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RESIDENTIAL AND LIGHT COMMERCIAL HEAT PUMP RANGE R290

MONOBLOC AIR-TO-WATER HEAT PUMP - R290- 30AWH-P

AQUASNAP 30AWH-P

The range has been designed to deliver performance, suitable for low to medium temperature emitters (underfloor heating, fan coil units, hydronic cassettes, radiators, mixed installations, etc.), and up to high temperature emitters for renovation application (boiler replacement).

With a high leaving water temperature of up to 75°C, the 30AWH-P can deliver more usable hot water and helps to avoid the need for direct electric immersion to sterilize the water, helping to protect from legionella. The 30AWH-P heat pump is installed outdoors in an open area. Each device is tested in the factory and delivered ready for operation.

AQUASNAP®

R290

Wide range offer
The 30AWH-P range of reversible heat pumps comprises 6 single-phase models and 2 three-phase models, from 4 kW to 14 kW.

Environmentally sustainable
Natural refrigerant R290 helps protect the environment (GWP=3) and achieve greenhouse emissions phase-down requirements.

High energy efficiency
SCOP up to 4.82
SEER up to 5.34
Energy class A+++ (35°C) or A++ (55°C)

High LWT (Leaving Water Temperature)
Up to 75°C leaving water temperature, the 30AWH-P is suitable for replacing oil and gas boilers.

Silent operation
With design optimisation for low noise level, 30AWH-P unit has standard sound power level starting from 47 dB(A), and a silent mode can be actived by customer.

Compact Design
Compact footprint 0.41m² facilitates installation even in small spaces (balcony for example).

Certified performance
New 30AWH-P can satisfy local incentive constraints*.

ONE RANGE, MANY APPLICATIONS

Individual Housing | Collective Housing | Light Commercial

Monobloc air-to-water heat pumps are designed for heating and cooling applications in new and existing individual homes and small businesses.

*depends on local market regulation

AQUASNAP 30AWH-P

TECHNICAL DATA

30AWH 04P-14P				004P (1Ph)	006P (1Ph)	008P (1Ph)	010P (1Ph)	012P (1Ph)	014P (1Ph)	012P (3Ph)	014P (3Ph)
Heating											
Nominal performances (1)	HA1	Nominal capacity	kW	3.95	5.80	7.60	9.60	11.40	13.80	11.40	13.80
		COP	kW/kW	4.90	4.80	4.80	4.35	4.55	4.30	4.65	4.40
	HA2	Nominal capacity	kW	3.85	5.50	7.80	9.50	10.80	13.60	10.80	13.60
		COP	kW/kW	3.65	3.65	3.75	3.55	3.65	3.40	3.75	3.50
	HA3	Nominal capacity	kW	3.75	5.25	7.55	9.40	10.95	13.25	10.95	13.25
		COP	kW/kW	2.95	2.95	3.15	2.95	3.10	2.90	3.15	2.95
Seasonal efficiency (2)	HA1	SCOP	kWh/kWh	4.70	4.82	4.69	4.69	4.74	4.74	4.74	4.74
		ηs heat	%	185	190	185	185	187	187	187	187
		P_{rated}	kW	4	5	6	6	9	9	9	9
		Annual Energy consumption	KWh	1666	2092	2829	2829	4068	4068	4068	4068
		Energy class		A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++
	HA3	SCOP	kWh/kWh	**3.34**	**3.34**	**3.34**	**3.34**	**3.35**	**3.35**	**3.35**	**3.35**
		ηs heat	%	**131**	**131**	**131**	**131**	**131**	**131**	**131**	**131**
		P_{rated}	kW	**3**	**5**	**6**	**6**	**9**	**9**	**9**	**9**
		Annual Energy consumption	KWh	2138	3010	3989	3989	5743	5743	5743	5743
		Energy class		A++	A++	A++	A++	A++	A++	A++	A++
Cooling											
Nominal performances (1)	CA1	Nominal capacity	kW	3.35	4.60	6.50	7.40	9.70	10.70	9.70	10.70
		EER	kW/kW	3.15	3.15	3.05	2.90	3.05	2.95	3.10	3.00
	CA2	Nominal capacity	kW	4.00	6.15	8.00	8.90	12.00	14.50	12.00	14.50
		EER	kW/kW	4.15	3.90	4.00	3.70	4.30	3.70	4.35	3.75
Seasonal efficiency		$SEER_{12/7\ °C}$ Comfort low temp.	kWh/kWh	4.93	5.34	5.27	5.14	5.33	5.16	5.33	5.16
		ηs cool	%	194	211	208	203	210	203	210	203
Sound levels											
Standard unit											
Sound power level, ErP C condition A7/W35 (3)			dB(A)	47	48	49	49	52	52	52	52
Sound pressure level, at 5 m ErP C condition A7/W35 (4)			dB(A)	21.5	22.5	23.5	23.5	26	26	26	26
Sound power level, ErP C condition A7/W55 (3)			dB(A)	49	50	51	51	54	54	54	54
Sound pressure level at 5 m, ErP C condition A7/W55 (4)			dB(A)	23.5	24.5	25.5	25.5	28	28	28	28
Maximum sound power level (indicative value)			dB(A)	64	66	68	68	69	69	69	69
Sound pressure level at 5 m /10 m (indicative value)			dB(A)	38.5 / 33	40.5 / 35	42.5 / 37	42.5 / 37	43.5 / 38	43.5 / 38	43.5 / 38	43.5 / 38
Dimensions											
Length			mm	946	946	946	946	946	946	946	946
Width			mm	430	430	430	430	430	430	430	430
Height			mm	927	927	927	927	1375	1375	1375	1375
Operating weight(5)											
Standard unit			kg	78	84	91	93	126	126	128	128
Compressors			Rotary compressor	1	1	1	1	1	1	1	1
Refrigerant				R290							
Charge(5)			kg	0.39	0.58	0.76	0.76	1.07	1.07	1.07	1.07

(1) In accordance with standard EN 14511-3:2022
(2) In accordance with standard EN 14825:2022, Average climate
C1 Cooling mode conditions : evaporator water entering/leaving temperature 12°C/7°C, outside air temperature 35°C, evaporator fooling factor 0m² K/W
C2 Cooling mode conditions : evaporator water entering/leaving temperature 23°C/18°C, outside air temperature 35°C, evaporator fooling factor 0m² K/W
HA1 Heating mode conditions : Water heat exchanger water entering/leaving temperature 30°C/35°C, fooling factor 0m² K/W. Outside air temperature 7°C db / 6°C wb
HA2 Heating mode conditions : Water heat exchanger water entering/leaving temperature 40°C/45°C, fooling factor 0m² K/W. Outside air temperature 7°C db / 6°C wb
HA3 Heating mode conditions : Water heat exchanger water entering/leaving temperature 47°C/55°C, fooling factor 0m² K/W. Outside air temperature 7°C db / 6°C wb
$ηs\ heat_{30/35\ °C}$ & $SCOP_{30/35\ °C}$ Values calculated in accordance with standard EN14825:2022
$ηs\ heat_{47/55\ °C}$ & $SCOP_{47/55\ °C}$ Values in bold comply with Ecodesign Regulation (EU) No. 813/2013 for heating application
$ηs\ cool_{12/7\ °C}$ & $SEER_{12/7\ °C}$ Values calculated in accordance with standard EN14825:2022
(3) In dB ref=10^{-12} W, (A) weighting. Declared dualnumber noise emission values in accordance with EN 12102-1 (with an associated uncertainty of +/-2dB(A)). as required by Ecodesign regulation and Eurovent certification. Measured in accordance with ISO 9614-1
(4) In dB ref 20 µPa, (A) weighting. Declared dualnumber noise emission values in accordance with EN 12102-1 (with an associated uncertainty of +/-2dB(A))
For information, calculated from the sound power level Lw(A)
(5) Values are guidelines only. Refer to the unit nameplate
(7) Min. water-side operating pressure with variable speed pump is 110 kPa

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