

airH₂O 600 S

Air/Water Split refrigeration heat pump, 60 & 65°C, without DHW
3.5 to 14 kW (R32)



Indoor units

3.5 to 8 kW	8.5 to 14kW
 712 450 285	 890 520 370
RWM-1.5R3E RWM-2.0R3E RWM-2.5R3E RWM-3.0R3E	RWM-3.5R3E RWM-4.0R3E RWM-5.0R3E RWM-6.0R3E

Outdoor units

 628 882 305	 1140 1220 430
RAS-1.5WHVRP2E RAS-2WHVRP2E RAS-2.5WHVRP2E RAS-3WHVRP2E	RAS-3.5WH(V)RP2E RAS-4WH(V)RP2E RAS-5WH(V)RP2E RAS-6WH(V)RP2E

Compatible controls and accessories

Controls and connectivity



Wired remote control
Ref.: PC-ARFH3E
Included



Wireless remote control for
ambient compensation 1st
circuit.
Ref.: ATW-RTU-07



Front cover AirH2O 600 S
& S COMBI to use in case of
remote control drift in the
environment.
Ref.: ATW-FCP-03



Black wired remote control
Ref.: PC-ARFH3EB
Option

Hydraulic accessories



2-zone kit with
3-way valve and
wall-mounted
circulator
Ref.: ATW-2TK-07



3-way directional
inversion valve
Ref.: ATW-3WV-01



Universal sensor
Ref.: ATW-WTS-02Y



Differential discharge
valve
Ref.: ATW-DPOV-01

Options



Domestic hot water storage tank (H x
D) 1270 x 595 mm
Refs.:
200 L: DHWT-200S-3.0H2E
300 L: DHWT-300S-3.0H2E



Reversible AirH2O 600 S kit
Refs.: ATW-CKS-01
(airH2O 600 S - 3.5 / 4 / 6 / 8 kW)
Refs.: ATW-CKS-02
(airH2O 600 - 8.5 / 10 / 12 / 14 kW)



Cascade control cabinet (8 max)
Ref.: ATW-YCC-04

+ PERFORMANCE RATING

- Power ratings suitable for all types of projects, new builds and renovations, even in cold weather. **Operates at up to -25°C outside CONSTANT POWER and 65°C from water temperature** from model 8.5 kW, Ideal for renovation work and cold climates.
- The airH2O 600 range delivers **exceptional performance** with Heating Heat Pumps up to 5.1.

+ PRACTICAL FOR PROFESSIONALS

- Fully-inclusive management:** All standard options (2 zones, boiler backup, remote DHW management, smart grid ready, solar thermal, fan coil units).
- CSNET Home PRO included as standard:** View the status of your equipment remotely and adjust its settings in real time.
- NFC function:** Create/copy/paste/duplicate a configuration directly via your smartphone.

+ EASY TO CONTROL

- Controller:** A modern, stylish LCD screen that is easy to use for both home and professional users.
- CSNet Home included as standard:** Control your comfort remotely at no extra cost.

R32 FLUID

Model	Unit	3.5 kW	4 kW	6 kW	8 kW	8.5 kW	10 kW	12 kW	14 kW
Performance, heating									
Min./rated/max. heating capacity (7°C outside./35°C water)	kW	1.5/3.5/6.32	1.85/4.3/6.5	2.1/6/8.6	2.1/8/11	3.7/8.5/10.5	3.7/10/12	4 / 12 / 14	4 / 14 / 16
Capacity/max. heating (-7°C outside / 35°C water)	kW	3 / 5.21	4.5 / 5.5	5.3 / 6.2	5.8 / 7.5	8.5 / 8.5	10 / 10.5	12 / 12	14 / 14.6
Capacity/max. heating (-7°C outside / 55°C water)	kW	3 / 3.84	4 / 4.77	4.7 / 5	5 / 6	8 / 8.5	10 / 10	12 / 12	13.3/13.3
Heat pump (7°C outside/35°C water) in accordance with EN14825	-	5.1	5	4.6	4.67	4.6	4.83	4.35	
SCOP average climate 35°C/55°C in accordance with EN14825	-	4.45 / 3.19	4.44 / 3.19	4.44 / 3.23	4.44 / 3.2	4.49 / 3.29	4.48 / 3.26		
Seasonal heating energy efficiency η_s (35°C) single/Tri ⁽¹⁾	%	175				177		176	
Seasonal heating energy efficiency η_s (55°C) single/Tri ⁽¹⁾	%	125				129		127	
Energy rating 35°C/55°C	-	A+++/A++							
Temperature range of water outlet (heating mode)	°C	20/60°C				20/65°C			
Max. temperature at the water outlet in thermodynamic-only mode	°C	60°C up to -5°C ext / -10°C ext with auxiliary				65°C up to -5°C ext / -13°C ext with auxiliary			

Performance in Cooling mode (optional)

Capacity/max. cooling mode (35°C outside/7°C water) (reversible)	kW	3.5 / 4.69	4 / 5.12	5.3 / 6	6.5 / 7	8.5 / 8.5	10 / 10	12 / 12	14 / 14
Absorbed capacity cooling (35°C ext/7°C water)	kW	1.21	1.31	1.63	1.77	2.71	2.91	4.19	4.56
EER (reversible model)	-	3.7	3.82	3.6	3.35	3.24	3.05	3	2.89

Hydraulic modules		RWM-1.5R3E	RWM-2.0R3E	RWM-2.5R3E	RWM-3.0R3E	RWM-3.5R3E	RWM-4.0R3E	RWM-5.0R3E	RWM-6.0R3E
Auxiliary electric resistance heating as standard / Three-stage	kW	3 (1+1+1)				6 (2+2+2)			
Net weight	kg	34		36		37	46	48	
Dimensions S (HxLxD)	mm	712 x 450 x 285				890 x 520 x 370			
Sound pressure level	dB(A)	30							
Remote control	-	included PC-ARFH3E							

Hydraulic features

Expansion vessel	L	6							
Water flow (min/rated/max)	m ³ /h	0.5/0.6/2.1	0.5/0.8/2.1	0.6/1/2.5	0.6/1.2/2.5	1/1.4/2.8	1/1.7/2.8	1.1/2.1/3	1.1/2.4/3
Hydraulic connections for heating (male/male valves supplied)	inches	1"							
Min. system water capacity	L	28				50		55	

Electrical features

Power supply	-	230V/1Ph/50Hz				230V / 1Ph / 50Hz or 400V / 3Ph / 50Hz			
SINGLE-PHASE 230V	Intensity max with auxiliary resistance	A				26.7			
	Cable section (mm ²) / max length (m) ⁽²⁾	-				3 x 2.5/28			
3-PHASE 400V	Intensity max with auxiliary resistance	A				9.1			
	Cable section (mm ²) / max length (m) ⁽²⁾	-				5 x 2.5/20			

Outdoor units		RAS-1.5WHVRP2E	RAS-2WHVRP2E	RAS-2.5WHVRP2E	RAS-3WHVRP2E	RAS-3.5WH(V)RP2E	RAS-4WH(V)RP2E	RAS-5WH(V)RP2E	RAS-6WH(V)RP2E
Pressure level at 5m / Sound power in hot mode ⁽³⁾	dB(A)	23/50			23/51		27/53		28/54
Dimensions (HxWxD)	mm	682 x 882 x 305				1140 x 1220 x 430			
Net weight	kg	45				112		114	
Operating ranges in Cooling/Heating/DHW mode	°C	+10~+46 // -20~+25 // -20~+35				+10~+46 // -25~+25 // -25~+43			

Cooling properties

Subject to the DESP, category II									
Diameter of refrigeration pipes (Liq - Gas)	inches	1/4" - 1/2"			1/4" - 1/2" up to 30m*		1/4" - 1/2" up to 30m (only hot)*		
Min./max. length/max. drop	m	3 - 50/20			3 - 40/20		5 - 50/20		5 - 50/20
Refrigerant / Refrigerant charge for 10m	- / kg	R32 / 1.1			R32 / 1.2		R32 / 1.8		R32 / 2.1
Compressor	-	ROTARY DC INVERTER							

Electrical features

Power supply	-	230V/1Ph/50Hz				230V / 1Ph / 50Hz or 400V / 3Ph / 50Hz			
SINGLE-PHASE 230V	Max. current	A				28.6			
	Cable section (mm ²) / max length (m) ⁽²⁾	3 x 2.5/28		3 x 2.5/28		3 x 4/24		3 x 4/21	
3-PHASE 400V	Max. current	A				16.1			
	Cable section (mm ²) / max length (m) ⁽²⁾	-				5 x 4/16			
Indoor/Outdoor connection (protected)	mm ²	2 x 0.75							

Retail price per unit excluding taxes

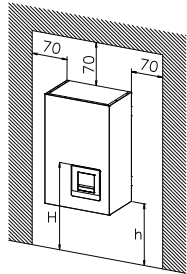
Hydraulic modules (Remote control included)	RWM-1.5R3E	RWM-2.0R3E	RWM-2.5R3E	RWM-3.0R3E	RWM-3.5R3E	RWM-4.0R3E	RWM-5.0R3E	RWM-6.0R3E
Premium outdoor units Single-phase units	RAS-1.5WHVRP2E	RAS-2WHVRP2E	RAS-2.5WHVRP2E	RAS-3WHVRP2E	RAS-3.5WHVRP2E	RAS-4WHVRP2E	RAS-5WHVRP2E	RAS-6WHVRP2E
Premium outdoor units Three-phase					RAS-3.5WHHRP2E	RAS-4WHHRP2E	RAS-5WHHRP2E	RAS-6WHHRP2E
Price for the whole set Single-phase Hydraulic module + outdoor unit								
Price for the whole set Three-phase Hydraulic module + outdoor unit								
Reversible kit (Optional)	ATW-CKS-01				ATW-CKS-02			

⁽¹⁾ = single⁽²⁾ Seasonal energy efficiency without regulation, Keymark certification, in accordance with Regulation (EU) No. 813/2013 of the Commission of August 2, 2013, and standard EN14825.⁽³⁾ Sections given for reference purposes only. Compliant with the applicable electrical standards.⁽⁴⁾ Pressure to 5m in night mode - In accordance with EN12102-1 / ErP

*For distances greater than 30 m or cooling, please consult us or refer to the technical manual. Refrigerator valves on unit and module in 1/4 5/8, provide adapters in accordance with the piping used / not supplied by Hitachi (refer to the technical manual for more information).

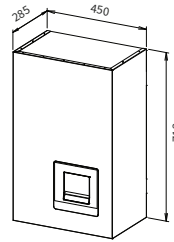
Prepare your construction site airH2O 600 S

1. How much space do I need for my hydraulic module?

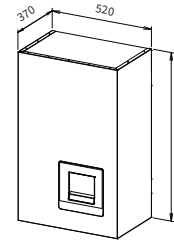


Models 3.5 to 14 kW

H = 1250mm recommended for easy access to the controller
h = 350mm min for installing stop valves and connections

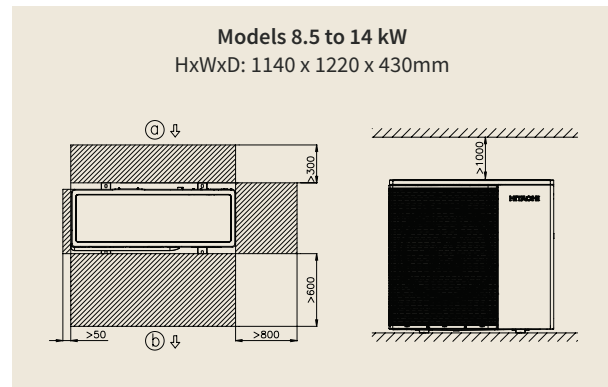
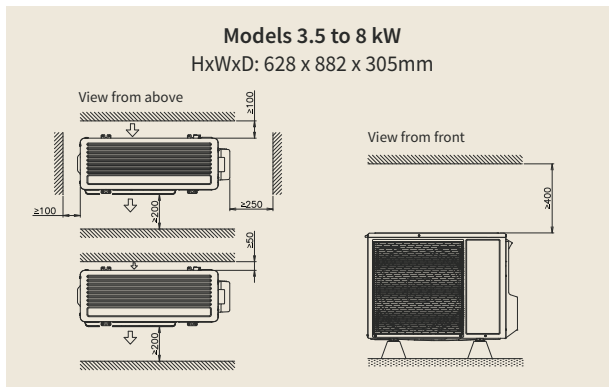


Models 3.5 to 8 kW



Models 8.5 to 14 kW

2. How much space do I need for my outdoor unit?



3. Which hydraulic and cooling connections are required?

Cooling properties	Unit	3.5 to 8 kW	8.5 to 14 kW
Diameter of cooling pipes (Liq - Gas)	inches	1/4" - 1/2" 3/8 5/8 > to 30m* for the 6 and 8 kW	1/4" - 1/2" up to 30m* and heat only
Hydraulic features			
Hydraulic connections for heating (male/male valves supplied)	inches		1"

* For distances greater than 30m or cooling, please consult us or refer to the technical manual. Refrigerator valves on unit and module in 1/4 5/8, provide adapters in accordance with the piping used / not supplied by Hitachi (refer to the technical manual for more information).

4. Which electrical connection should I provide?

Please note that these sections and protections are given for intensities with additional heating resistances.

If you have a remote DHW tank with a heating element and do not wish to use a backup heater, please refer to the technical catalog. Data provided as a guide, please refer to the applicable electrical standard.

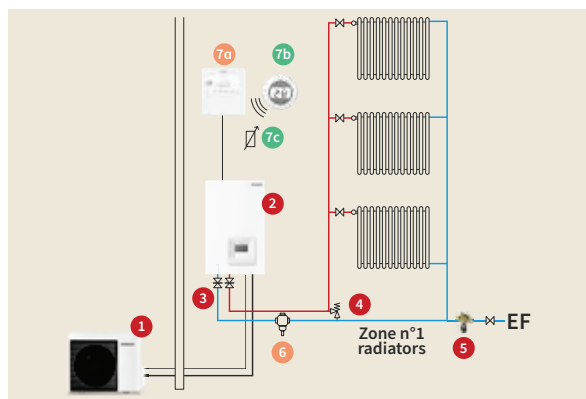
Power supply					Bus	Power supply					Bus
Outdoor units	Intensity 230 V	Protection 230 V	Cable section 230 V	Max. cable length 230 V	Lycy shielded cable 2 x 0,75 mm ²	Outdoor units	Intensity 230 / 400 V	Protection 230 / 400 V	Cable section 230 / 400 V	Max. cable length 230 / 400 V	Lycy shielded cable 2 x 0,75 mm ²
	Max A	A/curve	mm ²	m			Max A	A/curve	mm ²	m	
RAS-1.5WHVRP2E	12.6	16 / D	3G2.5	28		RAS-3.5WHVRP2E / WHRP2E	28.6 / 16.1	32 / 20	3G6/5G4	30 / 16	
RAS-2WHVRP2E	12.6	16 / D	3G2.5	28		RAS-4WHVRP2E/WHRP2E					
RAS-2.5WHVRP2E	16.5	20 / D	3G4	24		RAS-5WHVRP2E/WHRP2E					
RAS-3WHVRP2E	16.5	20 / D	3G4	34		RAS-6WHVRP2E/WHRP2E					
Power supply					Bus	Power supply					Bus
Hydraulic modules	Intensity 230 V	Protection 230 V	Cable section 230 V	Max. cable length 230 V	Lycy shielded cable 2 x 0,75 mm ²	Hydraulic modules	Intensity 230 / 400 V	Protection 230 / 400 V	Cable section 230 / 400 V	Max. cable length 230 / 400 V	Lycy shielded cable 2 x 0,75 mm ²
	Max A	A/curve	mm ²	m			Max A	A/curve	mm ²	m	
RWM-1.5R3E	13.7	16 / C	3G2.5	23		RWM-3.5R3E	26.7 / 9.1	32 / 16 - C	3G6/5G2.5	28 / 20	
RWM-2.0R3E	13.7	16 / C	3G2.5	23		RWM-4.0R3E					
RWM-2.5R3E	13.7	16 / C	3G2.5	23		RWM-5.0R3E					
RWM-3.0R3E	13.7	16 / C	3G2.5	23		RWM-6.0R3E					

Hydraulic setups airH2O 600S

Your diagrams in a few clicks
at yutaki-applications.com

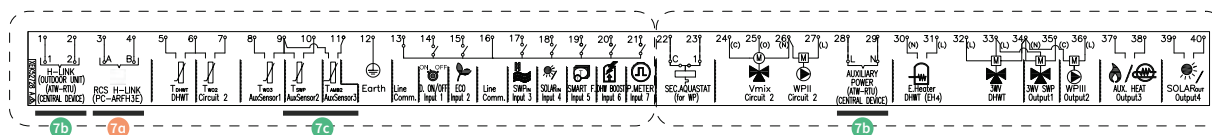


1 control zone - direct radiators

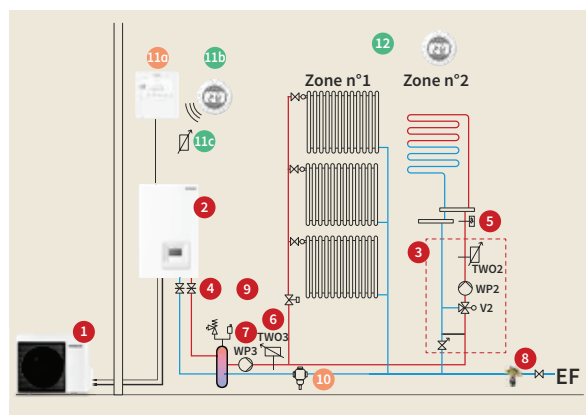


1	Outdoor unit	Mandatory	Hitachi supplied
2	Hydraulic module (6L expansion tank included)	Mandatory	Hitachi supplied
3	Isolating valve	Mandatory	Hitachi supplied (with module)
4	Differential discharge valve	Mandatory	Hitachi option (ATW-DPOV-01)
5	Disconnecter	Mandatory	Not supplied
6	Mud pot	Recommended (Required if floor)	Not supplied
7a	Wired compensation thermostat zone 1: remote PC-ARFH3E	Recommended	Hitachi supplied (with module)
7b	Wireless compensation thermostat zone 1	Option	Hitachi option (ATW-RTU-07)
7c	Wired ambiance sensor	Option	Hitachi option (ATW-ITS-01)

- Please note: carefully check that the heat pump circulator can compensate for losses from the network and ensure the nominal flow rate required by the heat pump. Otherwise, hydraulic decoupling is required.
- Ensure that the minimum volume required by the heat pump is sufficient; if not, add a buffer volume.
- Always flush the heating system before connecting and filling it permanently. Use a compatible inhibitor product, in accordance with the manufacturer's recommendations.
- Check that the expansion tank included in the machine is sufficient for the overall volume of the installation.
- Diagrams provided for illustrative purposes only. Installation will be carried out in compliance with applicable legislation (DTU, professional standards).

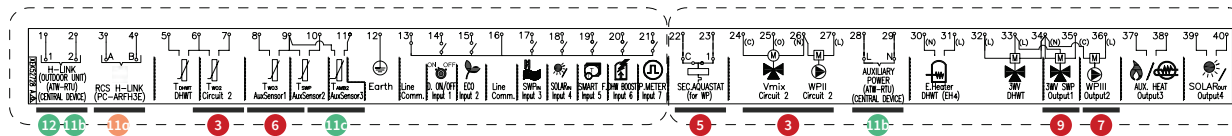


2 control zones - disconnection with direct radiators, mixed flooring (standard mode - reversible)



1	Outdoor unit	Mandatory	Hitachi supplied
2	Hydraulic module (6L expansion tank supplied)	Mandatory	Hitachi supplied
3	2 zones kit with mixer valve, balancing valve, circulator, universal temperature sensor, bypass	Mandatory	Hitachi option (ATW-2TK-07)
4	Isolating valve	Mandatory	Hitachi supplied (with module)
5	Safety aquastat for underfloor heating	Mandatory	Hitachi option (ATW-AQT-01)
6	Universal temperature sensor	Mandatory	Hitachi option (ATW-WTS-02Y)
7	Secondary circulator	Mandatory	Not supplied
8	Disconnecter	Mandatory	Not supplied
9	Motorized valve	Mandatory (if refresh)	Not supplied
10	Mud pot	Recommended	Not supplied
11a	Wired compensation thermostat zone 1: remote PC-ARFH3E	Recommended	Hitachi supplied (with module)
11b	Wireless compensation thermostat zone 1	Option	Hitachi option (ATW-RTU-07)
11c	Wired ambiance sensor	Option	Hitachi option (ATW-ITS-01)
12	Compensation thermostat zone 2	Option	Hitachi option RATW-RTU-06 if RTU-07 zone 1

- Please note: carefully check that the heat pump circulator can compensate for losses from the network and ensure the nominal flow rate required by the heat pump. Otherwise, hydraulic decoupling is required.
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- Always flush the heating system before connecting and filling it permanently. Use a compatible inhibitor product, in accordance with the manufacturer's recommendations.
- Check that the expansion tank included in the machine is sufficient for the overall volume of the installation.
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Output 230V
Set up in "cooling mode"