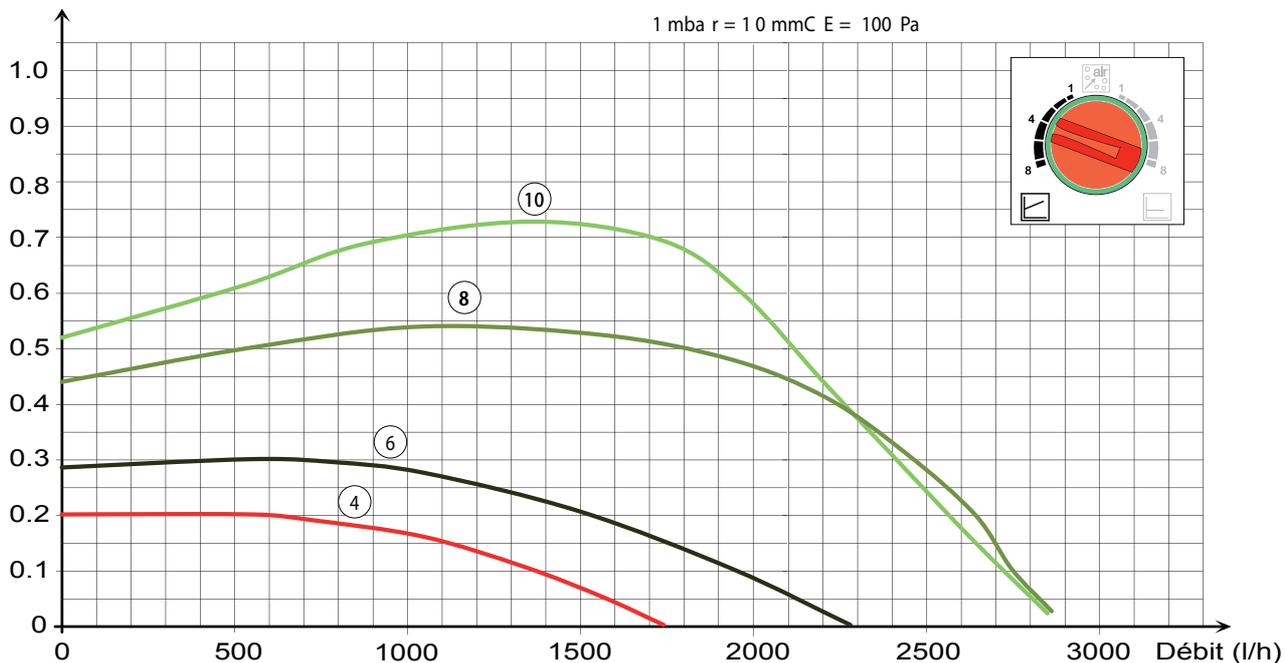
Constant pressure



alféa extensa A.I. 13 and 16 with high flow rate circulating pump kit (option)

Variable pressure

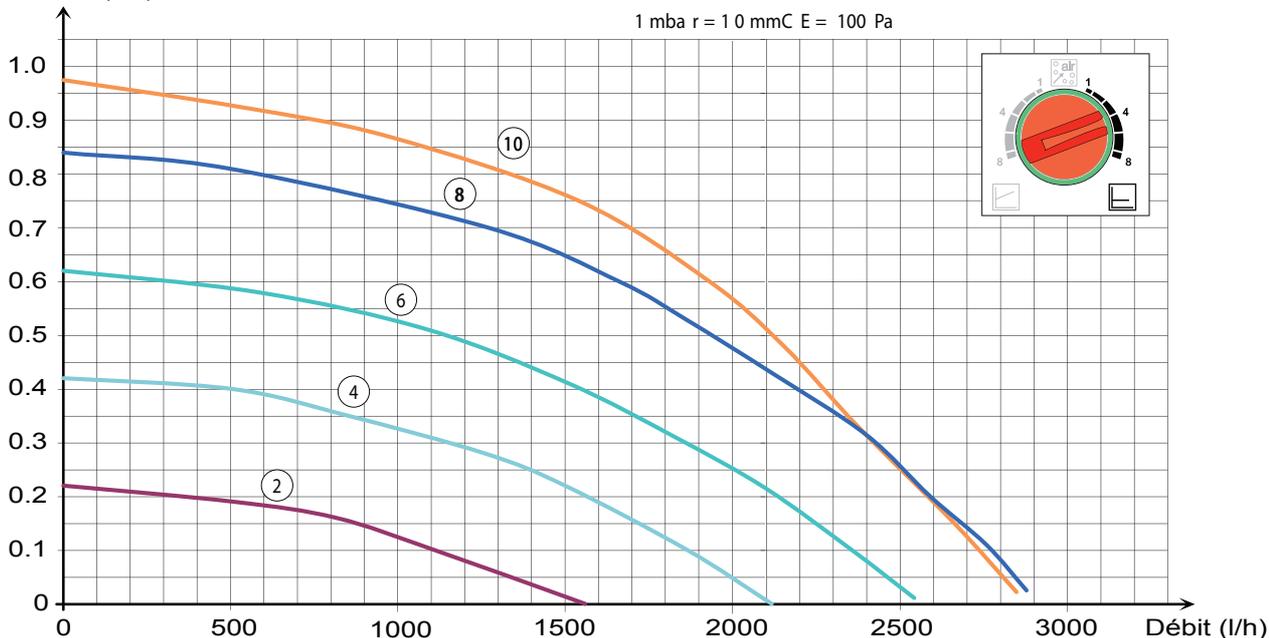
Pression (Bar)



Recommended for an installation radiators equipped (especially any system with thermostatic heads or solenoid zone).

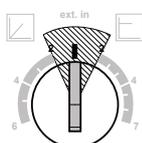
Constant pressure

Pression (Bar)



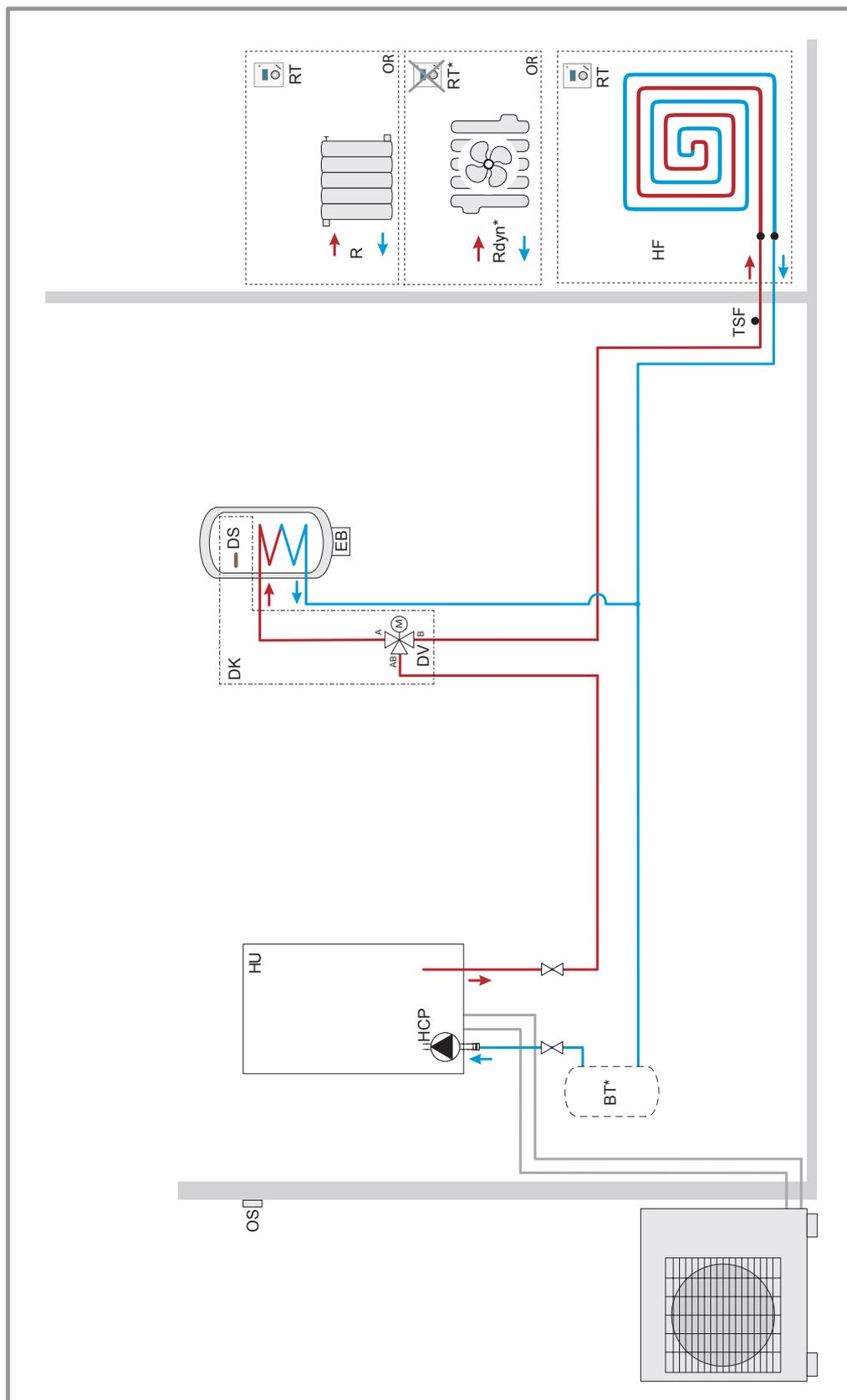
Recommended for an installation at floor heating at constant pressure drop.

Warning :



Don't use this area.

- Configuration 1 : 1 heating circuit and DHW tank

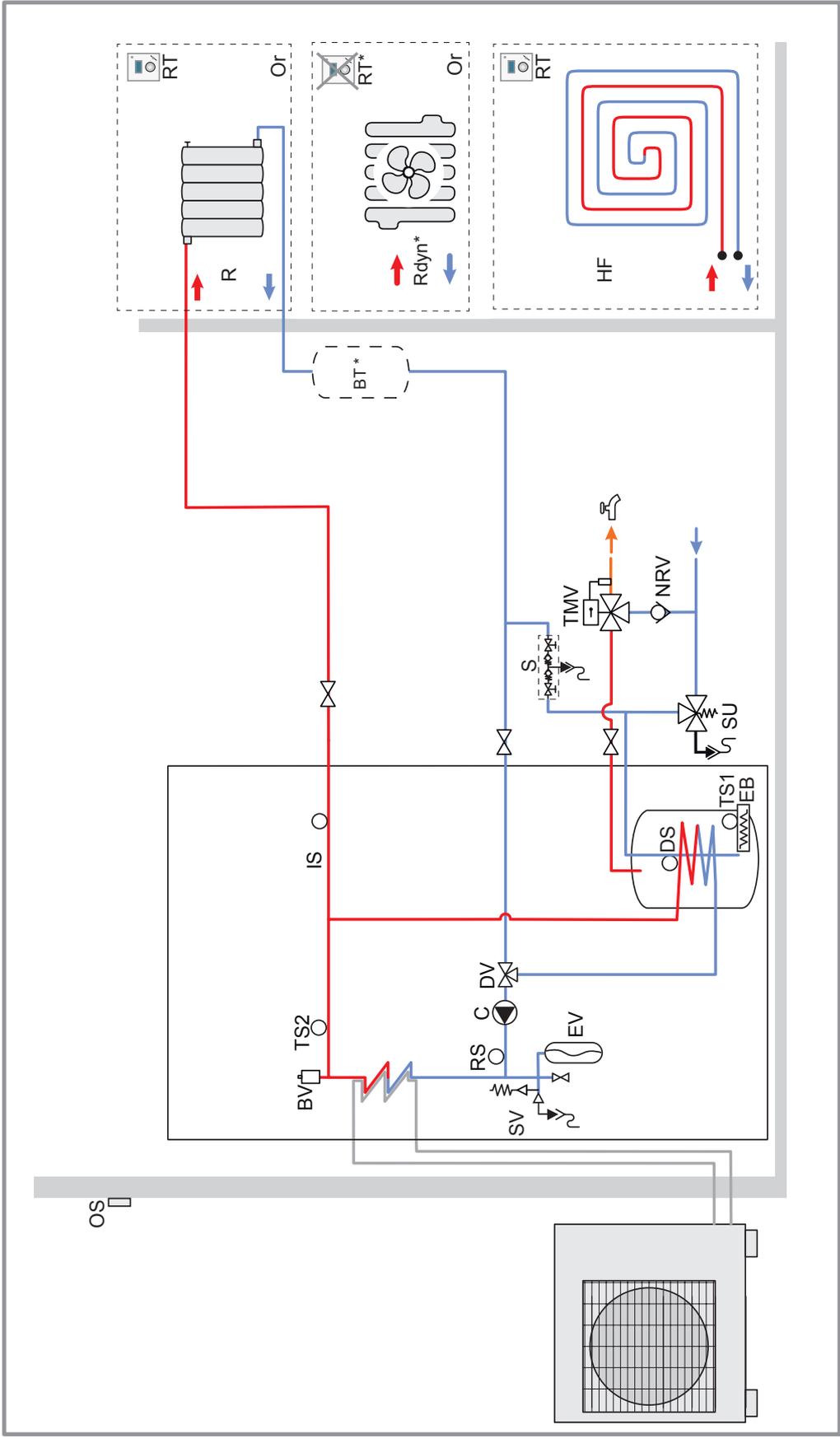


Caption :

- | | |
|---|---|
| EB - Electrical back-up heater | OS - Outdoor sensor |
| BT* - Buffer tank (obligatory with Rdyn, if HP>11kW) | DV - Distribution valve |
| HCP - Heating circulating pump | TSF - Heated floor thermal safety fuse |
| DK - DHW kit | RT* - Room thermostat or room control unit (option/except with Rdyn) |
| HU - Hydraulic unit | |
| | HF - Heating-cooling floor |
| | R - Radiators (or fan coils) |
| | Rdyn* - Dynamic radiators |
| | RT* - Room thermostat or room control unit (option/except with Rdyn) |
| | DS - DHW sensor |

3.2.2 alféa extensa duo A.I.

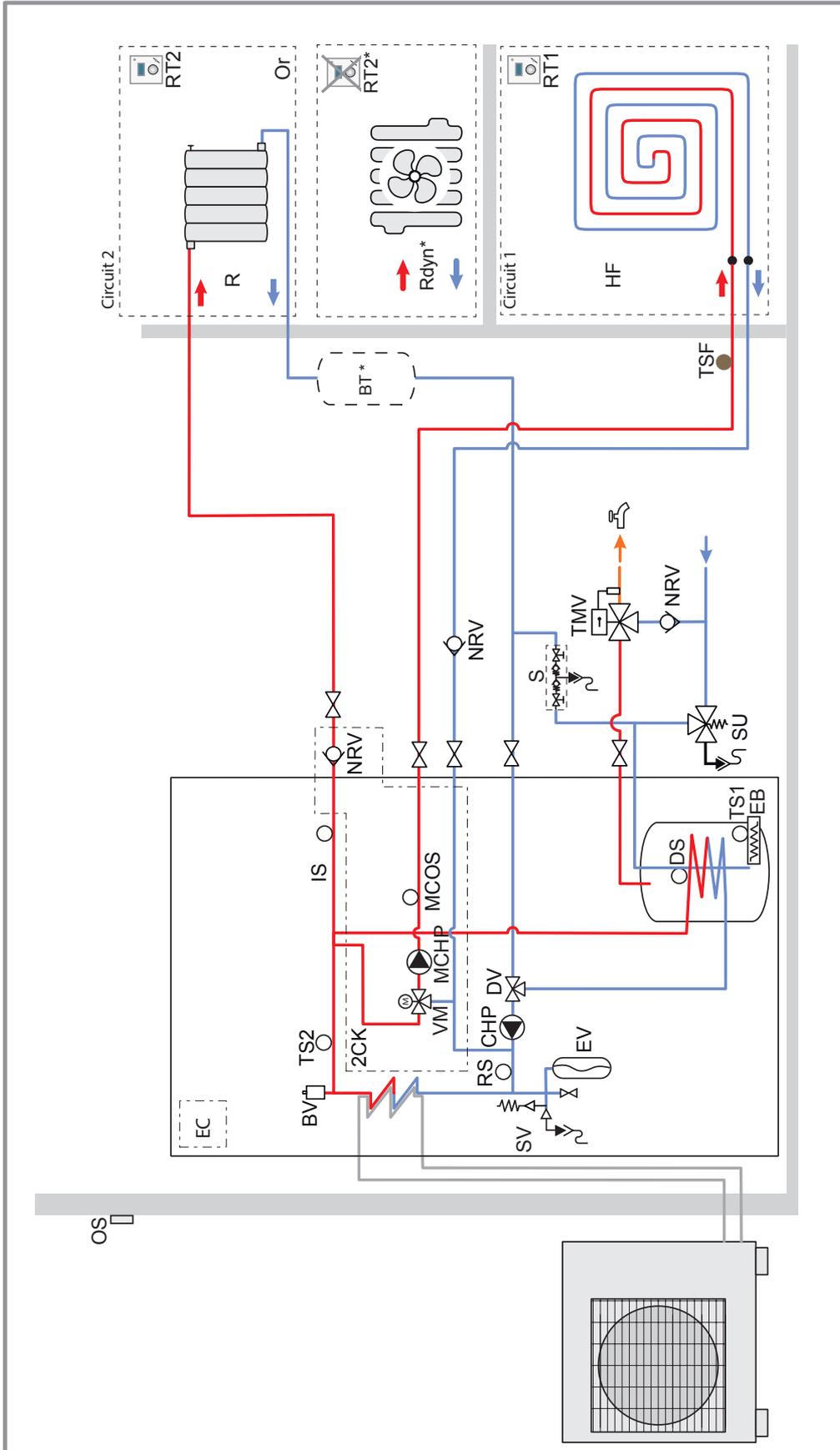
- Configuration 1 : 1 heating circuit



Caption :

- EB** - Electrical back-up heater
- NRV**- Non-return valve
- HCP** - heating circulating pump
- S** - Shut-off
- SU** - Safety unit
- BT*** - Buffer tank (mandatory with Rdyn, if HP>11kW)
- MTV** - Thermostatic mixer valve
- HF** - Heating-cooling floor
- BV** - Bleeder valve
- R** - Radiators (or fan coils)
- RT*** - Room thermostat or room control unit (option/except with Rdyn)
- RT** - Radiator thermostat
- TS1** - Temperature safety of domestic electrical back-up
- TS2** - Temperature safety (option Heating back-up option)
- IS** - HP Initial sensor
- OS** - Outdoor sensor
- Rdyn*** - Dynamic radiators
- DS** - DHW sensor
- SV** - Safety valve
- DV** - Distribution valve
- EV** - Expansion vessel
- RS** - Return sensor

• Configuration 2 : 2 heating circuits



Caption :

EB - Electrical back-up heating	2CK - 2nd circuit kit	DS - DHW sensor	EV - Expansion vessel
EC - Extension card, 2 circuits	MTV - Thermostatic mixer valve	TS1 - Temperature safety of domestic electrical back-up	SV - Safety valve
NRV - Non-return valve	HF - Heating-cooling floor	TS2 - Temperature safety (option Heating back-up option)	DV - Distribution valve
HCP - Heating circulating pump	BV - Bleeder valve	IS - HP Initial sensor	VM - Vanne mélangeuse circuit
MCHP - Mixed-circuit heat pump	R - Radiators (or fan coils)	OS - Outdoor sensor	
B - Breaker	RT1 - Room thermostat circuit 1 (option)	TSF - Heated floor thermal safety fuse	
SU - Safety unit	RT2 - Room thermostat circuit 2 (option)	RS - Return sensor	

4. Options

Function	Name	Reference	alféa extensa A.I.	alféa extensa duo A.I.
Ambient sensor	NAVILINK A59	074 208	•	•
	NAVILINK A75	074 213	•	•
	NAVILINK A78	074 214	•	•
COZYTOUCH	Cozytouch A.I. Kit	501 000	•	•
DHW	MILEO 200	090 881	•	
	MILEO 300	090 882	•	
	MILEO + 200	090 885	•	
	MILEO + 300	080 886	•	
	DHW kit	073 991	•	
	Expansion vessel duo kit	075 118		•
Connection	Hydraulic kit Duo exit (1 zone)	075 526		•
	Hydraulic kit Duo exit (2 zones)	075 522		•
2 Zones	Split 2 Zones kit	570 630	•	
	Split Duo 2 Zones kit (regul exterior kit included)	570 629		•
Boiler connection	Boiler connection kit	073 989	•	
	Boiler connection duo kit	073 990		•
	Bottle decoupling	073 957	•	•
Cooling	Cooling kit	075 328	•	•
Others	Relay kit 6 kW	075 327	•	•
Buffer tank	BT 25	700 436	•	•
	BT 50	700 437	•	•
Indoor unit integration ⁽¹⁾	Wall In grid	073 325	•	•
	Wall In frame	073 326	•	•
	Wall In box	073 327	•	•
Accessories for outdoor unit	Anti-vibration blocks (x4)	523 574	•	•
	White PVC floor support (x2)	809 532	•	•
	Cap for floor support (x4)	809 540	•	•
	Black rubber floor support (x2)	809 536	•	•
	Wall bracket ⁽²⁾ 600 mm (with bar)	875 033	•	•
	Heater for drain pan	809 644	•	•
	Drain pan models size 5,6,8	074 008	•	•
Refrigerant pipes ⁽³⁾	KM1 5M 1/2"-1/4" models size 5,6	809 155	•	•
	KM1 7M 1/2"-1/4" models size 5,6	809 157	•	•
	KM1 10M 1/2"-1/4" models size 5,6	809 160	•	•
	KM1 25M 1/2"-1/4" models size 5,6	809 165	•	•
	KM1 5M 5/8"-1/4" model size 8	809 255	•	•
	KM1 7M 5/8"-1/4" model size 8	809 257	•	•
	KM1 10M 5/8"-1/4" model size 8	809 260	•	•
	KM1 25M 5/8"-1/4" model size 8	809 265	•	•
	KM1 5M 5/8"-3/8" model size 10	809 565	•	•
	KM1 7M 5/8"-3/8" model size 10, 13, 16	809 567	•	•
	KM1 10M 5/8"-3/8" model size 10, 13, 16	809 570	•	•
KM1 25M 5/8"-3/8" model size 10, 13, 16	809 575	•	•	
Protection pipes for refrigerant pipes	GO 80x60 (8 lg. de 2 m)	809 709	•	•
	GO 80x60 (2 lg. de 2 m)	809 716	•	•
	CGO 80x60 (x5)	809 723	•	•
	PMC 80x60 (x5)	809 729	•	•

⁽¹⁾ Only for the models 5, 6 and 8.

⁽²⁾ Installer has to make sure that the wall bracket installation will not transmit vibration (ground position is being preferred).

⁽³⁾ For a better protection of insulation against UV, Atlantic recommend the installation of protection pipes together with refrigerant pipes.



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This equipment complies with:

- Low Voltage Directive 2014/35/EC in accordance with NF EN 60335-1, NF EN 60335-2-40, NF EN 60529, NF EN 60529/A2 (IP) standards,
- Electromechanical Compatibility Directive 2014/30/EC,
- Machines Directive 2006/42/EC,
- Pressure Equipment Directive 2014/68/EC in accordance with NF EN 378-2 standard,
- Ecodesign Directive 2009/125/EC,
- Energy Labelling Directive 2010/30/EC.

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.

