

**J.01**Air to Water Heat
Pumps**CAIROX tip R-
AQUA-CGW-ID
A1**

- Cairox R-Aqua
- Air/Water
- 6 and 10 kW

A+++**A++**

A2W heat pumps R32 with DHW heater type CAIROX tip R-AQUA-CGW-ID A1

Air/water inverter controlled heat pump with R32 refrigerant. Thanks to the advanced heat pump technology, the energy from the outside air is absorbed and transferred to the water for heating of the home and the domestic hot water. The intelligent control of the compressor and expansion valve ensures a precise and fast control of the water temperature, thus reducing the energy consumption.

Application

- Heating of new or existing houses
- Heating by means of radiators, convectors and floor or wall heating
- Heating of domestic water

Brand

- Cairox R-Aqua

Composition

- A+++ at 35°C water temperature
- Communication cable included
- High efficiency plate heat exchanger
- Wilo circulation pump
- Integrated water heater (185 liters - corresponding to 3-4 showers)
- Integrated controller
- Expansion vessel (10 liters)
- Safety valve (3 bar)
- Electrical backup heater
- Electrical backup heater domestic water
- Outside temperature sensor
- Water pressure sensor

Refrigerant

- R32

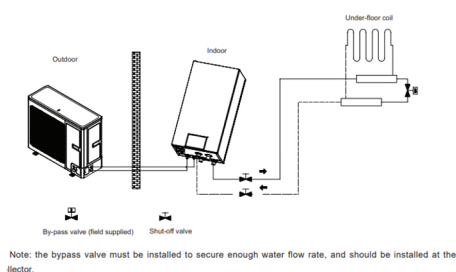
Specifications

- Split system
- 1 appliance for heating and domestic hot water
- Cooling is possible
- Standard equipped with WIFI
- Standard equipped with Modbus interface
- Heating assured down to -20°C outside temperature
- Water temperature up to 60°C even at negative outside temperatures thanks to the patented two-stage compressor
- Easy installation
- EUROVENT EN 14511 and EN 14825 certification

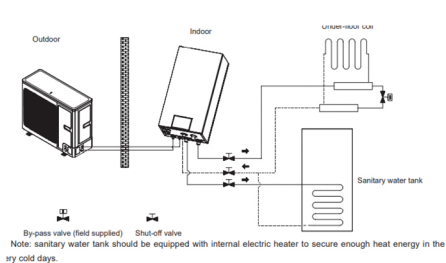
Applicable outdoor units

- Outdoor unit, type **R-AQUA-CGW-OU A1**

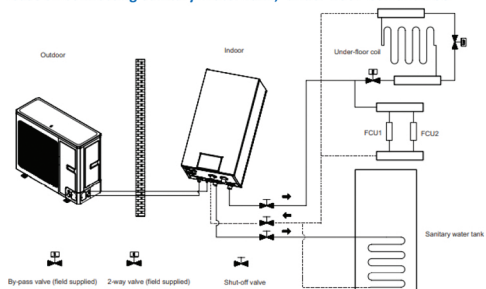
Case 1 : connecting under-floor Coil for Heating and Cooling



Case 2 : connecting Sanitary Water Tank and under floor coil



Case 3 : connecting Sanitary Water Tank, under floor coil and FCU



R-AQUA®

Technical data				
Indoor unit		R-AQUA-CGW-ID 06 A1		R-AQUA-CGW-ID 10 A1
Corresponding outdoor unit		R-AQUA-CGW-OU 06 A1		R-AQUA-CGW-OU 10 A1
Heating capacity A7/W35*	kW	6.0		9.5
COP A7/W35		5.0		4.59
Heating capacity A7/W45*	kW	5.9		9.5
COP A7/W45		3.91		3.60
Heating capacity A2/W35*	kW	5.1		8.1
COP A2/W35		4.26		3.85
Heating capacity A2/W45*	kW	5.0		8.1
COP A2/W45		3.44		3.17
Heating capacity A-7/W35*	kW	4.2		6.7
COP A-7/W35		3.05		2.81
Heating capacity A-7/W45*	kW	4.1		6.7
COP A-7/W45		2.42		2.23
Heating capacity A-10/W35*	kW	3.9		6.2
Heating capacity A-10/W45*	kW	3.8		6.2
Refrigerant (GWP)		R32 (675)		R32 (675)
Voltage	V / Ph / Hz	230/1/50		
Seasonal efficiency η_s heat pump (%)	(35°/55°C)	178,7 / 127,4		181/127
Annual energy consumption heat pump	kWh (35°/55°C)	2729/3169		4038/5091
Energy class heat pump	(35°/55°C)	A+++/A++		A+++/A++
Seasonal efficiency η_s DHW (%)	(55°C)	101.3		88.9
Annual energy consumption DHW	kWh (55°C)	1011		1152
Energy class DHW		A		A
Rated power (indoor unit only)	kW	3.1		6.1
Refrigerant pipes (liquid - gas)	"	1/4 - 1/2		
Hydraulic connections (supply - return)	"	1		
Components	Outgoing water temperatures	Heating (fan coil)	45	
		Heating (floor)	35	
		Domestic hot water	40 - 80	
		Type	water cooling	
	Pump	Number of steps	variable speed	
		Power (min-max)	2-75	
		Flow rate (min)	720	
		Flow rate (nom)	1032	1634
	Expansion vessel	Volume***	10	
		Pressure (max)	3	
		Pressure (pre)	1	
		Type	dry	
	Electrical heating	Material	stainless steel	
		Control	automatic	
		Number of steps	2	
		Capacity	3	6
	Heat exchanger	Combination	1,5 + 1,5	3 + 3
		Type	plate heat exchanger	
		Number	1	
		Volume	185	
	Water tank	Electrical resistance	3	
		Type	XL	
			29	
Sound pressure @ 1m		dB (A)		
Power cable section back-up resistance	mm ²	3G 2,5		3G 6
Power cable section indoor unit	mm ²	3G 2,5		3G 6
Automatic fuse (slow)	A	20		32
Dimensions	Unit (LxWxH)	mm	803 x 683 x 2000	
	Weight	kg	210	

* Specifications and design can change without notice for further improvements

** Capacities measured according to EN14511 measurement method

*** The size of the expansion tank should be determined in relation to the total water content of the system