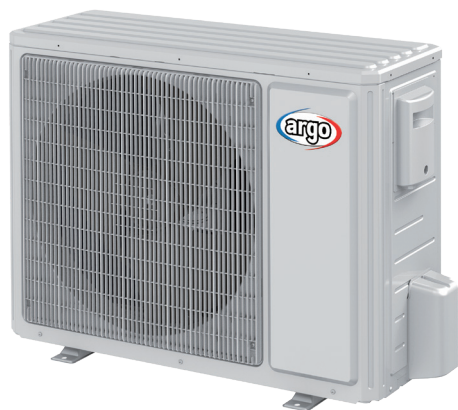


SPLIT HEAT PUMPS

MAIN FEATURES



(Standard on the indoor unit)

Touch-screen control panel installed on the indoor unit

- Split Air/Water heat pump with new-generation DC Inverter technology.
- Equipped with the heating, cooling and domestic hot water production functions.
- Single-phase version with 6-8-10 kW heating capacity.
- Achieves very high efficiency levels in heating mode, up to 5 COP.
- It uses R32, a refrigerant with low impact on global warming and ozone layer, characterised by high energy efficiency and a 30% lower charge compared to R410A.
- The vapour-injection compressor, thanks to its special technology, guarantees exceptional performances within a wide operating range.
- The leaving water temperature range is 20 °C-60 °C: this means that the heat pump can be used with radiant floor systems, fan coil units and also medium-temperature radiators.
- The DC brushless axial fans are designed to ensure aerodynamic optimisation: they guarantee low noise levels coupled with high efficiency and a high air flow rate.
- It is equipped with a heating element on the base to prevent ice build-up during winter operation.
- The outdoor unit is equipped with an electronic expansion valve, while the indoor unit contains all the hydraulic components: inverter pump, plate heat exchanger, expansion vessel, safety valve, flow switch and water filter supplied (installation mandatory).





Internal copper groove	Quiet mode	Weekly timer	Heating down to low temperatures	Door control	Full protection	Timer	Child lock	Wide operating range	Wide voltage range	Auto diagnosis	Low-voltage start-up
Auto restart memory	Intelligent defrosting	°C / °F switching	Long-distance monitoring	Exch. condenser: gold fin treatment	Min. outdoor temp. heating	Max. outdoor temp. heating	Min. outdoor temp. cooling	Max. outdoor temp. cooling	Min. outdoor temp. DHW	Max. outdoor temp. DHW	Max. output temp. DHW

A+++ Heating mode 35 °C

A++ Heating mode 55 °C

A DHW

THE RANGE

	Model	Code		Rated capacity according to EN14511 (kW)	
				1PH	 Heating (1)
OUTDOOR UNIT - 1PH 	AGHPSA061SH	398600012	●	6.0	5.8
	AGHPSA081SH	398600013	●	8.0	7.0
	AGHPSA101SH	398600014	●	9.5	8.5
HYDRONIC INDOOR UNIT 	AGHPS061W	398600016	●	6.0	5.8
	AGHPS081W	398600017	●	8.0	7.0
	AGHPS101W	398600018	●	9.5	8.5

(1) Water temperature 30 °C/35 °C, outdoor air temperature 7 °C D.B./6 °C W.B.

(2) Water temperature 23 °C/18 °C, outdoor air temperature 35 °C

INCLUDED ACCESSORIES

Ambient air temperature sensor
DHW temperature sensor
Y-shaped filter
Control panel (integrated into the indoor unit)

TECHNICAL DATA FOR 6 kW

MODEL				AGHPSA061		
Outdoor unit model				AGHPSA061SH		
Hydronic indoor unit model				AGHPS061W		
Matchable units for domestic hot water production (DHW)				200/300 liters external tank with diverting valve		
				Cooling	Heating	
COMFORT IN ENVIRONMENT	Performance according to EN 14511	Air +35 °C - Water 23/18 °C	Rated capacity	kW	5.80	6.00
		Air +7 °C - Water 30/35 °C	Rated electrical power input	kW _{el}	1.32	1.20
			EER/COP		4.39	5.00
	Performance according to Ecodesign (ERP) EN 14825	Air +35 °C - Water 12/7 °C	Rated capacity	kW	4.09	5.90
		Air +7 °C - Water 40/45 °C	Rated electrical power input	kW _{el}	1.28	1.51
			EER/COP		3.20	3.91
COMFORT IN ENVIRONMENT	Performance according to Ecodesign (ERP) EN 14825	LOW TEMPERATURE (35 °C) AVERAGE climate	Design thermal load (P _{design,h})	kW	6.00	
			Seasonal energy efficiency η _s	%	178.7	
			Energy efficiency class		A+++	
COMFORT IN ENVIRONMENT	Performance according to Ecodesign (ERP) EN 14825	MEDIUM TEMPERATURE (55 °C) AVERAGE climate	Design thermal load (P _{design,h})	kW	5.00	
			Seasonal energy efficiency η _s	%	127.4	
			Energy efficiency class		A++	
DHW	DHW performance according to EN 16147	With 300 liters tank and diverting valve AVERAGE climate	Load profile		XL	
			Energy efficiency class		A	
			Water heating efficiency - ERP η _{wh}	%	107.5	
Indoor unit	Indoor unit		Nominal water flow rate	m ³ /h	at 35 °C	1.03
					at 45 °C	1.02
					at 7 °C	0.70
					at 18 °C	1.00
			Minimum efficient water volume of the system	liters	40	
			Maximum delivery water temperature	°C	Up to 60	
			Power supply (Voltage/Phases/Frequency)	V/Ph/Hz	220-240/1/50	
			Electrical power input	kW	3.10	
			Heating element	nxkW	2x1.5	
			Expansion vessel	liters	10	
			Maximum circulator pump head	kPa	see H/Q graph	
			Hydraulic connections	inches	G1" female	
			Safety valve	bar	3	
			Indoor unit sound pressure	dB(A)	29	29
		Net weight	kg	62		
		Dimensions (H/W/D)	mm	860/460/318		
Outdoor unit	Outdoor unit		Outdoor temperature range (heating)	°C	-25/+35	
			Outdoor temperature range (cooling)	°C	+10/+48	
			Electrical power supply	V/Ph/Hz	220-240~/1/50	
			Maximum power input (cooling)	kW	2.30	
			Maximum power input (heating)	kW	2.30	
			Maximum current draw (cooling)	A	10	
			Maximum current draw (heating)	A	10	
			Liquid cooling pipe diameter	mm (inches)	6.35 (1/4)	
			Gas cooling pipe diameter	mm (inches)	12.7 (1/2)	
			Outdoor unit sound pressure	dB(A)	52	52
			Fan air flow rate	m ³ /h	3200	
			Net weight	kg	55	
			Dimensions (H/W/D)	mm	702/975/396	
			Compressor type		Twin Rotary with vapour injection	
Refrigerant	Refrigerant		Type and GWP		R32/675 kg CO ₂ eq.	
			Quantity		1 kg/0.675 tons CO ₂ eq.	

The equipments described in this catalogue contain HFC R32-type fluorinated greenhouse gases.
These products must be fitted by qualified staff pursuant to European regulations 303/2008 and 517/2014.

Data declared in accordance with REGULATION (EU) No. 811/2013 of 18 February 2013 with regard to the energy labelling of space heaters, combination heaters, packages of space heater, temperature control and solar device and packages of combination heater, temperature control and solar devices, packages of combination heater, temperature control and solar devices, and with COMMISSION REGULATION (EU) No. 813/2013 of 2 August 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for space heaters and combination heaters.

CAPACITY AND EFFICIENCY DATA IN RELATION TO THE OUTDOOR TEMPERATURE ACCORDING TO THE EN14511-3:2013 STANDARD

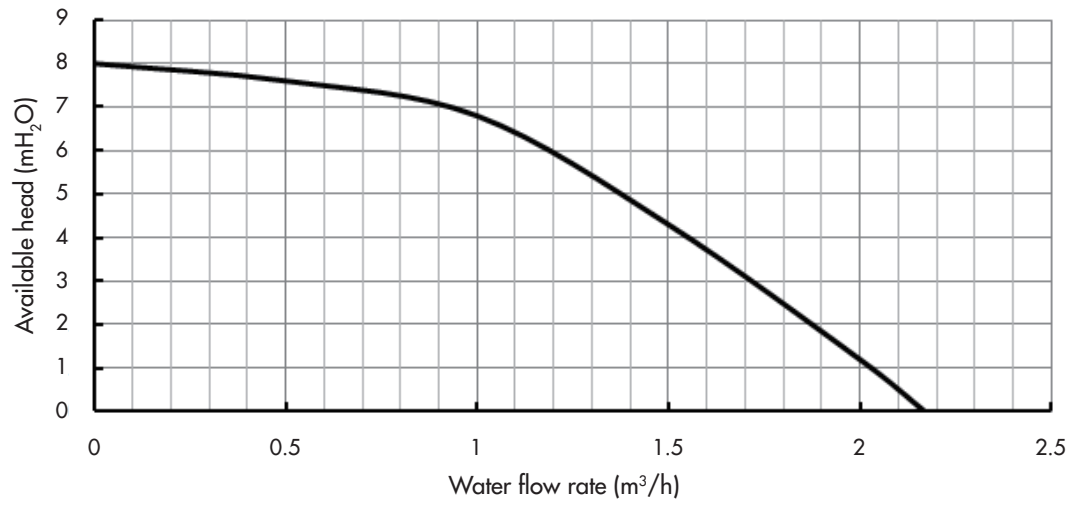
LWT [°C]	COOLING - Dry bulb outdoor air temperature in °C - (AGHPSA061)																	
	10		15		20		25		30		35		40		45		48	
	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER
7	3.35	4.35	3.72	4.19	3.93	4.06	4.17	3.87	4.25	3.55	4.09	3.20	3.72	2.65	2.90	1.95	2.45	1.57
8	3.48	4.47	3.89	4.31	4.09	4.19	4.34	3.99	4.42	3.64	4.25	3.29	3.89	2.75	3.03	2.01	2.54	1.63
9	3.64	4.67	4.01	4.47	4.21	4.35	4.46	4.12	4.54	3.80	4.38	3.42	4.01	2.84	3.15	2.08	2.66	1.66
10	3.72	4.79	4.13	4.60	4.38	4.47	4.62	4.25	4.70	3.90	4.54	3.51	4.13	2.91	3.23	2.17	2.74	1.73
11	3.84	4.92	4.29	4.76	4.50	4.60	4.79	4.41	4.91	4.06	4.70	3.64	4.29	3.00	3.31	2.20	2.82	1.76
12	3.97	5.08	4.42	4.92	4.66	4.76	4.95	4.54	5.07	4.15	4.87	3.74	4.42	3.10	3.44	2.30	2.90	1.85
13	4.13	5.24	4.58	5.05	4.79	4.89	5.11	4.67	5.19	4.28	4.99	3.87	4.58	3.20	3.56	2.33	2.99	1.89
14	4.25	5.40	4.66	5.21	4.95	5.05	5.28	4.79	5.36	4.41	5.15	3.96	4.66	3.29	3.68	2.43	3.07	1.95
15	4.34	5.53	4.83	5.34	5.11	5.18	5.44	4.92	5.52	4.51	5.32	4.09	4.83	3.39	3.76	2.49	3.19	1.98
18	4.74	5.98	5.24	5.75	5.52	5.59	5.89	5.34	6.01	4.89	5.77	4.41	5.24	3.64	4.09	2.68	3.48	2.17
20	4.95	6.29	5.52	6.07	5.85	5.88	6.18	5.59	6.30	5.14	6.05	4.63	5.52	3.83	4.34	2.84	3.64	2.27
23	5.36	6.74	5.93	6.49	6.26	6.33	6.67	6.01	6.79	5.50	6.54	4.95	5.93	4.12	4.62	3.00	3.93	2.43
25	5.60	7.03	6.22	6.77	6.54	6.58	6.95	6.29	7.12	5.75	6.83	5.18	6.22	4.31	4.87	3.16	4.09	2.56

LWT [°C]	HEATING - Dry bulb outdoor air temperature in °C																											
	-25		-20		-15		-10		-7		-2		2		7		10		15		20		25		30		35	
	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP
25	2.94	4.34	3.12	4.57	3.72	4.88	4.26	5.08	5.16	5.39	5.76	5.63	6.36	5.86	6.24	6.10	6.42	6.37	6.78	6.95	6.72	7.38	6.12	7.31	5.34	7.97	4.20	8.44
30	2.70	3.52	3.06	3.79	3.60	4.06	4.14	4.30	4.74	4.53	5.22	4.77	5.82	5.00	6.18	5.55	6.36	5.90	6.72	6.29	6.66	6.72	6.06	6.72	5.34	7.27	4.14	7.78
35	2.52	2.97	2.88	3.13	3.36	3.32	3.90	3.59	4.26	3.83	4.80	4.06	5.22	4.18	6.00	5.00	6.30	5.27	6.66	5.74	6.60	5.98	6.00	5.98	5.28	6.64	4.08	7.03
40	2.46	2.54	2.88	2.81	3.36	3.05	3.90	3.24	4.26	3.40	4.74	3.67	5.16	3.91	6.00	4.45	6.24	4.69	6.60	5.08	6.54	5.35	5.94	5.31	5.22	5.86	4.08	6.25
45			2.88	2.46	3.36	2.70	3.90	2.93	4.20	3.05	4.68	3.24	5.10	3.44	6.00	3.91	6.18	4.10	6.54	4.45	6.48	4.69	5.88	4.92	5.16	5.16	4.02	5.47
50					3.24	2.27	3.78	2.46	4.14	2.58	4.62	2.77	5.04	2.85	5.94	3.36	6.12	3.52	6.48	3.87	6.42	4.02	5.82	4.22	5.10	4.42	3.96	4.73
55							3.60	2.03	4.14	2.11	4.56	2.31	4.98	2.42	5.88	2.81	6.06	2.97	6.42	3.20	6.36	3.40	5.76	3.52	5.04	3.71	3.96	3.99
60									4.08	1.72	4.56	1.80	4.92	1.91	5.82	2.27	6.00	2.34	6.36	2.50	6.30	2.62	5.70	2.77	4.98	2.89	3.90	3.09

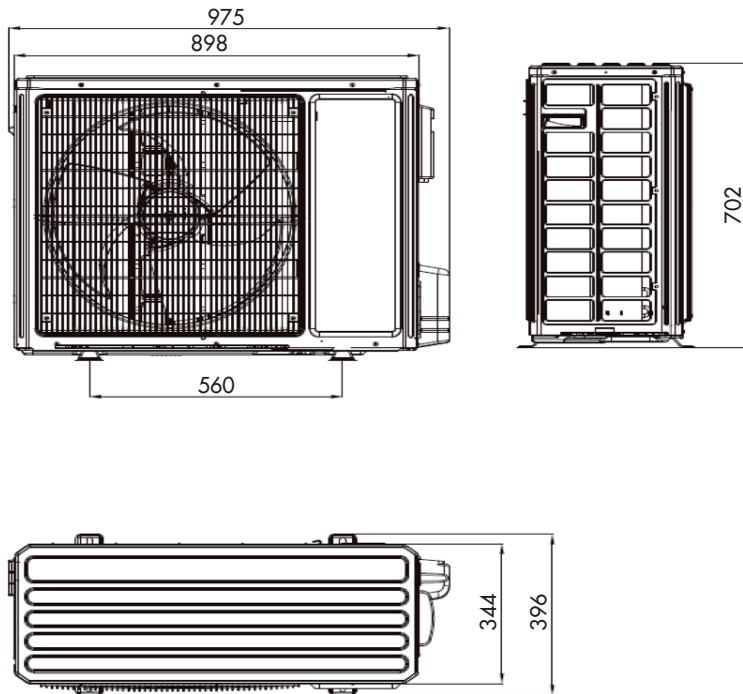
LWT: Leaving water temperature
Qh: Heating capacity
COP: Coefficient of performance

LWT: Leaving water temperature
Qc: Cooling capacity
EER: Energy efficiency ratio

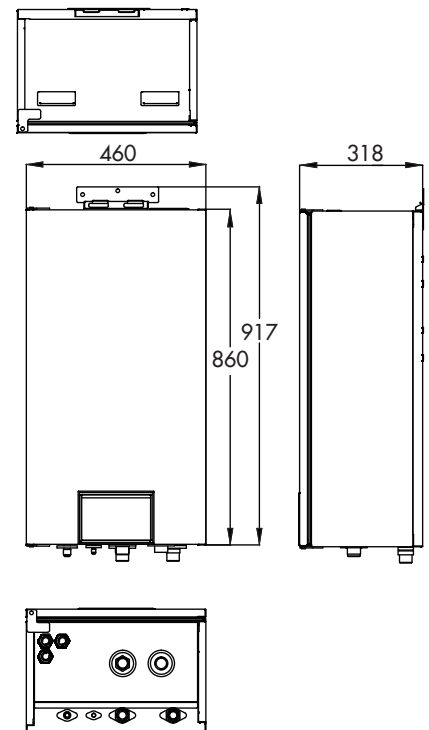
FLOW RATE CURVES FOR 6 kW



DIMENSIONAL DRAWINGS 6 kW

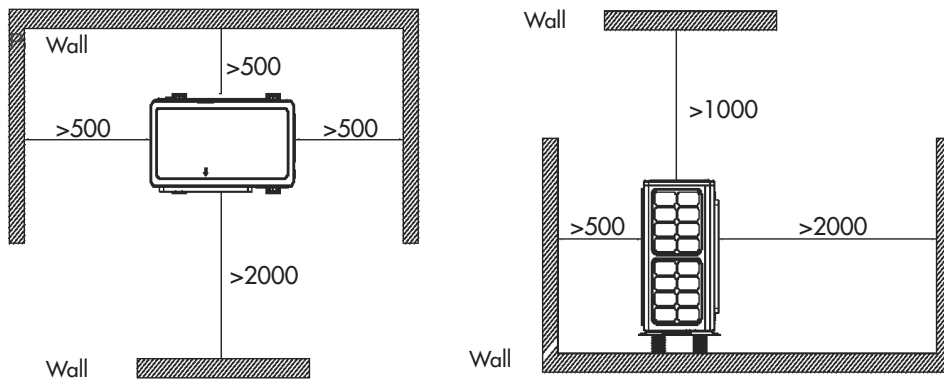


OUTDOOR UNIT 6 kW

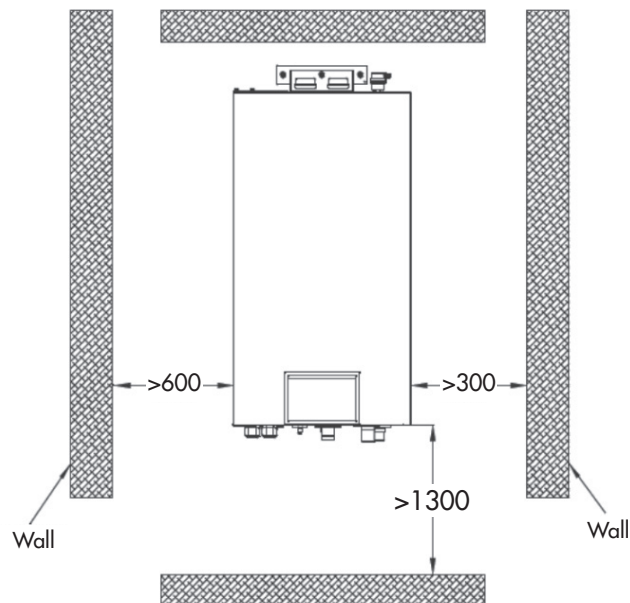


INDOOR UNIT 6 kW

SPACE REQUIRED FOR OUTDOOR UNIT INSTALLATION 6 kW



SPACE REQUIRED FOR INDOOR UNIT INSTALLATION 6 kW



TECHNICAL DATA FOR 8 kW

MODEL				AGHPSA081			
Outdoor unit model				AGHPSA081SH			
Hydronic indoor unit model				AGHPS081W			
Matchable units for domestic hot water production (DHW)				200/300 liters external tank with diverting valve			
				Cooling	Heating		
COMFORT IN ENVIRONMENT	Performance according to EN 14511	Air +35 °C - Water 23/18 °C Air +7 °C - Water 30/35 °C	Rated capacity	kW	7.00	8.00	
			Rated electrical power input	kW _{el}	1.75	1.70	
			EER/COP		4.00	4.71	
	Performance according to Ecodesign (ERP) EN 14825	LOW TEMPERATURE (35 °C) AVERAGE climate	Air +35 °C - Water 12/7 °C Air +7 °C - Water 40/45 °C	Rated capacity	kW	5.30	8.00
				Rated electrical power input	kW _{el}	1.73	2.14
				EER/COP		3.06	3.74
COMFORT IN ENVIRONMENT	Performance according to Ecodesign (ERP) EN 14825	MEDIUM TEMPERATURE (55 °C) AVERAGE climate	Design thermal load (P _{design,h})	kW	7.00		
			Seasonal energy efficiency η _s	%	181		
			Energy efficiency class		A+++		
	Performance according to Ecodesign (ERP) EN 14825	MEDIUM TEMPERATURE (55 °C) AVERAGE climate	Air +35 °C - Water 12/7 °C Air +7 °C - Water 40/45 °C	Design thermal load (P _{design,h})	kW	7.00	
				Seasonal energy efficiency η _s	%	129	
				Energy efficiency class		A++	
DHW	DHW performance according to EN 16147	With 300 liters tank and diverting valve AVERAGE climate	Load profile		XL		
			Energy efficiency class		A		
			Water heating efficiency - ERP η _{wh}	%	111		
Indoor unit			Nominal water flow rate	m ³ /h	at 35 °C	1.38	
					at 45 °C	1.38	
					at 7 °C	0.91	
					at 18 °C	1.20	
			Minimum efficient water volume of the system	liters	40		
			Maximum delivery water temperature	°C	Up to 60		
			Power supply (Voltage/Phases/Frequency)	V/Ph/Hz	220-240/1/50		
			Electrical power input	kW	3.10		
			Heating element	nxkW	2x3		
			Expansion vessel	liters	10		
			Maximum circulator pump head	kPa	see H/Q graph		
			Hydraulic connections	inches	G1" female		
			Safety valve	bar	3		
			Indoor unit sound pressure	dB(A)	29	29	
Net weight	kg	62					
Dimensions (H/W/D)	mm	860/460/318					
Outdoor unit			Outdoor temperature range (heating)	°C	-25/+35		
			Outdoor temperature range (cooling)	°C	+10/+48		
			Electrical power supply	V/Ph/Hz	220-240~/1/50		
			Maximum power input (cooling)	kW	4.32		
			Maximum power input (heating)	kW	3.00		
			Maximum current draw (cooling)	A	19		
			Maximum current draw (heating)	A	13		
			Liquid cooling pipe diameter	mm (inches)	6.35 (1/4)		
			Gas cooling pipe diameter	mm (inches)	12.7 (1/2)		
			Outdoor unit sound pressure	dB(A)	55	55	
			Fan air flow rate	m ³ /h	3300		
			Net weight	kg	82		
			Dimensions (H/W/D)	mm	787/982/427		
			Compressor type		Twin Rotary with vapour injection		
Refrigerant			Type and GWP		R32/675 kg CO ₂ eq.		
			Quantity		1.6 kg/1.08 tons CO ₂ eq.		

The equipments described in this catalogue contain HFC R32-type fluorinated greenhouse gases.
These products must be fitted by qualified staff pursuant to European regulations 303/2008 and 517/2014.

Data declared in accordance with REGULATION (EU) No. 811/2013 of 18 February 2013 with regard to the energy labelling of space heaters, combination heaters, packages of space heater, temperature control and solar device and packages of combination heater, temperature control and solar devices, packages of combination heater, temperature control and solar devices, and with COMMISSION REGULATION (EU) No. 813/2013 of 2 August 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for space heaters and combination heaters.

CAPACITY AND EFFICIENCY DATA IN RELATION TO THE OUTDOOR TEMPERATURE ACCORDING TO THE EN14511-3:2013 STANDARD

LWT [°C]	COOLING - Dry bulb outdoor air temperature in °C - (AGHP5A081)																	
	10		15		20		25		30		35		40		45		48	
	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER
7	4.35	4.17	4.82	4.01	5.09	3.89	5.41	3.71	5.51	3.40	5.30	3.06	4.82	2.54	3.76	1.87	3.18	1.50
8	4.51	4.26	4.98	4.11	5.25	4.01	5.57	3.80	6.04	3.49	5.46	3.16	4.98	2.60	3.87	1.90	3.29	1.53
9	4.56	4.41	5.09	4.23	5.35	4.11	5.72	3.92	6.20	3.58	5.62	3.25	5.09	2.70	3.98	1.96	3.34	1.56
10	4.72	4.50	5.25	4.35	5.51	4.23	5.88	4.01	6.36	3.68	5.78	3.31	5.25	2.76	4.08	1.99	3.45	1.62
11	4.88	4.63	5.41	4.47	5.72	4.35	6.04	4.14	6.57	3.80	5.94	3.40	5.41	2.85	4.19	2.08	3.55	1.68
12	4.98	4.75	5.57	4.56	5.88	4.44	6.25	4.20	6.73	3.89	6.10	3.49	5.57	2.91	4.35	2.14	3.66	1.72
13	5.09	4.87	5.67	4.72	5.99	4.56	6.31	4.35	6.89	3.98	6.20	3.58	5.67	3.00	4.40	2.18	3.71	1.75
14	5.25	4.99	5.83	4.81	6.10	4.66	6.47	4.44	7.05	4.07	6.36	3.68	5.83	3.06	4.51	2.24	3.82	1.78
15	5.35	5.15	5.99	4.93	6.25	4.78	6.68	4.53	7.21	4.17	6.52	3.77	5.99	3.12	4.66	2.30	3.92	1.84
18	5.78	5.45	6.36	5.27	6.73	5.12	7.16	4.84	7.69	4.44	7.00	4.01	6.36	3.31	4.98	2.45	4.24	1.96
20	5.99	5.70	6.63	5.48	7.00	5.33	7.42	5.09	8.06	4.66	7.31	4.20	6.63	3.46	5.14	2.54	4.40	2.05
23	6.41	6.04	7.10	5.79	7.47	5.64	7.90	5.39	8.53	4.93	7.79	4.44	7.10	3.68	5.51	2.73	4.66	2.18
25	6.63	6.28	7.37	6.07	7.79	5.85	8.22	5.58	8.85	5.12	8.06	4.63	7.37	3.83	5.72	2.82	4.82	2.27

LWT [°C]	HEATING - Dry bulb outdoor air temperature in °C																											
	-25		-20		-15		-10		-7		-2		2		7		10		15		20		25		30		35	
	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP
25	3.44	4.04	4.16	4.26	4.96	4.56	5.68	4.75	6.08	5.05	6.80	5.27	7.52	5.46	7.36	5.72	7.60	5.94	8.00	6.50	7.92	6.88	7.20	6.84	6.32	7.44	4.96	7.89
30	3.36	3.29	4.08	3.59	4.80	3.81	5.52	4.04	5.92	4.26	6.56	4.49	7.28	4.71	7.76	5.23	8.00	5.53	8.48	5.94	8.40	6.32	7.60	6.32	6.64	6.84	5.20	7.29
35	3.28	2.77	3.84	2.92	4.48	3.10	5.20	3.40	5.60	3.59	6.24	3.81	6.80	3.93	8.00	4.71	8.24	4.97	8.72	5.38	8.64	5.61	7.84	5.61	6.88	6.24	5.36	6.62
40	3.28	2.39	3.84	2.65	4.48	2.92	5.20	3.10	5.60	3.25	6.24	3.51	6.80	3.70	8.00	4.22	8.24	4.45	8.72	4.86	8.64	5.08	7.84	5.05	6.88	5.57	5.36	5.94
45			3.84	2.36	4.48	2.58	5.20	2.80	5.60	2.92	6.24	3.10	6.80	3.29	8.00	3.74	8.24	3.93	8.72	4.26	8.64	4.49	7.84	4.71	6.88	4.93	5.36	5.23
50					4.32	2.21	5.04	2.39	5.44	2.50	6.08	2.69	6.56	2.77	7.76	3.25	8.00	3.40	8.48	3.74	8.40	3.93	7.60	4.11	6.64	4.30	5.20	4.60
55							4.80	1.98	5.12	2.09	5.76	2.28	6.24	2.39	7.36	2.77	7.60	2.92	8.00	3.18	7.92	3.33	7.20	3.48	6.32	3.66	4.96	3.93
60									4.88	1.72	5.44	1.79	5.92	1.91	6.96	2.28	7.20	2.32	7.60	2.50	7.52	2.62	6.80	2.77	6.00	2.88	4.64	3.10

LWT: Leaving water temperature
 Qh: Heating capacity
 COP: Coefficient of performance

LWT: Leaving water temperature
 Qc: Cooling capacity
 EER: Energy efficiency ratio

TECHNICAL DATA FOR 10 kW

MODEL				AGHPSA101			
Outdoor unit model				AGHPSA101SH			
Hydronic indoor unit model				AGHPS101W			
Matchable units for domestic hot water production (DHW)				200/300 liters external tank with diverting valve			
				Cooling	Heating		
COMFORT IN ENVIRONMENT	Performance according to EN 14511	Air +35 °C - Water 23/18 °C Air +7 °C - Water 30/35 °C	Rated capacity	kW	8.50	9.50	
			Rated electrical power input	kW _{el}	2.24	2.07	
			EER/COP		3.79	4.59	
	Performance according to Ecodesign (ERP) EN 14825	LOW TEMPERATURE (35 °C) AVERAGE climate	Air +35 °C - Water 12/7 °C Air +7 °C - Water 40/45 °C	Rated capacity	kW	6.50	9.50
				Rated electrical power input	kW _{el}	2.27	2.64
				EER/COP		2.86	3.60
DHW performance according to EN 16147	With 300 liters tank and diverting valve AVERAGE climate	MEDIUM TEMPERATURE (55 °C) AVERAGE climate	Design thermal load (P _{design,h})	kW	9.00		
			Seasonal energy efficiency η _s	%	181		
			Energy efficiency class		A+++		
DHW performance according to EN 16147	With 300 liters tank and diverting valve AVERAGE climate	MEDIUM TEMPERATURE (55 °C) AVERAGE climate	Design thermal load (P _{design,h})	kW	8.00		
			Seasonal energy efficiency η _s	%	127		
			Energy efficiency class		A++		
DHW performance according to EN 16147	With 300 liters tank and diverting valve AVERAGE climate	MEDIUM TEMPERATURE (55 °C) AVERAGE climate	Load profile		XL		
			Energy efficiency class		A		
			Water heating efficiency - ERP η _{wh}	%	111		
Indoor unit	Nominal water flow rate		m ³ /h	at 35 °C	1.63		
				at 45 °C	1.63		
				at 7 °C	1.12		
				at 18 °C	1.46		
	Minimum efficient water volume of the system		liters	80			
	Maximum delivery water temperature		°C	Up to 60			
	Power supply (Voltage/Phases/Frequency)		V/Ph/Hz	220-240/1/50			
	Electrical power input		kW	3.10			
	Heating element		nxkW	2x3			
	Expansion vessel		liters	10			
	Maximum circulator pump head		kPa	see H/Q graph			
	Hydraulic connections		inches	G1" female			
	Safety valve		bar	3			
	Indoor unit sound pressure		dB(A)	29	29		
Net weight		kg	62				
Dimensions (H/W/D)		mm	860/460/318				
Outdoor unit	Outdoor temperature range (heating)		°C	-25/+35			
	Outdoor temperature range (cooling)		°C	+10/+48			
	Electrical power supply		V/Ph/Hz	220-240~/1/50			
	Maximum power input (cooling)		kW	5.06			
	Maximum power input (heating)		kW	3.40			
	Maximum current draw (cooling)		A	22			
	Maximum current draw (heating)		A	15			
	Liquid cooling pipe diameter		mm (inches)	6.35 (1/4)			
	Gas cooling pipe diameter		mm (inches)	12.7 (1/2)			
	Outdoor unit sound pressure		dB(A)	55	55		
	Fan air flow rate		m ³ /h	3300			
	Net weight		kg	82			
	Dimensions (H/W/D)		mm	787/982/427			
	Compressor type			Twin Rotary with vapour injection			
Refrigerant	Type and GWP		R32/675 kg CO ₂ eq.				
	Quantity		1.6 kg/1.08 tons CO ₂ eq.				

The equipments described in this catalogue contain HFC R32-type fluorinated greenhouse gases.
These products must be fitted by qualified staff pursuant to European regulations 303/2008 and 517/2014.

Data declared in accordance with REGULATION (EU) No. 811/2013 of 18 February 2013 with regard to the energy labelling of space heaters, combination heaters, packages of space heater, temperature control and solar device and packages of combination heater, temperature control and solar devices, packages of combination heater, temperature control and solar devices, and with COMMISSION REGULATION (EU) No. 813/2013 of 2 August 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for space heaters and combination heaters.

CAPACITY AND EFFICIENCY DATA IN RELATION TO THE OUTDOOR TEMPERATURE ACCORDING TO THE EN14511-3:2013 STANDARD

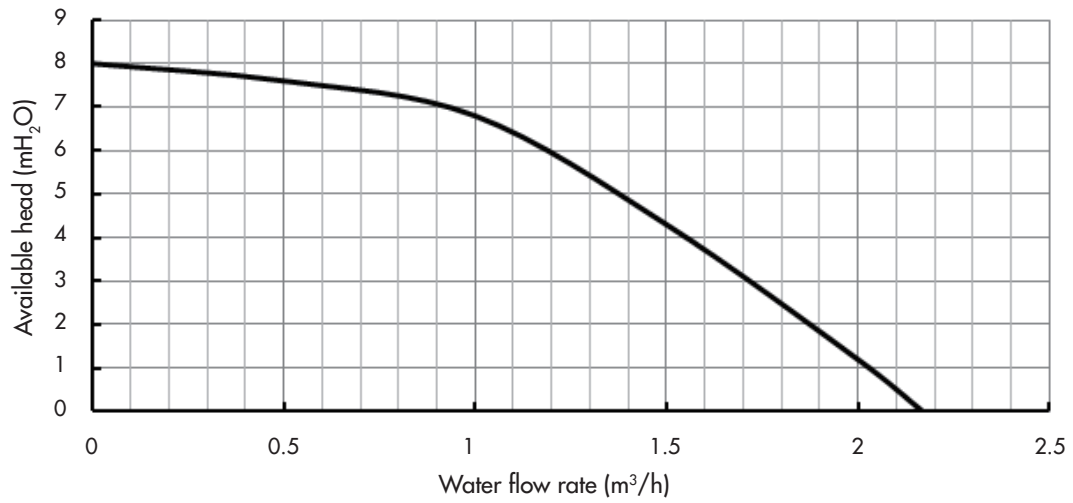
LWT [°C]	COOLING - Dry bulb outdoor air temperature in °C - (AGHP5A101)																	
	10		15		20		25		30		35		40		45		48	
	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER	Qc [kW]	EER
7	5.33	3.89	5.92	3.75	6.24	3.64	6.63	3.46	6.76	3.18	6.50	2.86	5.92	2.38	4.62	1.75	3.90	1.40
8	5.46	4.01	6.11	3.87	6.44	3.75	6.83	3.58	6.96	3.26	6.70	2.95	6.11	2.43	4.75	1.78	4.03	1.46
9	5.66	4.15	6.24	4.01	6.57	3.87	7.02	3.69	7.15	3.38	6.89	3.04	6.24	2.52	4.94	1.86	4.10	1.52
10	5.79	4.24	6.37	4.09	6.70	3.95	7.22	3.81	7.35	3.46	7.02	3.12	6.37	2.58	5.01	1.92	4.23	1.52
11	5.92	4.35	6.57	4.21	6.96	4.07	7.35	3.87	7.54	3.58	7.22	3.21	6.57	2.66	5.07	1.95	4.36	1.57
12	6.11	4.47	6.70	4.30	7.15	4.18	7.54	3.98	7.67	3.67	7.41	3.29	6.70	2.72	5.27	2.00	4.49	1.60
13	6.24	4.61	6.89	4.44	7.35	4.30	7.74	4.09	7.87	3.78	7.61	3.38	6.89	2.83	5.40	2.09	4.55	1.66
14	6.44	4.70	7.15	4.52	7.48	4.41	7.93	4.21	8.13	3.84	7.80	3.46	7.15	2.89	5.53	2.12	4.68	1.72
15	6.57	4.84	7.28	4.64	7.67	4.50	8.19	4.30	8.32	3.92	8.00	3.55	7.28	2.95	5.72	2.15	4.81	1.75
18	7.02	5.18	7.74	5.01	8.13	4.84	8.65	4.61	8.91	4.24	8.52	3.81	7.74	3.15	6.05	2.32	5.14	1.86
20	7.35	5.44	8.13	5.21	8.58	5.10	9.10	4.84	9.30	4.44	8.91	3.98	8.13	3.32	6.31	2.43	5.33	1.98
23	7.74	5.76	8.58	5.53	9.04	5.38	9.62	5.13	9.82	4.70	9.43	4.24	8.58	3.49	6.63	2.58	5.66	2.06
25	8.00	5.98	8.91	5.78	9.36	5.58	10.01	5.33	10.21	4.90	9.82	4.41	8.91	3.67	6.96	2.69	0.00	2.18

LWT [°C]	HEATING - Dry bulb outdoor air temperature in °C																											
	-25		-20		-15		-10		-7		-2		2		7		10		15		20		25		30		35	
	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP
25	4.09	3.99	4.94	4.21	5.89	4.50	6.75	4.68	7.22	4.97	8.08	5.18	8.93	5.40	8.74	5.61	9.03	5.87	9.50	6.41	9.41	6.80	8.55	6.73	7.51	7.34	5.89	7.77
30	3.99	3.24	4.85	3.49	5.70	3.74	6.56	3.96	7.03	4.17	7.79	4.39	8.65	4.61	9.22	5.11	9.50	5.43	10.07	5.79	9.98	6.19	9.03	6.19	7.89	6.69	6.18	7.16
35	3.90	2.73	4.56	2.88	5.32	3.06	6.18	3.31	6.65	3.53	7.41	3.74	8.08	3.85	9.50	4.61	9.79	4.86	10.36	5.29	10.26	5.51	9.31	5.51	8.17	6.12	6.37	6.48
40	3.90	2.34	4.56	2.59	5.32	2.81	6.18	2.99	6.65	3.13	7.41	3.38	8.08	3.60	9.50	4.10	9.79	4.32	10.36	4.68	10.26	4.93	9.31	4.89	8.17	5.40	6.37	5.76
45			4.56	2.27	5.32	2.48	6.18	2.70	6.65	2.81	7.41	2.99	8.08	3.17	9.50	3.60	9.79	3.78	10.36	4.10	10.26	4.32	9.31	4.53	8.17	4.75	6.37	5.04
50					5.13	2.09	5.99	2.27	6.46	2.38	7.22	2.55	7.79	2.63	9.22	3.09	9.50	3.24	10.07	3.56	9.98	3.71	9.03	3.89	7.89	4.07	6.18	4.35
55							5.70	1.87	6.08	1.94	6.84	2.12	7.41	2.23	8.74	2.59	9.03	2.73	9.50	2.95	9.41	3.13	8.55	3.24	7.51	3.42	5.89	3.67
60									5.80	1.58	6.46	1.66	7.03	1.76	8.27	2.09	8.55	2.16	9.03	2.30	8.93	2.41	8.08	2.55	7.13	2.66	5.51	2.84

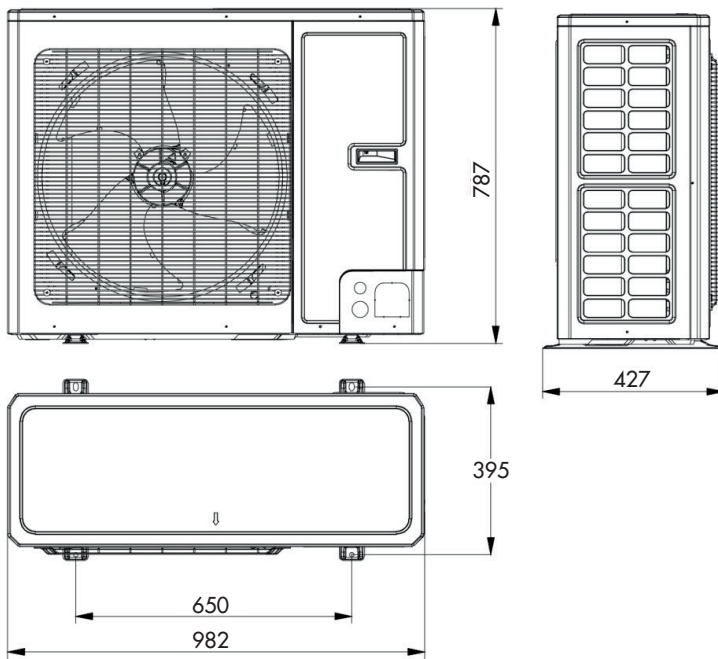
LWT: Leaving water temperature
 Qh: Heating capacity
 COP: Coefficient of performance

LWT: Leaving water temperature
 Qc: Cooling capacity
 EER: Energy efficiency ratio

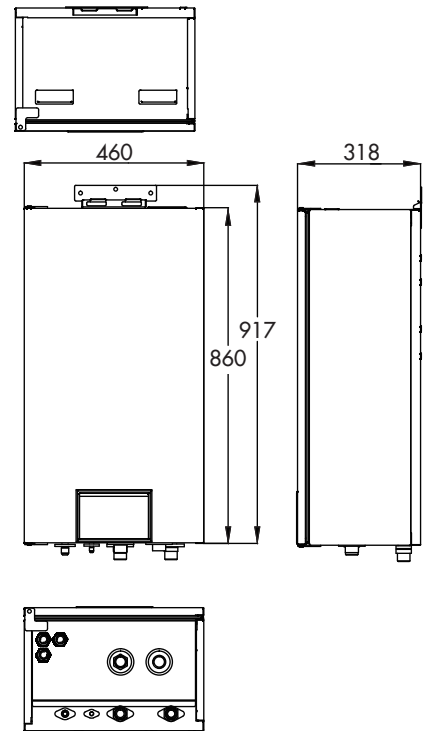
FLOW RATE CURVES 8-10 kW



DIMENSIONAL DRAWINGS 8-10 kW

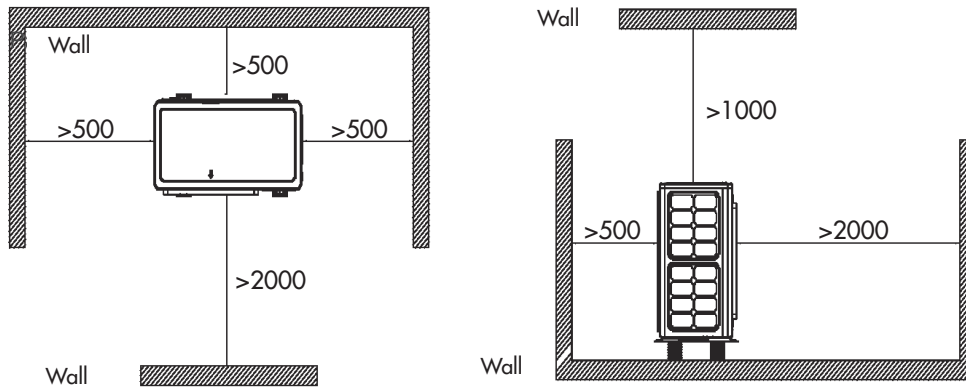


OUTDOOR UNIT 8-10 kW

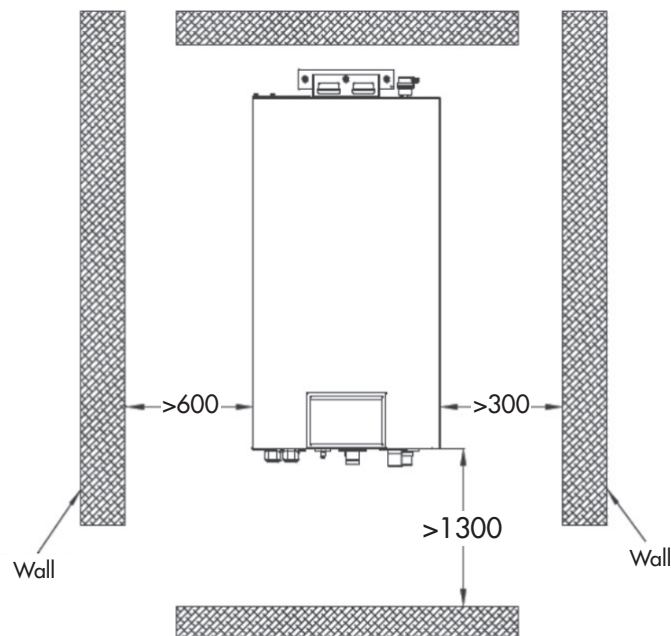


INDOOR UNIT 8-10 kW

SPACE REQUIRED FOR OUTDOOR UNIT INSTALLATION 8-10 kW



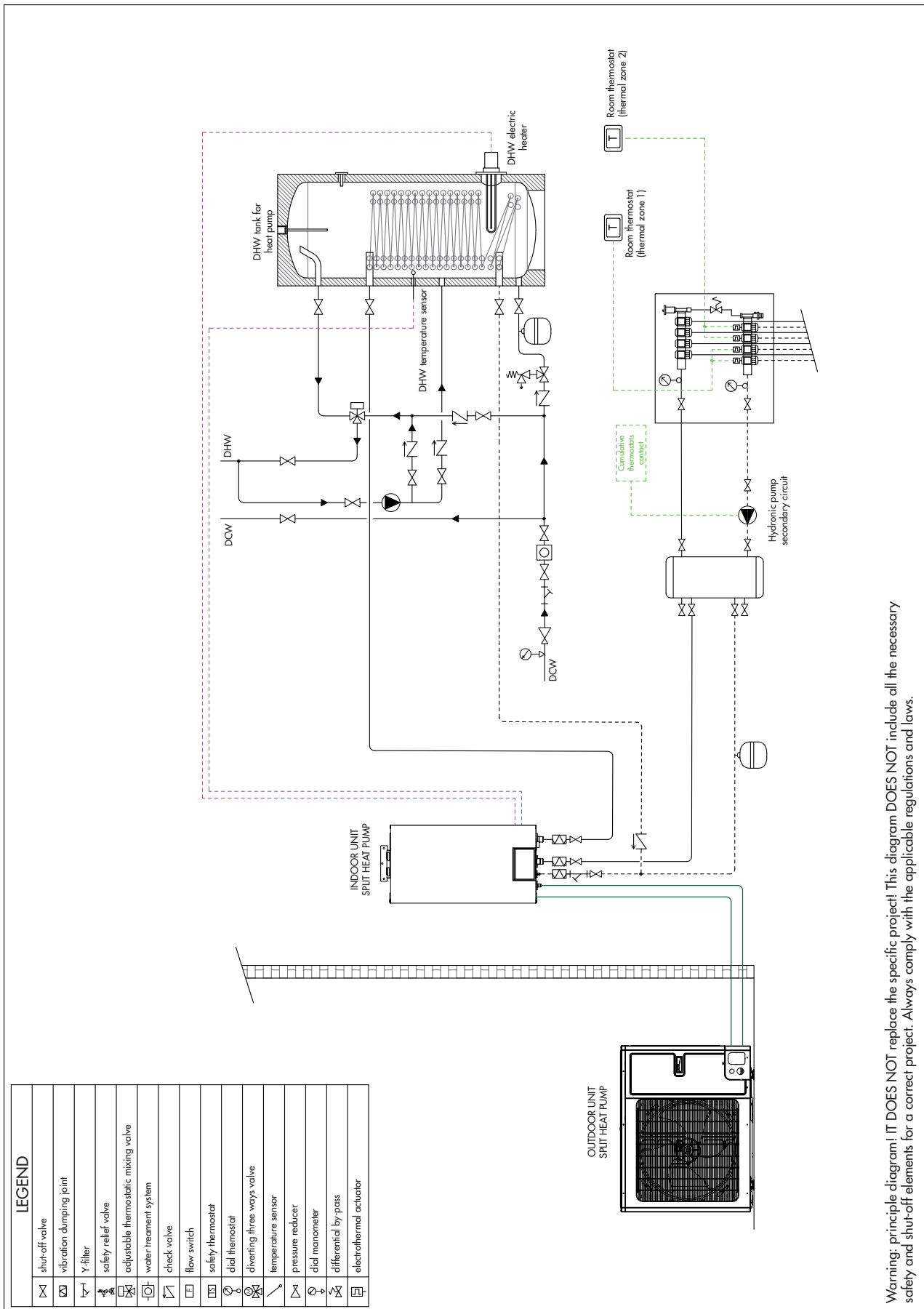
SPACE REQUIRED FOR INDOOR UNIT INSTALLATION 8-10 kW



INSTALLATION EXAMPLES

EXAMPLE 1

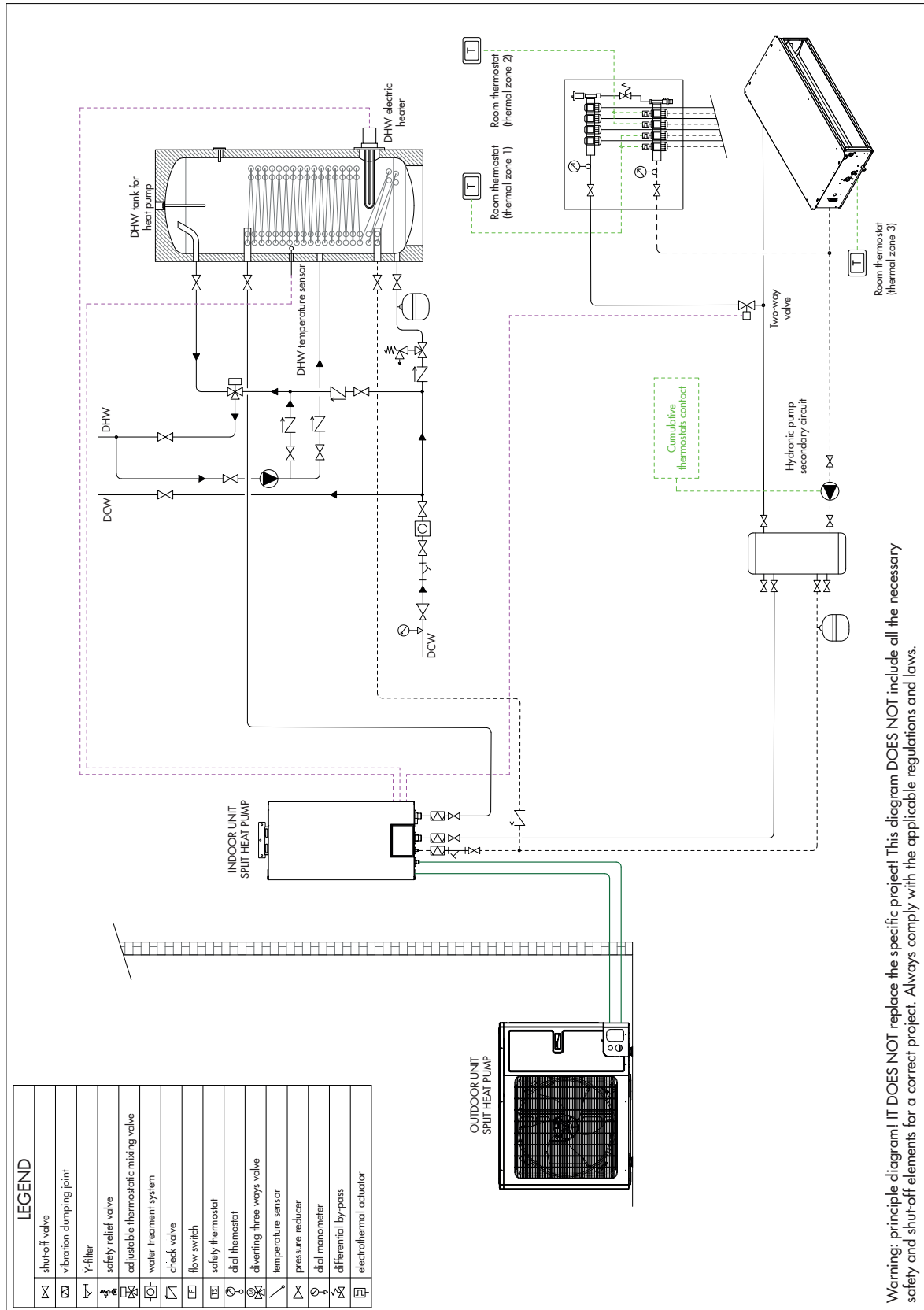
Radiant heating and DHW with three-way valve and tank



Warning: principle diagram! IT DOES NOT replace the specific project! This diagram DOES NOT include all the necessary safety and shut-off elements for a correct project. Always comply with the applicable regulations and laws.

EXAMPLE 2

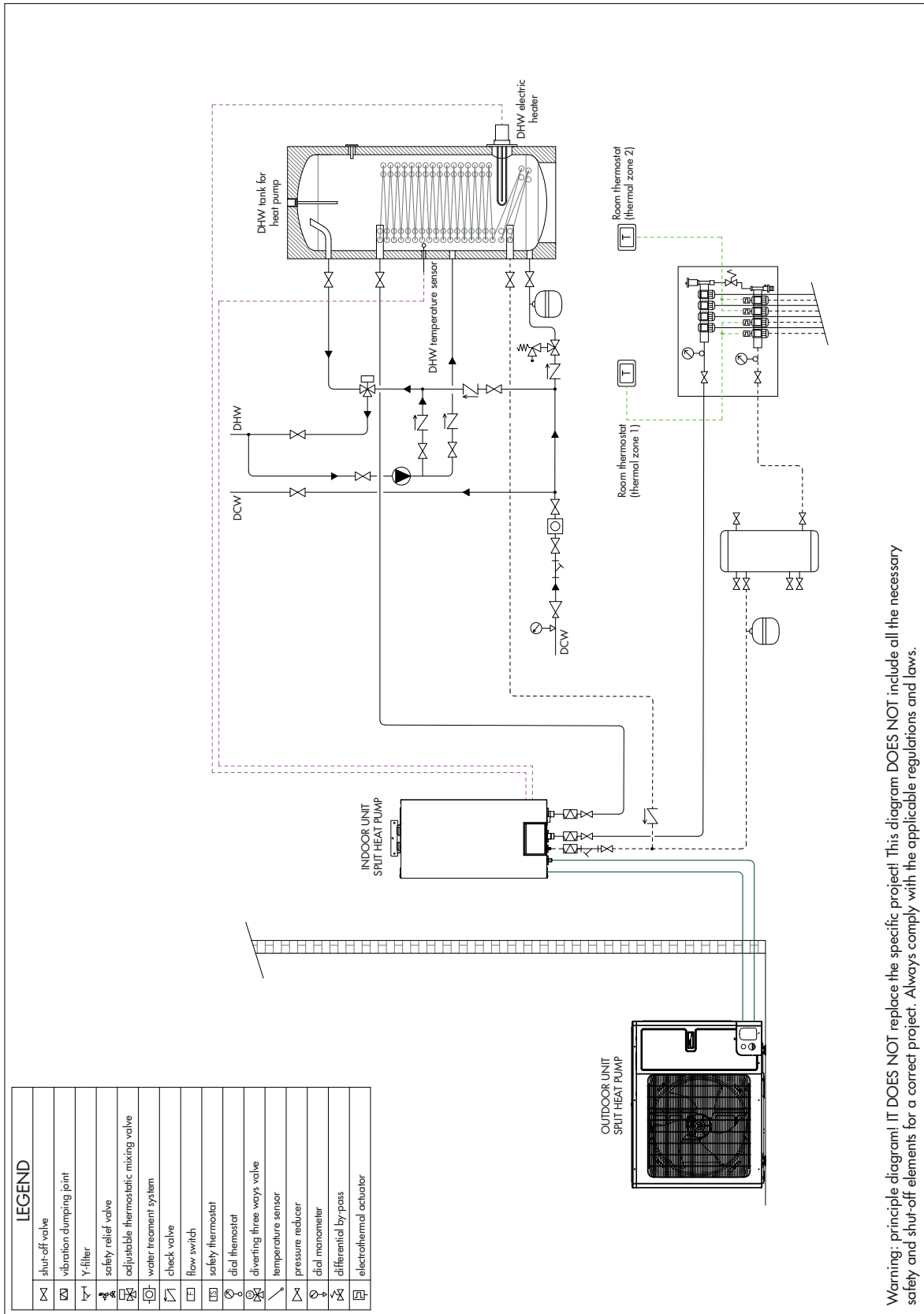
Heating (cooling) with fan coil units and DHW with three-way valve and tank



INSTALLATION EXAMPLES

EXAMPLE 3

Radiant heating, single thermal zone and DHW with three-way valve and tank



Warning: principle diagram! IT DOES NOT replace the specific project! This diagram DOES NOT include all the necessary safety and shut-off elements for a correct project. Always comply with the applicable regulations and laws.

EXAMPLE 4

Heating and Cooling with mixing modules and DHW with three-ways valve and tank

