

PAC BT LOW TEMPERATURE HEAT PUMP WITH DHW TANK INCLUDED



MADE IN EUROPE



+ PRODUCTS

- **High efficiency:** ηs 128%.
- High flexibility due to **DC Inverter** compressor: operation optimised at partial load.
- **Very low noise level:** 49dB(A) for outdoor unit.
- Domestic Hot Water tank - 280L included: **Compact solution.**
- **Modular system:** boiler back-up (optional) and additional DHW tank (optional).

FEATURES



DC INVERTER



R410A FLUID



HEATING MODE OPERATIONAL DOWN TO -20°C OUTDOORS



DOMESTIC HOT WATER



FLOOR HEATING



HIGH-TEMPERATURE RADIATOR



BOILER REPLACEMENT



BOILER BACK-UP



ULTRA QUIET



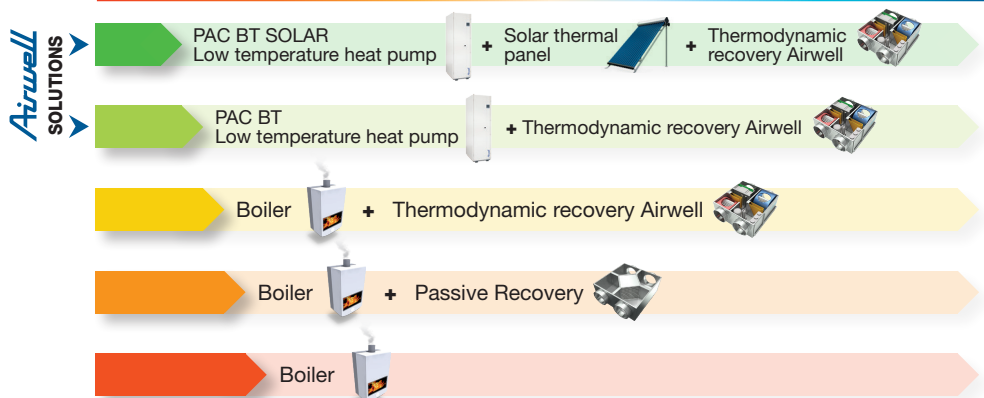
WATER PROGRAMS



Renewable Energy

- Ideal solution for radiant panel in heating and cooling mode, high temperature heater, towel dryer or fan-coil units.
- 5.2 to 17 kW in heating mode / 4.1 to 15.5 kW in cooling mode over 6 models.
- Operating in heating mode up to -20°C outdoor temperature (water outlet temperature up to 60°C).
- Operating in cooling mode up to 45°C (outdoor temperature).
- Digital display on indoor unit: mode selection (heating, cooling and Domestic Hot Water), weekly timer and holidays, diagnosis aid (display parameters, troubleshooting).
- Provides optimal comfort all year long: Only one system for heating and cooling.
- Solar heat recovery: free energy via solar exchanger (solar connection indoor unit model).

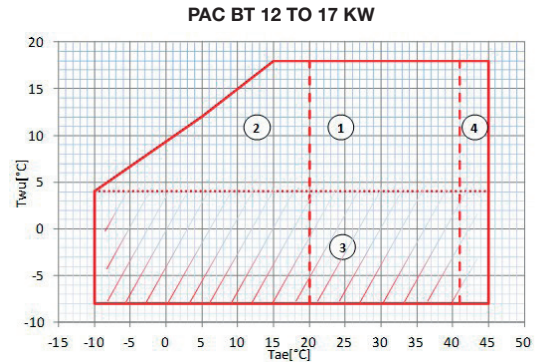
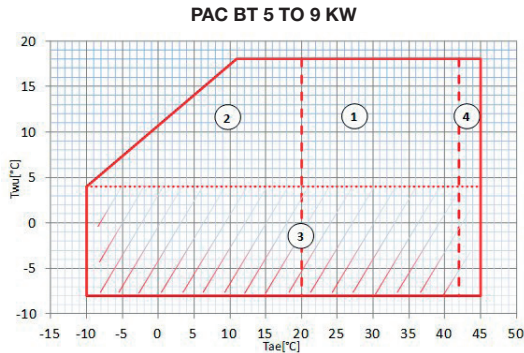
SPECIFIC PRIMARY ENERGY FOR HEATING



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OPERATING RANGE

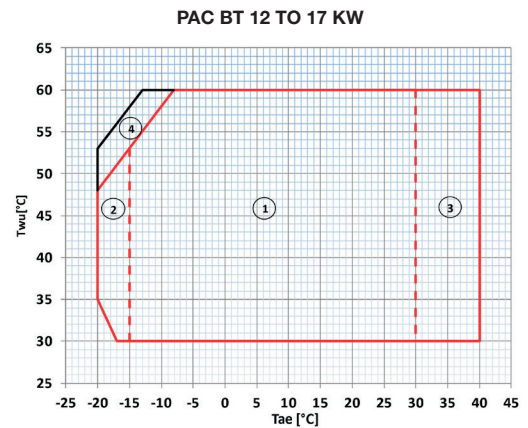
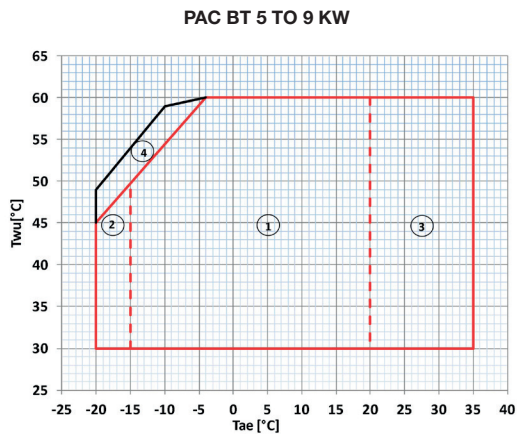
COOLING



Twu [°C] = outlet exchanger water temperature. Tae [°C]: External exchanger inlet air temperature.

1. Normal operating range
2. Normal operating range, with modulating fans
3. Operating range where the use of ethylene glycol is mandatory in relation to the temperature of the water at the outlet of the user side exchanger
4. Operating range with modulating compressor

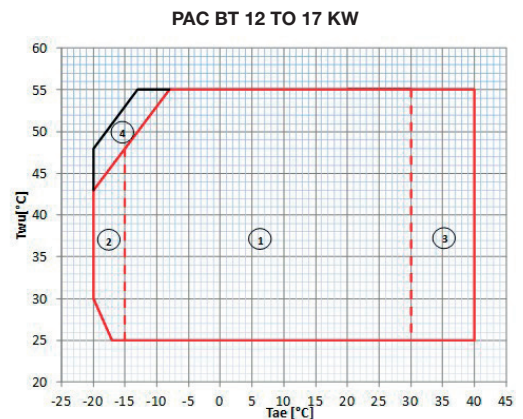
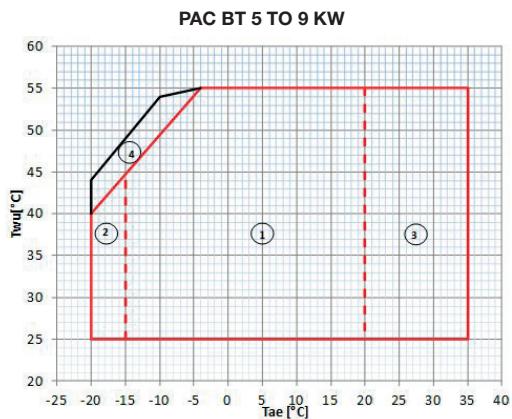
HEATING



Twu [°C] = outlet exchanger water temperature. Tae [°C]= External exchanger inlet air temperature.

1. Normal operating range
2. Operating range with modulating compressor
3. Operation with fans and compressors in modulation
4. Operating range with the use of the resistance (optional)

DOMESTIC HOT WATER

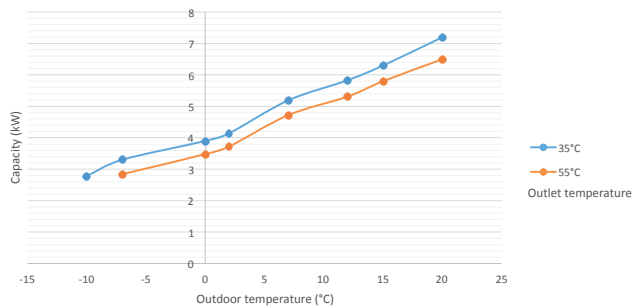


Twu [°C] = outlet exchanger water temperature. Tae [°C]= External exchanger inlet air temperature

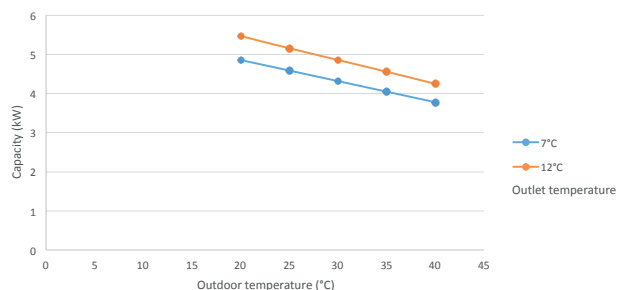
1. Normal operating range
2. Operating range with modulating compressor
3. Operation with fans and compressors in modulation
4. Operating range with the use of the resistance (optional)

PAC BT 5 KW PERFORMANCES

HEATING

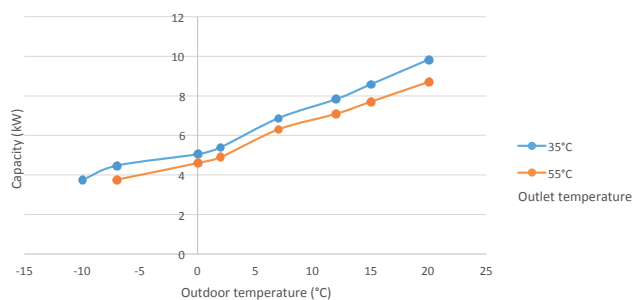


COOLING

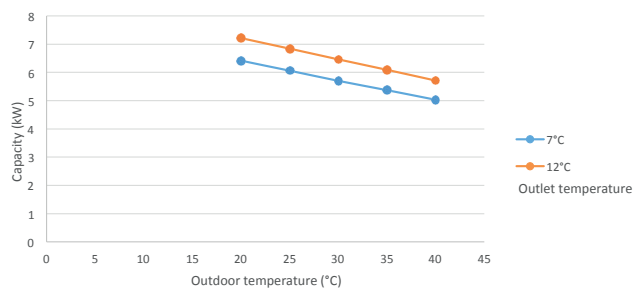


PAC BT 7 KW PERFORMANCES

HEATING

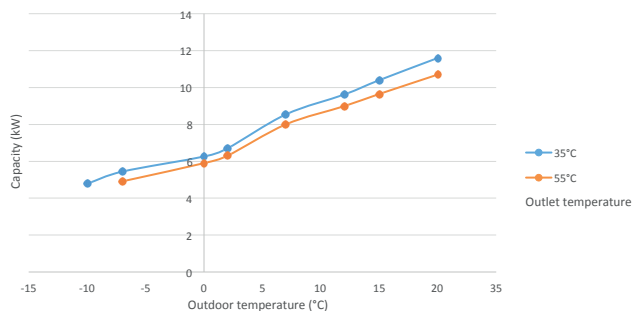


COOLING

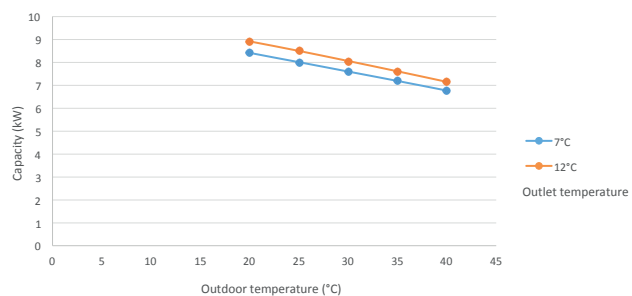


PAC BT 9 KW PERFORMANCES

HEATING



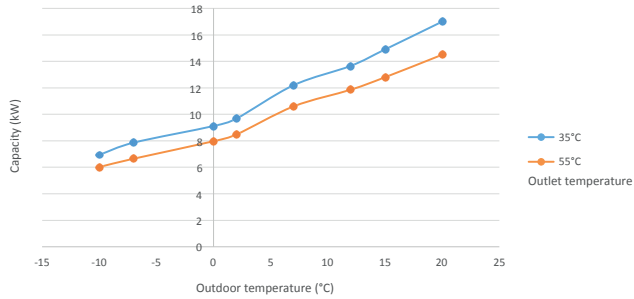
COOLING



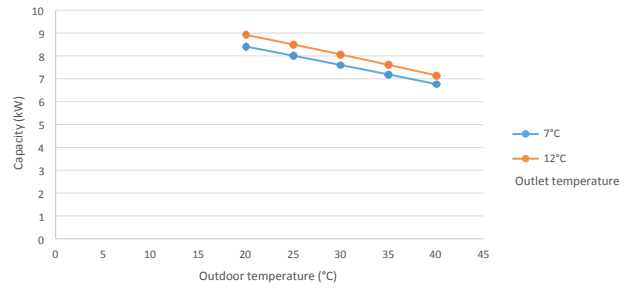
PAC BT LOW TEMPERATURE HEAT PUMP WITH DHW TANK INCLUDED

PAC BT 12 KW PERFORMANCES

HEATING

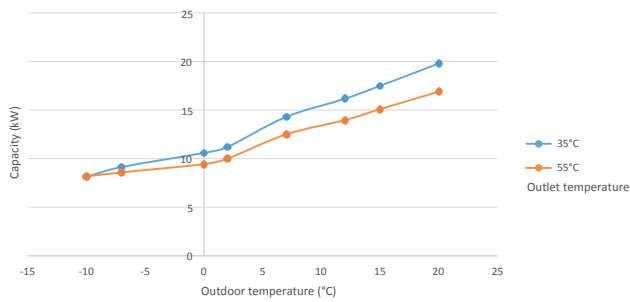


COOLING

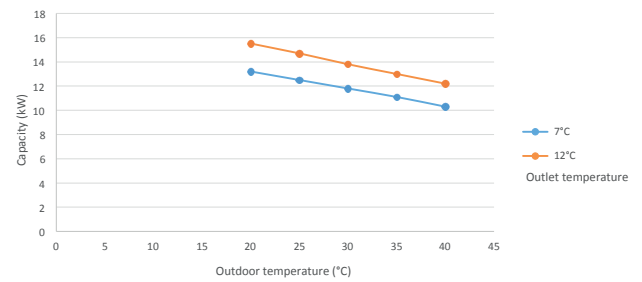


PAC BT 14 KW PERFORMANCES

HEATING

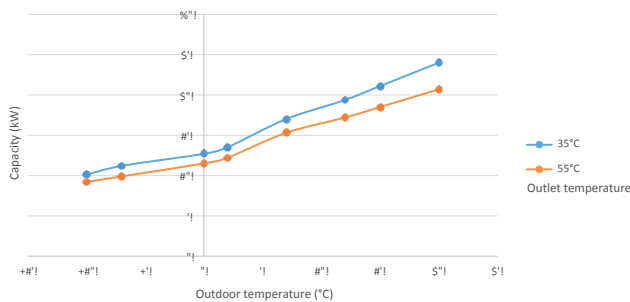


COOLING

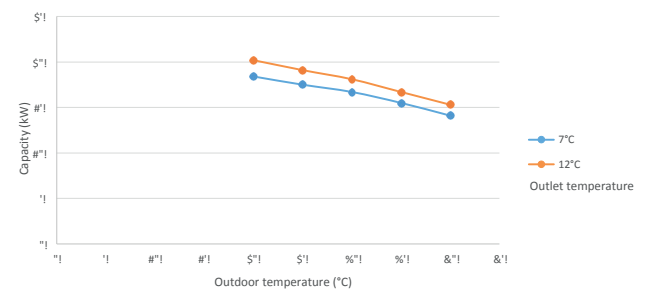


PAC BT 17 KW PERFORMANCES

HEATING



COOLING



MAIN OPTIONS AND ACCESSORIES

Photo / Part number	Accessory	Function
HYDRAULICS		
7ACFH0423	Shut-off valve with pressure tap	Control valve
7ACFH0666	Settling filter (pot) !	Protect the heat pump from sludging and preserve optimum thermal exchange.
7ACFH0278	Water filter !	
7ACFH0663	140-litre buffer tank / mixing tank	It protects the heat pump against short cycles that can reduce the useful life of the compressors and improves operation during defrosting phases.
SYSTEM		
7ACFH0818	Electrical complement kit 2/4/6 kW mono/triphasis	Allows to ensure additional heating via electrical resistance.
7ACEL1731	Boiler backup kit	Allows to connect a boiler (fuel, gas, wood...).
7ACFH0819	Auxiliary storage tank ECS 280L	Allows to increase the storage capacity of ECS.
7ACFH0821	Kit bi-zone 1 temperature PAC BT	Hydraulic braker with board to booster management + n°2 Booster hydraulic kit not mixed
7ACFH0820	Kit bi-zone 2 temperature PAC BT	Hydraulic braker with board to booster management + n°1 Booster hydraulic kit not mixed + n° 1 Mixed booster hydraulic kit
INSTALLATION AND REGULATION		
7ACEL1732 + 7ACEL1733	RCW15 Thermostat PAC BT Power supply 12V pour RCW15 PAC BT	Temperature and humidity thermostat / Remote keyboard / weekly timer.
7ACTL0509	Floor support rubber recycled (pair) Long: 600 mm	Necessary for a professional installation For models: 5 to 14 kW
7ACTL0510	Floor support rubber recycled (pair) Long: 1 000 mm	Necessary for a professional installation For model: 17 kW

! Mandatory accessory.

PAC BT LOW TEMPERATURE HEAT PUMP WITH DHW TANK INCLUDED

PAC BT SPLIT TECHNICAL DATA

Indoor units		AWHK-PAC-BT-UI-5-9KW-H11	AWHK-PAC-BT-UI-5-9KW-H11	AWHK-PAC-BT-UI-5-9KW-H11	AWHK-PAC-BT-UI-12-17KW-H11	AWHK-PAC-BT-UI-12-17KW-H11	AWHK-PAC-BT-UI-12-17KW-H11
Part numbers		7HP010001	7HP010001	7HP010001	7HP010002	7HP010002	7HP010002
Solar connection indoor units		AWHK-PAC-BT-UI-5-9KWSOLAR-H11	AWHK-PAC-BT-UI-5-9KWSOLAR-H11	AWHK-PAC-BT-UI-5-9KWSOLAR-H11	AWHK-PAC-BT-UI-12-17KWSOLAR-H11	AWHK-PAC-BT-UI-12-17KWSOLAR-H11	AWHK-PAC-BT-UI-12-17KWSOLAR-H11
Part numbers		7HP010003	7HP010003	7HP010003	7HP010004	7HP010004	7HP010004
Outdoor units 1~230V-50Hz		AWAU-PAC-BT-UE-5KW-H11	AWAU-PAC-BT-UE-7KW-H11	AWAU-PAC-BT-UE-9KW-H11	AWAU-PAC-BT-UE-12KW-H11	AWAU-PAC-BT-UE-14KW-H11	-
Part numbers		7HP061005	7HP061006	7HP061007	7HP061009	7HP061011	-
Outdoor units 3~400V-50Hz-N		-	-	-	AWAU-PAC-BT-UE-12KW-H13	AWAU-PAC-BT-UE-14KW-H13	AWAU-PAC-BT-UE-17KW-H13
Part numbers		-	-	-	7HP061008	7HP061010	7HP061012
RADIANT PANEL							
Nominal water flow	l/h	900	1188	1476	2088	2448	2916
Pump nominal available pressure	kPa	51	50	47	53	47	37
Air 7°C Water 35°C							
Heating capacity	kW	5.19	6.87	8.54	12.2	14.3	17
Total power input	kW	1.32	1.76	2.18	3.12	3.66	4.35
COP ⁽¹⁾	-	3.94	3.91	3.91	3.91	3.91	3.91
Air 2°C Water 35°C							
Heating capacity	kW	4.06	5.4	6.7	9.59	11.2	13.5
Total power input	kW	1.29	1.71	2.13	3.07	3.58	4.26
COP	-	3.14	3.16	3.15	3.12	3.14	3.18
Air-7°C Water 35°C							
Heating capacity	kW	3.3	4.47	5.44	7.86	9.14	11.2
Total power input	kW	1.22	1.64	2	2.9	3.36	4.13
COP	-	2.7	2.71	2.72	2.71	2.72	2.71
Air 35°C Water 18°C							
Cooling capacity	kW	4.11	6.56	8.05	10.7	12.2	15.9
Total power input	kW	1.07	1.78	2.23	2.77	3.38	4.38
EER	-	3.85	3.69	3.61	3.86	3.61	3.64
TERMINAL UNIT							
Nominal water flow	l/h	828	1152	1512	2016	2340	2664
Pump nominal available pressure	kPa	51	50	46	55	49	72
Air 7°C Water 45°C							
Heating capacity	kW	5.01	6.59	8.65	11.6	13.6	16.6
Total power input	kW	1.59	2.11	2.69	3.77	4.5	5.5
COP	-	3.15	3.12	2.99	3.08	3.02	3.02
Air 2°C Water 45°C							
Heating capacity	kW	3.93	5.18	6.85	9.26	10.6	13.1
Total power input	kW	1.55	2.04	2.78	3.67	4.3	5.29
COP	-	2.54	2.54	2.47	2.53	2.47	2.49
Air-7°C Water 45°C							
Heating capacity	kW	3	3.9	5.3	7.28	8.65	10.6
Total power input	kW	1.47	1.69	2.59	3.64	4.13	5.17
COP	-	2.04	2.06	2.04	2	2.09	2.05
Air 35°C Water 7°C							
Cooling capacity	kW	4.05	5.37	7.19	8.65	11.1	15.5
Total power input	kW	1.46	1.93	2.79	3.12	4.51	5.95
EER	-	2.77	2.78	2.58	2.77	2.46	2.62
ESEER	-	4.08	4.02	3.89	4.03	4	4.06
RADIATOR							
Nominal water flow	l/h	396	540	684	900	1080	1332
Pump nominal available pressure	kPa	46	48	50	65	64	62
Air 7°C Water 55°C							
Heating capacity	kW	4.72	6.3	8	10.6	12.5	15.3
Total power input	kW	1.96	2.59	3.54	4.65	5.74	6.95
COP	-	2.41	2.44	2.26	2.29	2.17	2.2
Air 2°C Water 55°C							
Heating capacity	kW	3.72	4.92	6.3	8.48	10	12.1
Total power input	kW	1.9	2.48	3.39	4.58	5.65	6.69
COP	-	1.96	1.99	1.66	1.85	1.77	1.8
Air-7°C Water 55°C							
Heating capacity	kW	2.84	3.76	4.91	6.65	8.59	9.9
Total power input	kW	1.74	2.27	3.1	4.49	5.5	6.6

Indoor units		AWHK-PAC-BT-UI-5-9KW-H11	AWHK-PAC-BT-UI-5-9KW-H11	AWHK-PAC-BT-UI-5-9KW-H11	AWHK-PAC-BT-UI-12-17KW-H11	AWHK-PAC-BT-UI-12-17KW-H11	AWHK-PAC-BT-UI-12-17KW-H11
Part numbers		7HP010001	7HP010001	7HP010001	7HP010002	7HP010002	7HP010002
Solar connection indoor units		AWHK-PAC-BT-UI-5-9KWSOLAR-H11	AWHK-PAC-BT-UI-5-9KWSOLAR-H11	AWHK-PAC-BT-UI-5-9KWSOLAR-H11	AWHK-PAC-BT-UI-12-17KWSOLAR-H11	AWHK-PAC-BT-UI-12-17KWSOLAR-H11	AWHK-PAC-BT-UI-12-17KWSOLAR-H11
Part numbers		7HP010003	7HP010003	7HP010003	7HP010004	7HP010004	7HP010004
Outdoor units 1~230V-50Hz		AWAU-PAC-BT-UE-5KW-H11	AWAU-PAC-BT-UE-7KW-H11	AWAU-PAC-BT-UE-9KW-H11	AWAU-PAC-BT-UE-12KW-H11	AWAU-PAC-BT-UE-14KW-H11	-
Part numbers		7HP061005	7HP061006	7HP061007	7HP061009	7HP061011	-
Outdoor units 3~400V-50Hz-N		-	-	-	AWAU-PAC-BT-UE-12KW-H13	AWAU-PAC-BT-UE-14KW-H13	AWAU-PAC-BT-UE-17KW-H13
Part numbers		-	-	-	7HP061008	7HP061010	7HP061012
ELECTRICAL FEATURES							
Total power input max	kW	2.69	3.42	4.22	5.68	6.63	
Maximum inrush current value	A	11.99	15.13	18.61	25.26	29.54	
REFRIGERANT FEATURES							
Pipe diameter		3/8"-3/8"	1/2"-3/8"	1/2"-3/8"	5/8"-3/8"	5/8"-1/2"	3/4"-1/2"
Max length between ODU and IDU	m	25					
Max drop between IDU and ODU	m	15					
Refrigerant charge (R410A)	kg	2.9	2.9	2.9	4.9	6.6	8.5
INDOOR UNIT							
Minimal water flow	liters	17	20	25	33	40	50
Sound power level	dB(A)	42	42	42	42	42	42
Dimensions (LxHxD)	mm	600x2040x800					
Shipping weight	kg	170	170	170	190	190	190
Operating weight	kg	450	450	450	470	470	470
DHW Tank capacity	l	280					
DHW connection	inches	1/2"					
Solar exchanger capacity	W/K	2703	2703	2703	3186	3186	3186
Heating connection	inches	1"1/4					
OUTDOOR UNIT							
Sound power level	dB(A)	64	64	64	68	69	70
Sound pressure level (to 1m)	dB(A)	49	49	49	53	54	56
Dimensions (LxHxD)	mm	912x988x450	912x988x450	912x988x450	1087x1234x450	1738x1137x720	
Shipping weight	kg	102	105	113	157	161	225
Operating range - Air side - DHW	°C	-20/35	-20/35	-20/35	-20/40	-20/40	-20/40
Operating range - Air side - Cooling	°C	-10/45					
Operating range - Air side - Heating	°C	-20/35	-20/35	-20/35	-20/40	-20/40	-20/40
ERP							
SCOP		3.28	3.27	3.31	3.19	3.19	3.19
ERP system- average climate- Water 55°C (2)	Class/ ηs	A++ / 133	A++ / 133	A++ / 133	A++ / 130	A++ / 130	A++ / 130
Energy Class ERP Heating- Average climate- Water 55°C (3)	Class/ ηs system	A++ / 128	A++ / 128	A++ / 128	A++ / 125	A++ / 125	A++ / 125
Energy Class ERP DHW- Average climate- Water 55°C (4)	Class/ ηWh	A / 80	A / 80	A / 81	A / 81	A / 82	A / 82
DHW profile (5)		XL	XL	XL	XL	XL	XL

The Product is compliant with the ErP (Energy Related Products) European Directive. It includes the Commission delegated Regulation (EU) No 811 / 2013 (rated heat output ≤ 70 kW at specified reference conditions) and the Commission delegated Regulation (EU) No 813 / 2013 (rated heat output ≤ 400 kW at specified reference conditions).

- (1) Air 7°C / Water 35°C internal water exchanger 30 / 35°C; outdoor air temperature 7°C BS / 6°C BH. Performances according to EN 14511:2013.
- (2) Seasonal Space Heating Energy Efficiency Class of the package according to Commission delegated Regulation (EU) No 811/2013.
- (3) Seasonal Space Heating Energy Efficiency Class according to Commission delegated Regulation (EU) No 811/2013. W = Water outlet temperature (°C).
- (4) Water Heating Energy Efficiency Class according to Commission delegated Regulation (EU) No 811/2013.
- (5) Considered Load profile for the definition of Domestic Hot Water Energy Class according to Commission delegated Regulation (EU) No 811/2013.



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