

# Aquami Big Mono heat pump

AQM220X3 <sup>[R14]</sup>



## Device features



Environmentally friendly refrigerant R32



Efficient heating



Energy efficiency class at 35°C A+++ <sup>(1)</sup>



Energy efficiency class at 55°C A++ <sup>(1)</sup>



Maximum COP 4,40



Operating range down to -25°C



Supply water temperature of 60°C



Integrated USB port for updates



Energy meter



Smart Grid functionality



Twin rotary compressor



Outdoor unit drip tray heater



Compressor crankcase heater



Easy installation and maintenance



Silent mode



Wired controller Wi-Fi module



Daily operation schedule



Configurable weekly schedules



Vacation mode



Menu in English



Multilanguage menu



Integrated temperature sensor



Weather operating modes (climate curve)



2 heating control zones



Dedicated application



Disinfection



DHW circulation pump operation schedules



Maximum leaving water temperature of 60°C (in DHW mode)



Prepared to create a cascade system



Modbus Protocol

# Specification outdoor unit

Model			AQM220X3 R14
EAN Code			5905567602245
Power supply		V-Hz, Ø	380-420-50, 3f
Heating (A7/W35)	Capacity	kW	22,00
	Rated input	kW	5,00
	COP		4,40
Heating (A7/W45)	Capacity	kW	22,00
	Rated input	kW	6,47
	COP		3,40
Heating (A7/W55)	Capacity	kW	22,00
	Rated input	kW	8,30
	COP		2,65
Cooling (A35/W18)	Capacity	kW	23,00
	Rated input	kW	5,00
	EER		4,60
Cooling (A35/W7)	Capacity	kW	21,00
	Rated input	kW	7,12
	EER		2,95
Seasonal energy efficiency LWT at 35°C	SCOP <sup>(1)</sup>		4,53
	Rated heat output	kW	22
	Seasonal energy efficiency ratio (η <sub>s</sub> )	%	178
	Annual energy consumption	kWh	10108
	Seasonal space heating energy efficiency class <sup>(1)</sup>		A+++
Seasonal energy efficiency LWT at 55°C	SCOP <sup>(1)</sup>		3,23
	Rated heat output	kW	22
	Seasonal energy efficiency ratio (η <sub>s</sub> )	%	126
	Annual energy consumption	kWh	14390
	Seasonal space heating energy efficiency class <sup>(1)</sup>		A++
SEER	LWT at 7°C		4,70
	LWT at 18°C		5,67
Minimum rated current of the overcurrent circuit breaker with breaker type		A	B20
Compressor	Type		Twin rotary inverter compressor DC
Fan	Type		Brushless DC motor / BLDC
	Quantity		2
Refrigerant	Type / GWP		R32 / 675
	Quantity	kg	5
	TCO <sub>2</sub> eq		3,375
Minimal wire pcs and dimension of cords*		pcs x mm <sup>2</sup>	5 x 4
Bracket spacing	(W1×W2×D)	mm	668 x 206 x 494
Sound pressure level		dB(A)	59,8
Sound power level		dB(A)	73
Net dimensions	(W×D×H)	mm	1129×528×1558
Gross dimensions	(W×D×H)	mm	1220×565×1735
Net weight / Gross weight		kg	177/206
Operating outdoor temperature	Cooling	°C	-5-46
	Heating	°C	-25-35
	DHW	°C	-25-43
Operation modes			Heating and cooling
Leaving water temperature	Space cooling	°C	5-25
	Space heating	°C	25-60
	DHW (tank)	°C	30-60
Electric heater	Power supply	V-Hz, Ø	-
	Number of heating stages / Power	pcs / kW	-
	Maximum operating current	A	-
Water circuit	Water connections	mm (inch)	41,91 mm (G5/4" BSP) external
	Pressure relief valve	MPa	0,3
	Condensate drain	mm	16
	Expansion tank	Total volume / Actual volume	l
		Maximum pressure / Initial pressure	MPa
	Heat exchanger	Type	PHE / plate heat exchanger
		Minimum flow	l/min
	Water pump head	m	12
	Water pump type		DC
	Total water volume	l	3,5

(1) Seasonal energy efficiency class measured under average climate conditions.

Notes: DHW - Domestic hot water, LWT - Leaving water temperature

The sound pressure level is measured 1 m in front of the unit and (1+H)/2m (where H is the height of the unit) above the floor in semi-anechoic room. During on-site operation sound pressure levels can be higher as a result of ambient noise. Sound pressure level and sound power level reflect the maximum value tested under three conditions specified respectively in notes A7W35, ΔT=5; A7W45, ΔT=5; A7W55 ΔT=8; relative humidity 85%. The figures specified above refer to the following standards: EN14511; EN14825; EN50564; EN12102; (EU) Np. 811/2013; (EU) No. 813/2013; Journal of Laws 2014 / C 207/02: 2014.

The residual current circuit breaker used to protect the electrical circuit of the appliance shall be selected in view of the electrical regulations in force, assuming that the rated residual current is not greater than I<sub>Δn</sub>: 30mA

\*The above values apply to supply cables with a maximum length of 20mb. If this value is exceeded, an electrical designer should be consulted.