



- R-AQUA
- Air/water split
- Hydromodule + DHW
- R32



## A2W heat pumps R32 with DHW heater 3ph type CGW-ID M1

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. The integrated water heater (185L) is made of enamelled steel to protect against corrosion on the inside. A anode will protect the tank against ionization.

### Brand

- R-AQUA

### Application

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

### Composition

- 3-way valve
- Communication cable included
- High efficiency plate heat exchangers
- Energy-efficient circulation pumps
- Integrated water heater with thermal stratification (185 liters)
- Colour touch screen controller (wired)
- Expansion vessel (10 liters)
- Safety valve (3 bar)
- Electrical backup heater
- Electrical backup heater domestic water
- electronic anode
- Water pressure sensor

### Refrigerant

- R32

### Specifications

- Split system
- 1 device for heating, cooling and domestic hot water
  - Heating assured at outside temperatures down to -25°C
  - Water temperature up to 55°C at outside temperatures down to -10°C
- A+++ at 35°C water temperature
- Bivalent setup possible
  - The heat pump will send a signal to an external heat source (eg gas boiler) depending on the outside temperature. This causes the heat pump stopped, and the second source present will provide the heating.
- Standard equipped with WiFi
- Standard equipped with Modbus interface
- Easy installation
- EUROVENT EN 14511 and EN 14825 certification
- Keymark certification

### Accessories

- Room thermostat, type **TS-CLOUD**, **TS-CLOUD RF** (only suitable for heating)
- Smart Grid module, type **SMART GRID**
- Buffer tank, type **BTE 60**, **BTE 100**
- Deaerator, type **AAS**
- Magnetic dirt separator, type **ADS**
- Differential pressure regulator, type **DPC**
- Filling set, type **WFS**
- Expansion vessel for heating, type **HEV**
- Expansion vessel console, type **EVC**
- Protector, type **PAB**
- Safety group, type **PSG**
- Siphon for pressure safety group, type **SSG**
- Expansion vessel for sanitary water, type **SEV**
- Connection kit for sanitary expansion vessel, type **EVC SAN**
- Pressure regulator, type **PRV**
- Coding plug for permanently disabling the cooling function, type **COD-ID-H**
- Start-up is strongly recommended, type **XSTARTUPJ**

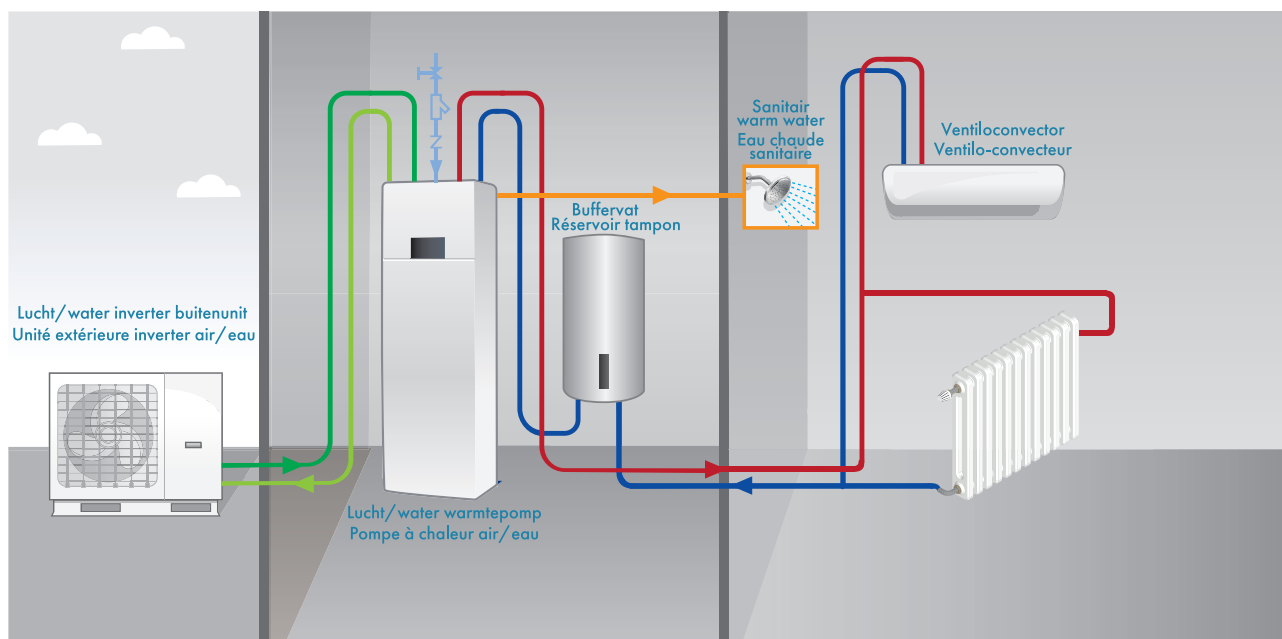
Water filter, safety group and expansion vessel **MUST** be provided on site.

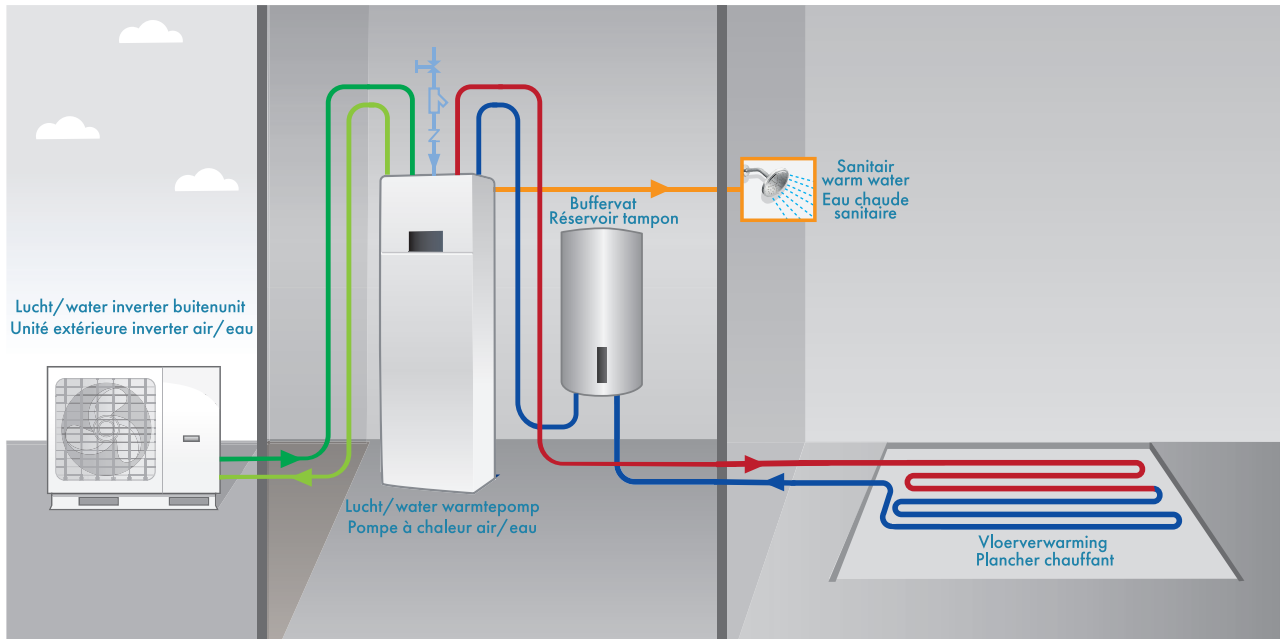
### Applicable outdoor units

- Outdoor unit, type **CGW-OU M1**

### Startup

- **Start-up by CAIROX BELGIUM strongly recommended**





Indoor unit		Technical data			
Corresponding outdoor unit		CGW-ID 12 M1	CGW-ID 14 M1	CGW-ID 16 M1	
		CGW-OU 12 M1	CGW-OU 14 M1	CGW-OU 16 M1	
Heating capacity A7/W35	kW	12,00	14,00	15,50	
COP A7/W35		5,00	4,70	4,51	
Heating capacity A7/W45	kW	12,29	14,44	16,13	
COP A7/W45		3,98	3,98	3,88	
Heating capacity A2/W35	kW	9,60	11,20	12,32	
COP A2/W35		3,42	3,30	3,23	
Heating capacity A2/W45	kW	9,36	10,92	12,01	
COP A2/W45		2,74	2,64	2,58	
Heating capacity A-7/W35	kW	7,92	9,24	10,16	
COP A-7/W35		2,70	2,60	2,55	
Heating capacity A-7/W45	kW	7,68	8,96	9,86	
COP A-7/W45		2,16	2,08	2,04	
Heating capacity A-10/W35	kW	7,20	8,40	9,24	
Heating capacity A-10/W45	kW	6,96	8,12	8,93	
SCOP W35/W55		4,48/3,23	4,45/3,35	4,45/3,35	
Seasonal efficiency $\eta_s$ heat pump W35/W55	%	176/126	175/131	175/131	
Annual energy consumption heat pump W35/W55	kWh	5065/7028	5552/7958	6027/7958	
Energy class heat pump W35/W55			A++/A++		
Seasonal efficiency $\eta_s$ DHW W55	%	112	112	112	
Annual energy consumption DHW W55	kWh	915	915	915	
Energy class DHW			A		
Power supply	V / Ph / Hz		400/3/50		
Refrigerant (GWP)			R32 (675)		
Refrigerant pipes (liquid - gas)	inch		1/4 - 5/8		
Hydraulic connections (supply - return)	inch		1		
Outgoing water temperatures	Heating	°C	20 ~ 60		
	Cooling	°C	7 ~ 25		
	DHW	°C	40 ~ 80		
Components	Pump	Type	High-efficiency pump		
		Regulation	Electronic - continuous control		
		Capacity (min-max)	3 ~ 87		
	Expansion vessel	Flow rate (min)	l/h	1150	1150
		Flow rate (nom)	l/h	2060	2400
		Volume*	l	10	2660
	Electrical heating	Pressure (max)	bar	3	
		Pre-pressure	bar	1	
		Type	-	Wet	
	Heat exchanger	Material	-	Incoloy825	
		Regulation	-	Automatic	
		Number of steps	-	2	
Water tank	Capacity	kW	6		
	Combination	kW	3 + 3		
Sound pressure**	Type	-	Plate heat exchanger		
	Number	-	2		
Power cable section indoor unit	mm <sup>2</sup>		5G4		
Automatic fuse (slow)	A		20		
Dimensions	Unit (LxDxH)	mm	600x650x1800		
	Weight	kg	195		

Specifications and design can change without notice for further improvements

Capacities measured according to EN14511

\* The size of the expansion vessel should be determined in accordance with the total water volume of the system

\*\* Measured at 1m distance in a semi-anechoic chamber