#### Acquainverter® Air-to-water heat pump

Acquainverter<sup>®</sup> is a **R410A split heat pump** designed by ECA Technology to satisfy the most diverse system solutions in residential and commercial sectors, owing to a range consisting of 3 product families, each of which is available in 4 power sizes from 7 to 18kW:

**WRHL**: version with built-in 195L stainless steel DHW water heater (solar water heating ready);

**WA**: version with built-in 80L puffer;

WM: compact version for applications with external DHW water heater and puffer;

Acquainverter<sup>®</sup> control electronics allow the working parameters to be customised according to the most diverse system and climatic requirements, including – management of the climate temperature curve for the heating/air conditioning system, management of the external solar system, management of the DHW water heater anti-legionella cycle, availability of potential free contacts for third party control, energy saving function to optimise management costs, detailed self-diagnostics, load partialisation logic and uniform wear of outdoor units (dual versions);

Acquainverter<sup>®</sup> is an inverter heat pump that produces **hot water up to 55°C** for domestic use even with outdoor temperatures of -20°C, using a split-system, DC inverter heat pump system. The water temperature can be adjusted from 30°C to 50°C on domestic hot water and heating.

Acquainverter<sup>®</sup> supplies **chilled water for cooling from 7°C to 25°C** for radiant systems or with ventilated units;

The wide range of DHW water heaters and puffers is a perfect complement for all types of systems;





#### Features

#### 新 Heating and Cooling

Heat pump for heating, cooling of rooms (max. water temperature 55°).



#### Domestic hot water

Heat pump for domestic hot water production (max. water temperature 55°)

## Defrosting

Automatic cycle reversal and base heating cable to prevent ice formation during winter operation.

## Corrosion protection

Heat exchanger coils with corrosion protection manganese aluminium coil fins.

### X Silent Operation

Brushless DC axial fans (aerodynamic optimisation, reduced noise level, increased efficiency and air flow rate).



#### Auto-restart

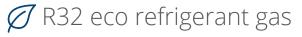
Restart in the event of power cut.

# √ Self-Diagnostics

Automatic troubleshooting for easy maintenance.

## ) Weekly Programme

Set up the different functions of the Acquainverter<sup>®</sup>, programming it according to your needs for the desired time slots.



New gas with low environmental impact and better performance.

# 定 Condensation Control

Automatic function that measures the condensation temperature and, based on this, switches the fan(s) off or on to ensure optimal levels of efficiency.



## 🛐 Anti-Legionella

Activation of the anti-legionella cycle for weekly heating of the entire tank to thermal shock temperature.

# HE Climate control

Intelligent self-regulation of the heating/air conditioning setpoint temperature according to the outside temperature.

### Solar water heating manag

Electronics designed to control solar water heating pumping assembly.



## Energy saving

Activation of energy saving mode using potential free contact.

🕞 DHW only operation

Exclusion of cooling and heating functions using potential free contact.



## Digital panel

Allows simple management of the main control activities storing all the information needed to control and manage optimum levels of climatic comfort.

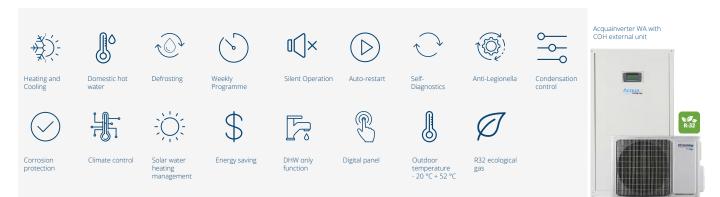


#### Outside temperatures

Outdoor units with extended operating range from -20 °C up to +52 °C outdoor temperature

#### TECHNICAL DATA

### **WA** Universal



#### TRIVALENT VERSION Heating , Cooling and domestic hot water

WA6.1 - WA11.2 - WA8.1 - WA15.2 - WA9.1 - WA19.2

the system is composed of:

- Hydronic unit Acquainverter® WA model

- 1 or 2 external units COH model

- 80 liters puffer
- WBX DHW heat storage (optional) from 200 to 1000 liters with solar water heater exchanger (fixed serpentine).

#### HC VERSION Heating and Cooling

WA6.1 - WA11.2 - WA8.1 - WA15.2 - WA9.1 - WA19.2

the system is composed of:

- Hydronic unit Acquainverter® WA model

- 1 or 2 external units COH model
- 70 liters embedded puffer

TRIVALENT VERSION Heating , Cooling and domestic hot water	U.I.	WA 6.1	WA 11.2	WA 8.1	WA 15.2	WA 9.1	WA 19.2	
	U.E.	COH3522HE32		COH5022HE32		COH7022HE32		
OU Number		1	2	1	2	1	2	
Power supply	V/f/Hz	230/1/50						
Nominal heating capacity (nom-max)1	kW	5,68	11,36	7,40	14,80	8,77	17,54	
COP (1)		4,25	4,27	3,97	4,03	3,93	3,97	
Nominal cooling capacity (nom-max)2	kW	6,02	12,04	7,92	15,84	11,05	22,10	
EER (2)		4,22	4,23	4,66	4,68	4,28	4,34	
Sound pressure (max)	dB(A)	54 56		6	58			
O.U. dimensions (WxHxD)	mm	899 x596 x378 1003 ×790 ×427			1003 ×790 ×427			
O.U. weight	kg	46 61			65			
I.U. dimensions (WxHxD)	mm	705x1205x505						
I.U. weight in operation	kg	186	198	186	198	186	198	
built-in heat storage capacity		70						
Refrigerant / Pre-charge	tipo/ kg	R32 / 1,00	R32 / 1,00 (x2)	R32 / 1,50	R32 / 1,50 (x2)	R32 / 2,0	R32 / 2,0 (x2)	
Global warm potential / CO2 equivalent	GWP / tons	675 / 0,675	675 / 0,675 (x2)	675 / 1,013	675 / 1,013 (x2)	675 / 1,350	675 / 1,350 (x2)	
Split length min/max	mt	5 / 20		5 / 25		5 / 30		
Refrigerant gas pipe diameter	mm	1/4" / 3/8"		1/4" / 5/8"		1/4" / 5/8"		
CODE	U.I.	00012WA70	00012WA71	00012WA72	00012WA73	00012WA74	00012WA75	
	U.E.	2701620		2701621		2701622		
HC VERSION Heating , Cooling	U.I.	WA 6.1 HC	WA 11.2 HC	WA 8.1 HC	WA 15.2 HC	WA 9.1 HC	WA 19.2 HC	
	U.E.	COH3522HE32		COH5022HE32		COH7022HE32		

ACCESSORIES	Initial	Codice	Compatibilità							
Initial start-up service	AVV	00013C	1	1	1	1	1	✓		
Two-phase power supply	BIF	00013E		1		1		$\checkmark$		
Solar water heating management	SOL	00013F	1	1	1	1	1	~		
Water filter	FIL	00013G	1	1	1	1	1	✓		
Rubber bases outdoor unit	BAS	6401062			1	1	1	✓		

Nominal efficiency under the following conditions, in accordance with UNI EN 14511: 2011

(1) Winter: outside air temperature 7°C DB/ 6°C WB; water temperature 30/35°C (2) Summer: outside air temperature 35°C DB / 24°C WB; water temperature 18/23°C NOTE: THE ABOVE PRODUCTS CONTAIN FLUORINATED GREENHOUSE GASES GOVERNED BY THE KYOTO PROTOCOL.