

# **Aquami Split heat pump** AQS140X30<sup>[R14]</sup> / AQS160X13i<sup>[R14]</sup>



### **Device** features

**1** 

Efficient

heating

Smart Grid

functionality

⊛ Г\_\_\_\_ 30m

Maximum

installation length

up to 30m

Integrated

temperature

sensor



Environmentally friendly refrigerant R32



Energy

meter



Compact indoor split unit housing



Multilanguage menu



Prepared to create

a cascade system



Modbus Protocol



Energy efficiency



Twin rotary

compressor

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Silent

mode

Weather operating

modes (climate curve)



۳ G

heater

 $\Delta_{a}^{\mu}$ 

Energy efficiency

class at 55°C

A++

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Built-in Wi-Fi module



2 heating control zones

) — O MON

COP

4,70

Maximum

COP 4,70

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Outdoor unit drip

tray heater



application

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Disinfection

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

Ŷ Integrated USB port for updates

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Easy installation and maintenance





DATASHEET

WIE

-25°C

Operating range down to -25°C

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Compressor

crankcase heater

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Configurable

weekly schedules



Supply water temperature of 65°C



Indoor unit drip tray

Vacation

mode

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### **ZOTENSO<sup>®</sup>**

## Specification indoor unit

Model				AQ\$160X13i 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			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 v	Net weight / Gross weight		kg	39/45
	Water connections		inch	R1" external
	Pressure relief valve		MPa	0,3
	Condensate drain		mm	Φ25
	Expansion tank	Total volume / Actual volume	I.	8 / 4,8
Water circuit		Maximum pressure / Initial pressure	MPa	0,3 / 0,1
Trater encore	PHE / plate heat Type			PHE / plate heat exchanger
	exchanger	Minimum flow	l/min	10
	Water pump head		m	9
	Water pump type			DC.
Refrigerant circuit	Refrigerant circuit Liquid / Gas			Φ9,52 (3/8") / Φ15,9 (5/8")
Minimal wire pcs an	Minimal wire pcs and dimension of cords* pcs × mm <sup>2</sup>			5×2,5
Control cables: indoor unit to outdoor unit pcs × mm <sup>2</sup>			pcs × mm²	$2 \times 0,75$ (shielded cable)

### Specification outdoor unit

Model			AQ5140X30 R14
EAN Code			5905567602092
Power supply			380-420-50, 3f
Heating (A7/W35)	Capacity	kW	14,50
	Rated input	kW	3,09
	COP		4,70
	Capacity	kW	14,20
Heating (A7/W45)	Rated input	kW	3,89
	COP		3,65
	Capacity	kW	13,80
Heating	Rated input	kW	4,60
(A7/W55)	COP		3.00
	Capacity	kW	13,50
Cooling		kW	
(A35/W18)	Rated input EER	KVV	3,75
			3.60
Cooling	Capacity	kW	12,70
(A35/W7)	Rated input	kW	4,98
	EER		2,55
	SCOP <sup>(1)</sup>		4,72
Seasonal energy	Rated heat output	kW	13,7
efficiency	Seasonal energy efficiency ratio (ηS)	96	185,7
LWT 35°C	Annual energy consumption	kWh	6012
	Seasonal space heating energy efficiency class <sup>(1)</sup>		A+++
	SCOP <sup>(1)</sup>		3,47
Seasonal energy	Rated heat output	kW	12,1
efficiency	Seasonal energy efficiency ratio (ηS)	96	135,6
LWT 55°C	Annual energy consumption	kWh	7202
	Seasonal space heating energy efficiency class (1)		A++
CEED	LWT at 7°C		4,83
SEER	LWT at 8°C		6,85
Minimum rated curr	rent of the overcurrent circuit breaker with breaker type	A	816
Compressor	Туре		Twin rotary inverter compressor DC
_	Туре		Brushless DC motor / BLDC
Fan	Quantity		1
	Type/ GWP		R32
Refrigerant	Charged (<15m)	kg	1.84
		TCO,eq	1,24
	Liquid / Gas	mm	Φ9,52 (3/8°) / Φ15,9 (5/8°)
	Minimum installation length	m	2
Pipe connections	Maximum installation length	m	30
	Additional amount of refrigerant for over 15 linear meters	g/m	38
Maximum height	Outdoor unit above the indoor unit	m	20
difference	Outdoor unit below the indoor unit	m	
		pcs × mm <sup>2</sup>	5×25
	Minimal wire pcs and dimension of cords* Control cables: indoor unit to outdoor unit		2 × 0,75 (shielded cable)
Bracket spacing		pcs × mm <sup>2</sup> (W×D)	556×456
Sound pressure level		dB(A)	51
Sound pressure level		dB(A)	65
	Vet dimensions (W×D×H)		
	Gross dimensions (W×D×H) (W×D×H)		1118×523×865
			1180×560×890
Net weight/Gross we		kg	112/125,5
Operating outdoor	Cooling	°C	-5-43
temperature	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 levels measured in 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; 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 20702: 2014. In the intervent drovit 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

# Aquami All in Split heat pump

AQS140X30<sup>[R14]</sup> / AQS160T240X13i<sup>[R14]</sup>



## **Device** features

**1** 

Efficient

heating

Smart Grid

functionality



Environmentally friendly refrigerant R32



Energy meter





Compact indoor split unit housing



Multilanguage menu



Integrated DHW tank

installation length up to 30m

Integrated



316L

Tank of stainless

steel

Built-in switching



 $\Delta_{c}^{s}$ 

Energy efficiency

class at 35°C

A+++

Twin rotary

compressor

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Silent

mode

valve



zones



Energy efficiency class at 55°C A++



Integrated electric heater



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COP

4,70

Maximum

COP 4,70

crankcase heater



Daily operation schedule



Dedicated application







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pump operation

schedules

water temperature of 60°C (in DHW mode)

Ŷ Integrated USB port for updates

**ZOTENS**  $\sigma^{\mathbb{R}}$ 

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▲ 65°C

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Supply water

temperature

of 65°C

Indoor unit

drip tray

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Easy installation and maintenance

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module D

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Built-in Wi-Fi

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Maximum leaving







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WIE

-25°C

Operating range

down to -25°C

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Compressor

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mode





\*\*\* AV Vacation





### **COTENS**σ<sup>®</sup>

# 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 / Operatin	Rated input / Operating current W / A			9095 / 13,5
Sound power level			dB(A)	42
	Power supply		V-Hz, Ø	220-240-50, 1f / 380-420-50, 3f
Electric heater	Number of heating stages / Power		pcs. / kW	3 / 9 (3+3+3)
	Maximum operating cu	urrent	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 connections		inch	R1" external
	Pressure relief valve	Pressure relief valve		0,3
	Condensate drain		mm	Φ25
	Expansion tank	Total volume / Actual volume	I	8/4,8
	скранзіонталік	Maximum pressure / Initial pressure	MPa	0,3 / 0,1
	PHE / plate heat	Туре		PHE / plate heat exchanger
	exchanger	Minimum flow	l/min	10
Water circuit	Water pump head		m	9
	Water pump head			DC
		Tank material		Stainless steel 316L
		Housing material/colour		Polyurethane foam, steel / white
		Tank capacity	I	240
	DHW tank	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 × n			pcs × mm <sup>2</sup>	5×2,5
Control cables: indoor unit to outdoor unit pcs × mm <sup>2</sup>			pcs × mm <sup>2</sup>	$2 \times 0.75$ (shielded cable)

### Specification outdoor unit

Model			AQ\$140X3o R14
EAN Code			5905567602092
Power supply			380-420-50, 3f
Tower supply	Capacity	kW	14,50
Heating (A7/W35)	Rated input	kW	3,09
	COP	KVV	4,70
		kW	4,70
Heating	Capacity Rated input	kW	3.89
(A7/W45)	COP	KVV	
			3.65
Heating	Capacity	kW	13,80
(A7/W55)	Rated input	kW	4,60
	COP		3,00
Cooling	Capacity	kW	13,50
(A35/W18)	Rated input	kW	3,75
	EER		3,60
Cooling	Capacity	kW	12,70
(A35/W7)	Rated input	kW	4,98
	EER		2,55
	SCOP <sup>(1)</sup>		4,72
Seasonal energy	Rated heat output	kW	13,7
efficiency	Seasonal energy efficiency ratio (ηS)	96	185,7
LWT 35°C	Annual energy consumption	kWh	6012
	Seasonal space heating energy efficiency class <sup>(1)</sup>		A+++
	SCOP <sup>(1)</sup>		3,47
Seasonal energy	Rated heat output	kW	12,1
efficiency	Seasonal energy efficiency ratio (ŋS)	96	135,6
LWT 55°C	Annual energy consumption	kWh	7202
	Seasonal space heating energy efficiency class (1)		A++
	LWT at 7°C		4.83
SEER	LWT at 8°C		6,85
Minimum rated curr	ent of the overcurrent circuit breaker with breaker type	A	816
Compressor	Туре		Twin rotary inverter compressor DC
	Туре		Brushless DC motor / BLDC
Fan	Quantity		1
	Type/ GWP		R32 / 675
Refrigerant		kg	1.84
-	Charged (<15m)	TCO2eq	1.24
	Liquid / Gas	mm	Φ9,52 (3/8") / Φ15,9 (5/8")
	Minimum installation length	m	2
Pipe connections	Maximum installation length	m	30
	Additional amount of refrigerant for over 15 linear meters	g/m	38
Maximum height	Outdoor unit above the indoor unit	m	20
difference	Outdoor unit below the indoor unit	m	20
	1	pcs × mm <sup>2</sup>	5×25
	Minimal wire pcs and dimension of cords* Control cables: indoor unit to outdoor unit		2 × 0.75 (shielded cable)
Bracket spacing		pcs × mm <sup>2</sup> (W×D)	2 ~ 0,73 gameted code; 655x455
Sound pressure level		dB(A)	51
Sound pressure level		2.20 V	65
Net dimensions	(W×D×H)	mm	1118×523×865
Gross dimensions	(W×D×H) (W×D×H)	mm	1180×560×690
	et weight/Gross weight		
INEL WEIGHTUGTUSS WE		kg	112/125,5
Operating outdoor	Cooling	°C	-5-43
temperature	Heating	°C	-25-35
	DHW	٥C	-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 Idn: 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.