



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



## A2W heat pumps R32 with DHW heater type 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. 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**

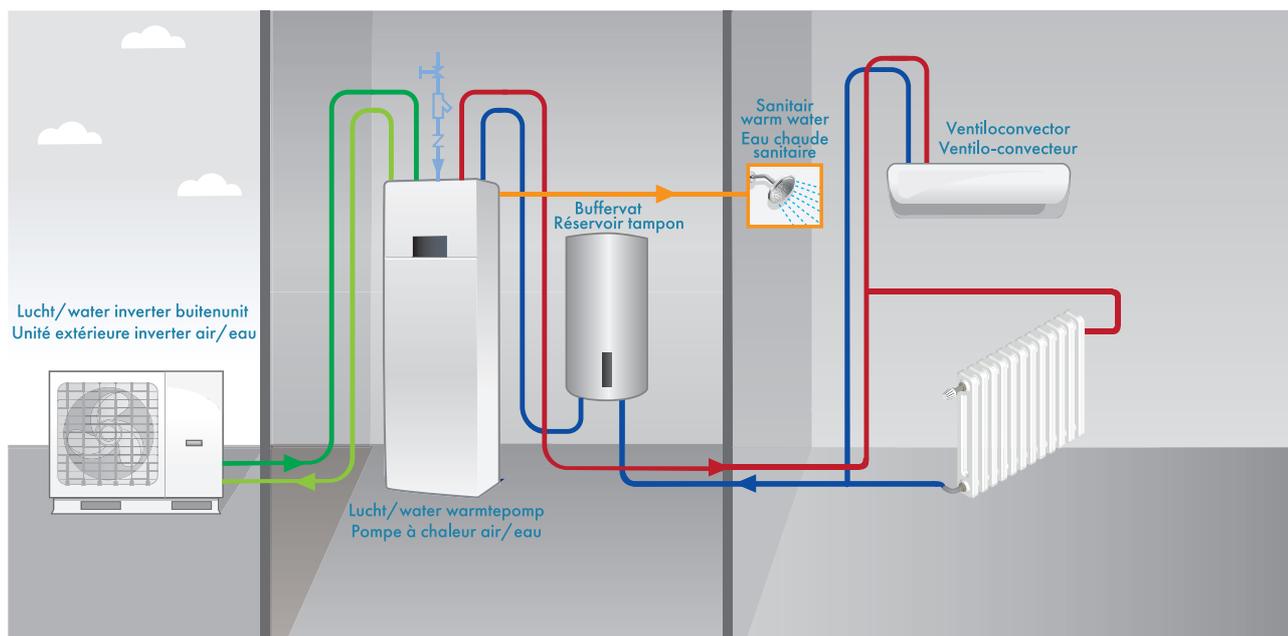
Water filter, safety group and expansion vessel **MUST** be provided on site.

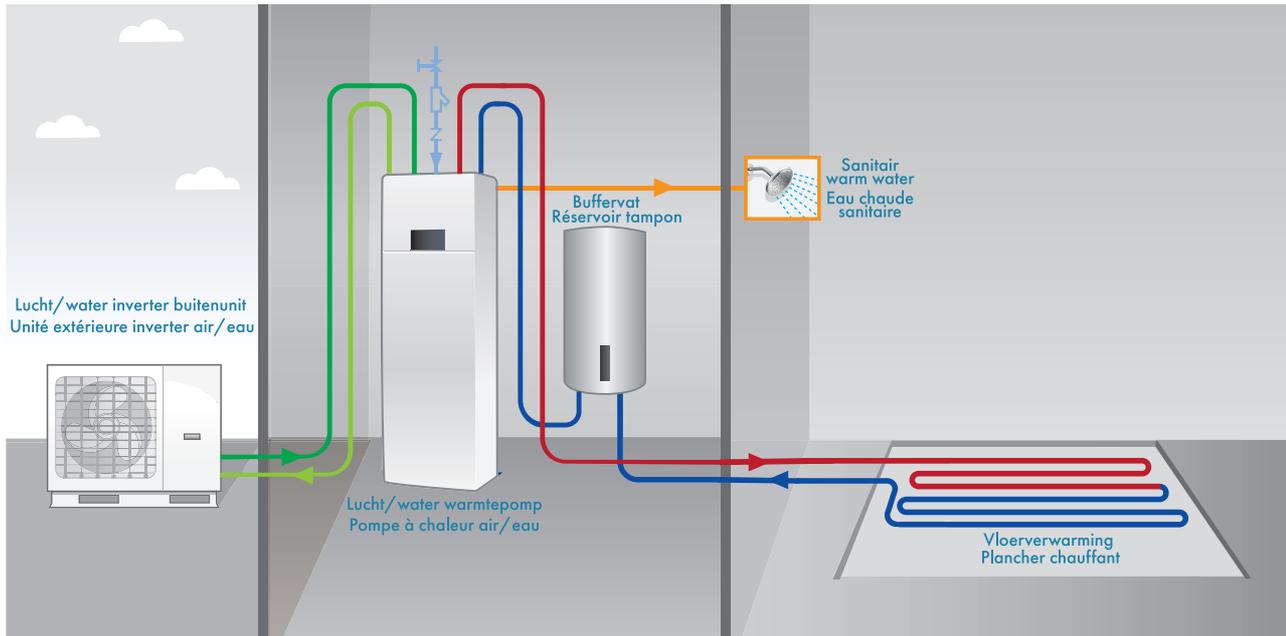
### Applicable outdoor units

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

### Startup

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





		Technical data						
Indoor unit		CGW-ID 06 A1	CGW-ID 08 A1	CGW-ID 10 A1	CGW-ID 12 A1	CGW-ID 14 A1	CGW-ID 16 A1	
Corresponding outdoor unit		CGW-OU 06 A1	CGW-OU 08 A1	CGW-OU 10 A1	CGW-OU 12 A1	CGW-OU 14 A1	CGW-OU 16 A1	
Heating capacity A7/W35	kW	6,00	8,00	10,00	12,00	14,00	15,50	
COP A7/W35		5,00	4,97	4,76	5,00	4,70	4,50	
Heating capacity A7/W45	kW	5,80	8,00	9,85	12,40	14,48	16,09	
COP A7/W45		3,82	3,86	3,67	3,77	3,68	3,62	
Heating capacity A2/W35	kW	5,19	6,56	7,67	9,60	11,20	13,13	
COP A2/W35		3,71	3,69	3,53	3,42	3,34	3,74	
Heating capacity A2/W45	kW	5,06	6,40	7,48	9,36	10,92	13,13	
COP A2/W45		2,97	2,95	2,83	2,74	2,67	3,13	
Heating capacity A-7/W35	kW	4,28	5,41	6,33	7,68	8,96	10,81	
COP A-7/W35		2,93	2,92	2,79	2,70	2,63	2,74	
Heating capacity A-7/W45	kW	4,15	5,25	6,14	7,44	8,68	10,81	
COP A-7/W45		2,34	2,33	2,23	2,16	2,11	2,21	
Heating capacity A-10/W35	kW	3,89	4,92	5,75	6,72	7,84	10,04	
Heating capacity A-10/W45	kW	3,76	4,76	5,56	6,48	7,56	10,04	
SCOP W35/W55		4,53/3,25	4,60/3,30	4,60/3,25	4,63/3,23	4,65/3,50	4,60/3,50	
Seasonal efficiency $\eta_s$ heat pump W35/W55	%	179/127	181/129	181/127	182/126	183/137	181/137	
Annual energy consumption heat pump W35/W55	kWh	2729/3169	3149/4371	4038/5091	4967/6985	5535/8045	5886/8045	
Energy class heat pump W35/W55		A+++/A++						
Seasonal efficiency $\eta_s$ DHW W55	%	116	123	123	112	112	112	
Annual energy consumption DHW W55	kWh	885	831	831	915	915	915	
Energy class DHW		A						
Power supply	V / Ph / Hz	230/1/50						
Refrigerant (GWP)		R32 (675)						
Refrigerant pipes (liquid - gas)	inch	1/4 - 1/2		1/4 - 5/8				
Hydraulic connections (supply - return)	inch	1						
Outgoing water temperatures	Heating	20 ~ 60						
	Cooling	7 ~ 25						
DHW	Heating	40 ~ 80						
	Cooling	-						
Components	Pump	Type	High-efficiency pump					
		Regulation	Electronic - continuous control					
		Capacity (min-max)	2 ~ 75		3 ~ 87			
		Flow rate (min)	650	870	870	1150	1150	1150
	Expansion vessel	Flow rate (nom)	1030	1380	1710	2060	2410	2660
		Volume*	10					
		Pressure (max)	3					
	Electrical heating	Pre-pressure	1					
		Type	Wet					
		Material	Incoloy825					
Regulation		Automatic						
Heat exchanger	Number of steps	2						
	Capacity	3	6					
Water tank	Combination	1,5 + 1,5	3 + 3					
	Type	Plate heat exchanger						
Sound pressure**	Number	2						
	Volume	185						
	Electrical resistance	3						
Power cable section indoor unit	mm <sup>2</sup>	3G2,5			3G6			
Automatic fuse (slow)	A	20			32			
Dimensions	Unit (LxDxH)	600x650x1800						
	Weight	195						

Specifications and design can be modified for further improvement without prior notice

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