



































Aquami Split heat pump

AQS120X3o^[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 4,95 | 
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 | | | | | | |

Rotenso reserves the right to make changes to its products without prior notice.

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		(WxDxH)	mm	
Gross dimensions			420 × 270 × 790	
Net weight / Gross weight			mm	
			525 × 360 × 1050	
			kg	
			39/45	
Water circuit	Water connections		inch	
	Pressure relief valve		MPa	
	Condensate drain		mm	
	Expansion tank	Total volume / Actual volume		l
		Maximum pressure / Initial pressure		MPa
	PHE / plate heat exchanger	Type		PHE / plate heat exchanger
		Minimum flow		l/min
	Water pump head		m	
	Water pump type			9
	Refrigerant circuit		Liquid / Gas	mm
			Φ9,52 (3/8") / Φ15,9 (5/8")	
Minimal wire pcs and dimension of cords*		pcs × mm ²	5 × 2,5	
Control cables: indoor unit to outdoor unit		pcs × mm ²	2 × 0,75 (shielded cable)	

Specification outdoor unit

Model			AQS120X3o R14
EAN Code			5905567602085
Power supply			380-420-50, 3f
Heating (A7W35)	Capacity	kW	12,10
	Rated input	kW	2,44
	COP		4,95
Heating (A7W45)	Capacity	kW	12,30
	Rated input	kW	3,24
	COP		3,80
Heating (A7W55)	Capacity	kW	12,00
	Rated input	kW	3,87
	COP		3,10
Cooling (A35W18)	Capacity	kW	12,00
	Rated input	kW	3,00
	EER		4,00
Cooling (A35W7)	Capacity	kW	11,60
	Rated input	kW	4,22
	EER		2,75
Seasonal energy efficiency LWT 35°C	SCOP ⁽¹⁾		4,81
	Rated heat output	kW	12
	Seasonal energy efficiency ratio (η _S)	%	189,4
	Annual energy consumption	kWh	5152
Seasonal space heating energy efficiency class ⁽¹⁾			A+++
Seasonal energy efficiency LWT 55°C	SCOP ⁽¹⁾		3,45
	Rated heat output	kW	11,6
	Seasonal energy efficiency ratio (η _S)	%	135,1
	Annual energy consumption	kWh	6927
Seasonal space heating energy efficiency class ⁽¹⁾			A++
SEER	LWT at 7°C		4,86
	LWT at 8°C		7,04
Minimum rated current of the overcurrent circuit breaker with breaker type		A	B16
Compressor	Type		Twin rotary inverter compressor DC
	Type		Brushless DC motor / BLDC
Fan	Quantity		1
	Type/ GWP		R32 / 675
Refrigerant	Charged (<15m)		kg
			1,84
		TCO _{eq}	1,24
Pipe connections	Liquid / Gas		mm
	Minimum installation length		Φ9,52 (3/8") / Φ15,9 (5/8")
	Maximum installation length		2
Maximum height difference	Outdoor unit above the indoor unit		m
	Outdoor unit below the indoor unit		30
			38
			g/m
			38
Minimal wire pcs and dimension of cords*		pcs × mm ²	5 × 2,5
Control cables: indoor unit to outdoor unit		pcs × mm ²	2 × 0,75 (shielded cable)
Bracket spacing		(WxD)	656x456
Sound pressure level		dB(A)	50
Sound power level		dB(A)	64
Net dimensions		(WxDxH)	mm
Gross dimensions		(WxDxH)	mm
			1118x523x865
Net weight/Gross weight		kg	112/125,5
Operating outdoor temperature	Cooling	°C	-5-43
	Heating	°C	-25-35
	DHW	°C	-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 Split heat pump

AQS140X3o^[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 4,70 | 
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 | | | | | | |

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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		(WxDxH)	mm	
Gross dimensions			420 × 270 × 790	
Net weight / Gross weight			mm	
			525 × 360 × 1050	
			kg	
			39/45	
Water circuit	Water connections		inch	
	Pressure relief valve		MPa	
	Condensate drain		mm	
	Expansion tank	Total volume / Actual volume		l
		Maximum pressure / Initial pressure		MPa
	PHE / plate heat exchanger	Type		PHE / plate heat exchanger
		Minimum flow		l/min
	Water pump head		m	
	Water pump type			9
	Refrigerant circuit		Liquid / Gas	mm
			Φ9,52 (3/8") / Φ15,9 (5/8")	
Minimal wire pcs and dimension of cords*		pcs × mm ²	5 × 2,5	
Control cables: indoor unit to outdoor unit		pcs × mm ²	2 × 0,75 (shielded cable)	

Specification outdoor unit

Model			AQS140X3o R14
EAN Code			5905567602092
Power supply			380-420-50, 3f
Heating (A7W35)	Capacity	kW	14,50
	Rated input	kW	3,09
	COP		4,70
Heating (A7W45)	Capacity	kW	14,20
	Rated input	kW	3,89
	COP		3,65
Heating (A7W55)	Capacity	kW	13,80
	Rated input	kW	4,60
	COP		3,00
Cooling (A35W18)	Capacity	kW	13,50
	Rated input	kW	3,75
	EER		3,60
Cooling (A35W7)	Capacity	kW	12,70
	Rated input	kW	4,98
	EER		2,55
Seasonal energy efficiency LWT 35°C	SCOP ⁽¹⁾		4,72
	Rated heat output	kW	13,7
	Seasonal energy efficiency ratio (η _S)	%	185,7
	Annual energy consumption	kWh	6012
Seasonal space heating energy efficiency class ⁽¹⁾			A+++
Seasonal energy efficiency LWT 55°C	SCOP ⁽¹⁾		3,47
	Rated heat output	kW	12,1
	Seasonal energy efficiency ratio (η _S)	%	135,6
	Annual energy consumption	kWh	7202
Seasonal space heating energy efficiency class ⁽¹⁾			A++
SEER	LWT at 7°C		4,83
	LWT at 8°C		6,85
Minimum rated current of the overcurrent circuit breaker with breaker type		A	B16
Compressor	Type		Twin rotary inverter compressor DC
	Type		Brushless DC motor / BLDC
Fan	Quantity		1
	Type/ GWP		R32
Refrigerant	Charged (<15m)		kg
			1,84
		TCO _{eq}	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 × mm ²	5 × 2,5
Control cables: indoor unit to outdoor unit		pcs × mm ²	2 × 0,75 (shielded cable)
Bracket spacing		(WxD)	656x456
Sound pressure level		dB(A)	51
Sound power level		dB(A)	65
Net dimensions		(WxDxH)	mm
Gross dimensions		(WxDxH)	mm
Net weight/Gross weight		kg	112/125,5
Operating outdoor temperature	Cooling	°C	-5-43
	Heating	°C	-25-35
	DHW	°C	-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 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 | | | | | | |

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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		(WxDxH)	mm	
Gross dimensions			420 × 270 × 790	
Net weight / Gross weight			mm	
			525 × 360 × 1050	
			kg	
			39/45	
Water circuit	Water connections		inch	
	Pressure relief valve		MPa	
	Condensate drain		mm	
	Expansion tank	Total volume / Actual volume		l
		Maximum pressure / Initial pressure		MPa
	PHE / plate heat exchanger	Type		PHE / plate heat exchanger
		Minimum flow		l/min
	Water pump head		m	
	Water pump type			9
	Refrigerant circuit		Liquid / Gas	mm
			Φ9,52 (3/8") / Φ15,9 (5/8")	
Minimal wire pcs and dimension of cords*		pcs × mm ²	5 × 2,5	
Control cables: indoor unit to outdoor unit		pcs × mm ²	2 × 0,75 (shielded cable)	

Specification outdoor unit

Model			AQS160X3o R14
EAN Code			5905567602108
Power supply			380-420-50, 3f
Heating (A7W35)	Capacity	kW	16,00
	Rated input	kW	3,56
	COP		4,50
Heating (A7W45)	Capacity	kW	16,00
	Rated input	kW	4,44
	COP		3,60
Heating (A7W55)	Capacity	kW	16,00
	Rated input	kW	5,52
	COP		2,90
Cooling (A35W18)	Capacity	kW	14,90
	Rated input	kW	4,38
	EER		3,40
Cooling (A35W7)	Capacity	kW	14,00
	Rated input	kW	5,71
	EER		2,45
Seasonal energy efficiency LWT 35°C	SCOP ⁽¹⁾		4,62
	Rated heat output	kW	15,2
	Seasonal energy efficiency ratio (η _S)	%	181,7
	Annual energy consumption	kWh	6804
Seasonal space heating energy efficiency class ⁽¹⁾			A+++
Seasonal energy efficiency LWT 55°C	SCOP ⁽¹⁾		3,41
	Rated heat output	kW	13
	Seasonal energy efficiency ratio (η _S)	%	133,2
	Annual energy consumption	kWh	7896
Seasonal space heating energy efficiency class ⁽¹⁾			A++
SEER	LWT at 7°C		4,67
	LWT at 8°C		6,71
Minimum rated current of the overcurrent circuit breaker with breaker type		A	B16
Compressor	Type		Twin rotary inverter compressor DC
	Type		Brushless DC motor / BLDC
Fan	Quantity		1
	Type/ GWP		R32 / 675
Refrigerant	Charged (<15m)		kg
			1,84
		TCO _{eq}	1,24
Pipe connections	Liquid / Gas		mm
	Minimum installation length		m
	Maximum installation length		30
	Additional amount of refrigerant for over 15 linear meters		g/m
			38
Maximum height difference	Outdoor unit above the indoor unit		m
	Outdoor unit below the indoor unit		m
			20
			20
Minimal wire pcs and dimension of cords*		pcs × mm ²	5 × 2,5
Control cables: indoor unit to outdoor unit		pcs × mm ²	2 × 0,75 (shielded cable)
Bracket spacing		(WxD)	656x456
Sound pressure level		dB(A)	55
Sound power level		dB(A)	68
Net dimensions		(WxDxH)	mm
			1118x523x865
Gross dimensions		(WxDxH)	mm
			1180x560x890
Net weight/Gross weight		kg	112/125,5
Operating outdoor temperature	Cooling	°C	-5-43
	Heating	°C	-25-35
	DHW	°C	-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.