Aquami Split heat pump

AQS160X3o [R14] / AQS160X13i [R14]

Device features

- Environmentally friendly refrigerant R32
- Efficient heating
- Energy efficiency class at 35°C A+++
- Energy efficiency class at 55°C A++
- Maximum COP 4,50
- Operating range down to -25°C
- Supply water temperature of 65°C
- Integrated USB port for updates
- Energy meter
- Smart Grid functionality
- Twin rotary compressor
- Integrated electric heater
- Outdoor unit drip tray heater
- Compressor crankcase heater
- Indoor unit drip tray
- Easy installation and maintenance
- Compact indoor split unit housing
- Maximum installation length up to 30m
- Silent mode
- Built-in 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 indoor unit

Model				**AQS160X13i R14**
EAN Code				5905567602139
Operation modes				Heating and cooling
Leaving water temperature	Surface cooling		°C	5~25
	Surface heating		°C	25~65
	DHW (tank)		°C	30~60
Power supply			V-Hz, Ø	220-240~50, 1f / 380-420~50, 3f
Rated input / Operating current			W / A	9095 / 13,5
Sound power level			dB(A)	43
Electric heater	Power supply		V-Hz, Ø	220-240~50, 1f / 380-420~50, 3f
	Number of heating stages / Power		pcs. / kW	3 / 9 (3 + 3 + 3)
	Maximum running current		A	13,3
Net dimensions	(W×D×H)		mm	420 × 270 × 790
Gross dimensions			mm	525 × 360 × 1050
Net weight / Gross weight			kg	39/45
Water circuit	Water connections		inch	R1" external
	Pressure relief valve		MPa	0,3
	Condensate drain		mm	Φ25
	Expansion tank	Total volume / Actual volume	l	8 / 4,8
		Maximum pressure / Initial pressure	MPa	0,3 / 0,1
	PHE / plate heat exchanger	Type		PHE / plate heat exchanger
		Minimum flow	l/min	10
	Water pump head		m	9
	Water pump type			DC
Refrigerant circuit	Liquid / Gas		mm	Φ9,52 (3/8") / Φ15,9 (5/8")
Minimal wire pcs and dimension of cords*			pcs × mm²	5 × 2,5
Control cables: indoor unit to outdoor unit			pcs × mm²	2 × 0,75 (shielded cable)

Specification outdoor unit

Model			**AQS160X3o R14**
EAN Code			5905567602108
Power supply			380-420~50, 3f
Heating (A7/W35)	Capacity	kW	16,00
	Rated input	kW	3,56
	COP		4,50
Heating (A7/W45)	Capacity	kW	16,00
	Rated input	kW	4,44
	COP		3,60
Heating (A7/W55)	Capacity	kW	16,00
	Rated input	kW	5,52
	COP		2,90
Cooling (A35/W18)	Capacity	kW	14,90
	Rated input	kW	4,38
	EER		3,40
Cooling (A35/W7)	Capacity	kW	14,00
	Rated input	kW	5,71
	EER		2,45
Seasonal energy efficiency LWT 35ºC	SCOP[1)]		4,62
	Rated heat output	kW	15,2
	Seasonal energy efficiency ratio (ηS)	%	181,7
	Annual energy consumption	kWh	6804
	Seasonal space heating energy efficiency class[1)]		A+++
Seasonal energy efficiency LWT 55ºC	SCOP[1)]		3,41
	Rated heat output	kW	13
	Seasonal energy efficiency ratio (ηS)	%	133,2
	Annual energy consumption	kWh	7896
	Seasonal space heating energy efficiency class [1)]		A++
SEER	LWT at 7ºC		4,67
	LWT at 8ºC		6,71
Minimum rated current of the overcurrent circuit breaker with breaker type		A	B16
Compressor	Type		Twin rotary inverter compressor DC
Fan	Type		Brushless DC motor / BLDC
	Quantity		1
Refrigerant	Type/ GWP		R32 / 675
	Charged (<15m)	kg	1,84
		TCO_2eq	1,24
Pipe connections	Liquid / Gas	mm	Φ9,52 (3/8") / Φ15,9 (5/8")
	Minimum installation length	m	2
	Maximum installation length	m	30
	Additional amount of refrigerant for over 15 linear meters	g/m	38
Maximum height difference	Outdoor unit above the indoor unit	m	20
	Outdoor unit below the indoor unit	m	20
Minimal wire pcs and dimension of cords*		pcs × mm²	5 × 2,5
Control cables: indoor unit to outdoor unit		pcs × mm²	2 × 0,75 (shielded cable)
Bracket spacing		(W×D)	656×456
Sound pressure level		dB(A)	55
Sound power level		dB(A)	68
Net dimensions	(W×D×H)	mm	1118×523×865
Gross dimensions	(W×D×H)	mm	1180×560×890
Net weight/Gross weight		kg	112/125,5
Operating outdoor temperature	Cooling	ºC	-5~43
	Heating	ºC	-25~35
	DHW	ºC	-25~43

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 1m 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 IΔn: 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.

Aquami All in Split heat pump

AQS160X3o [R14] / AQS160T240X13i [R14]

Device features

- Environmentally friendly refrigerant R32
- Efficient heating
- Energy efficiency class at 35°C A+++
- Energy efficiency class at 55°C A++
- Maximum COP 4,50
- Operating range down to -25°C
- Supply water temperature of 65°C
- Integrated USB port for updates
- Energy meter
- Smart Grid functionality
- Twin rotary compressor
- Integrated electric heater
- Outdoor unit drip tray heater
- Compressor crankcase heater
- Indoor unit drip tray
- Easy installation and maintenance
- Compact indoor split unit housing
- Maximum installation length up to 30m
- Silent mode
- Built-in 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)
- Integrated DHW tank
- Tank of stainless steel
- Built-in switching valve

Notes: DHW – Domestic hot water, LWT – Leaving water temperature
The sound pressure level is measured 1m 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.

Specification indoor unit

Model				**AQS160T240X13i R14**
EAN code				5905567602160
Operation modes				Heating and cooling
Leaving water temperature	Surface cooling		°C	5~25
	Surface heating		°C	25~65
	DHW (tank)		°C	30~60
Power supply			V-Hz, Ø	220-240~50, 1f / 380-420~50, 3f
Rated input / Operating current			W / A	9095 / 13,5
Sound power level			dB(A)	42
Electric heater	Power supply		V-Hz, Ø	220-240~50, 1f / 380-420~50, 3f
	Number of heating stages / Power		pcs. / kW	3 / 9 (3+3+3)
	Maximum operating current		A	13,3
Net dimensions		(W×D×H)	mm	600×600×1943
Gross dimensions		(W×D×H)	mm	653×653×2160
Net weight / Gross weight			kg	158/173
Water circuit	Water connections		inch	R1" external
	Pressure relief valve		MPa	0,3
	Condensate drain		mm	Φ25
	Expansion tank	Total volume / Actual volume	l	8 / 4,8
		Maximum pressure / Initial pressure	MPa	0,3 / 0,1
	PHE / plate heat exchanger	Type		PHE / plate heat exchanger
		Minimum flow	l/min	10
	Water pump head		m	9
	Water pump head			DC
	DHW tank	Tank material		Stainless steel 316L
		Housing material/colour		Polyurethane foam, steel / white
		Tank capacity	l	240
		Maximum water temperature (disinfection mode)	°C	70
		Insulation thickness	mm	45
		Maximum pressure	bar	10
Refrigerant circuit	Liquid / Gas		mm	Φ9,52 (3/8") / Φ15,9 (5/8")
Minimal wire pcs and dimension of cords*			pcs × mm²	5 × 2,5
Control cables: indoor unit to outdoor unit			pcs × mm²	2 × 0,75 (shielded cable)

Specification outdoor unit

Model			**AQS160X3o R14**
EAN Code			5905567602108
Power supply			380-420~50, 3f
Heating (A7/W35)	Capacity	kW	16,00
	Rated input	kW	3,56
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	Rated input	kW	4,44
	COP		3,60
Heating (A7/W55)	Capacity	kW	16,00
	Rated input	kW	5,52
	COP		2,90
Cooling (A35/W18)	Capacity	kW	14,90
	Rated input	kW	4,38
	EER		3,40
Cooling (A35/W7)	Capacity	kW	14,00
	Rated input	kW	5,71
	EER		2,45
Seasonal energy efficiency LWT 35ºC	SCOP(1)		4,62
	Rated heat output	kW	15,2
	Seasonal energy efficiency ratio (ηS)	%	181,7
	Annual energy consumption	kWh	6804
	Seasonal space heating energy efficiency class(1)		A+++
Seasonal energy efficiency LWT 55ºC	SCOP(1)		3,41
	Rated heat output	kW	13
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	Annual energy consumption	kWh	7896
	Seasonal space heating energy efficiency class (1)		A++
SEER	LWT at 7ºC		4,67
	LWT at 8ºC		6,71
Minimum rated current of the overcurrent circuit breaker with breaker type		A	B16
Compressor	Type		Twin rotary inverter compressor DC
Fan	Type		Brushless DC motor / BLDC
	Quantity		1
Refrigerant	Type/ GWP		R32 / 675
	Charged (<15m)	kg	1,84
		TCO_2eq	1,24
Pipe connections	Liquid / Gas	mm	Φ9,52 (3/8") / Φ15,9 (5/8")
	Minimum installation length	m	2
	Maximum installation length	m	30
	Additional amount of refrigerant for over 15 linear meters	g/m	38
Maximum height difference	Outdoor unit above the indoor unit	m	20
	Outdoor unit below the indoor unit	m	20
Minimal wire pcs and dimension of cords*		pcs × mm²	5 × 2,5
Control cables: indoor unit to outdoor unit		pcs × mm²	2 × 0,75 (shielded cable)
Bracket spacing		(W×D)	656×456
Sound pressure level		dB(A)	55
Sound power level			68
Net dimensions	(W×D×H)	mm	1118×523×865
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Net weight/Gross weight		kg	112/125,5
Operating outdoor temperature	Cooling	ºC	-5~43
	Heating	ºC	-25~35
	DHW	ºC	-25~43

1. Seasonal energy efficiency class measured under average climate conditions

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 IΔn: 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.