

## Airmi Monoblock heat pump

AIMG100X1 [R14]

























## **Device** features



Environmentally friendly refrigerant R32



Efficient heating



Energy efficiency class at 35°C



Energy efficiency class at 55°C A++



Maximum COP 5,01



Operating range down to -25°C



Supply water temperature of 65°C



Smart Grid functionality



Twin rotary compressor



Integrated electric



Outdoor unit drip tray heater



Compressor crankcase heate



Easy installation and maintenance



Silent mode



WiFi module in wired controller



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



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



Prepared to create a cascade system



Modbus Protocol



## **Specification** outdoor unit

Model				AIMG100X1 R14
EAN Code				5905567602436
Power supply			V-Hz, Ø	220-240~50,1f
	Capacity		kW	10,20
Heating			kW	2,04
(A7/W35)	Rated input  COP		NTV	
				5,01
Heating	Capacity		kW	10,20
Heating (A7/W45)	Rated input		kW	2,79
(	COP			3,65
	Capacity		kW	9,60
Heating	Rated input		kW	3,22
(A7/W55)	COP			2,98
			1	
Cooling	Capacity		kW	10,10
(A35/W18)	Rated input		kW	2,42
	EER			4,14
	Capacity		kW	8,80
Cooling	Rated input		kW	2,97
(A35/W7)	EER			2,96
	SCOP (f)			4,86
Seasonal energy	Rated heat output		kW	9,2
efficiency LWT at 35°C	Seasonal energy efficiency ratio (ηS)		96	206
	Annual energy consumption		kWh	3617
	Seasonal space heating energy efficiency class (1)			A+++
	SCOP (1)			3,51
	Rated heat output		kW	7,70
Seasonal energy			96	139
efficiency LWT at 55°C	Seasonal energy efficiency ratio (ηS)			
	Annual energy consumption		kWh	4453
	Seasonal space heating energy efficiency class <sup>(1)</sup>			A++
LWT at 7°C			4,66	
LWT at 18°C			8,23	
Minimum rated curr	rent of the overcurrent circuit breaker w	th breaker type	A	832
Compressor		Туре		Twin rotary inverter compressor DC
			Brushless DC motor / BLDC	
Fan		Туре		
		Quantity		1
Type GWP			R32	
		GWP		675
Refrigerant			kg	1,5
		Quantity	TCO <sub>2</sub> eq	1,013
Minimal wire nos and	nd dimension of cords*			3×6
	nd dimension of cords*	ANG NO D)	pcs × mm²	3×6
Bracket spacing		(W1 × W2 × D)	pcs × mm² mm	640×239×448
		(W1 × W2 × D)	pcs × mm² mm dB(A)	640×239×448 46
Bracket spacing		(W1 × W2 × D)	pcs × mm² mm	640×239×448
Bracket spacing Sound pressure leve		(W1×W2×D) (W×D×H)	pcs × mm² mm dB(A)	640×239×448 46
Bracket spacing  Sound pressure level  Sound power level			pcs × mm² mm dB(A) dB(A)	640×239×448 46 60
Bracket spacing Sound pressure level Sound power level Net dimensions Gross dimensions	el	(W×D×H)	pcs × mm² mm dB(A) dB(A) mm mm	640×239×448 46 60 1135×488×803 1260×488×982
Bracket spacing Sound pressure level Sound power level Net dimensions Gross dimensions Net weight / Gross w	rel weight	(W×D×H)	pcs × mm² mm dB(A) dB(A) mm mm	640×239×448  46  60  1135×488×803  1260×488×982  99/114
Bracket spacing Sound pressure leve Sound power level Net dimensions Gross dimensions Net weight / Gross w Operating outdoor	weight Cooling / Heating	(W×D×H)	pcs × mm² mm dB(A) dB(A) mm kg	640×239×448  46  60  1135×488×803  1260×488×982  99/114  -5-43/-25-35
Bracket spacing Sound pressure leve Sound power level Net dimensions Gross dimensions Net weight / Gross w Operating outdoor temperature	rel weight	(W×D×H)	pcs × mm² mm dB(A) dB(A) mm mm	640×239×448  46  60  1135 × 488 × 803  1260 × 488 × 982  99 / 114  -5-43 / -25-35  -25-43
Bracket spacing Sound pressure leve Sound power level Net dimensions Gross dimensions Net weight / Gross w Operating outdoor	weight Cooling / Heating DHW	(W×D×H)	pcs x mm² mm dB(A) dB(A) mm mm kg °C °C	640×239×448  46  60  1135 × 488 × 803  1260 × 488 × 982  99 / 114  -5-43 / -25-35  -25-43  Heating and cooling
Bracket spacing Sound pressure leve Sound power level Net dimensions Gross dimensions Net weight / Gross w Operating outdoor temperature Operation modes	weight  Cooling / Heating  DHW  Space cooling	(W×D×H)	pcs x mm² mm dB(A) dB(A) mm mm kg °C °C	640×239×448  46  60  1135 × 488 × 803  1260 × 488 × 982  99 / 114  -5-43 / -25-35  -25-43  Heating and cooling  7-25
Bracket spacing Sound pressure level Sound power level Net dimensions Gross dimensions Net weight / Gross w Operating outdoor temperature Operation modes Leaving water	weight Cooling / Heating DHW	(W×D×H)	pcs x mm² mm dB(A) dB(A) mm mm kg °C °C	640×239×448  46  60  1135 × 488 × 803  1260 × 488 × 982  99 / 114  -5-43 / -25-35  -25-43  Heating and cooling
Bracket spacing Sound pressure leve Sound power level Net dimensions Gross dimensions Net weight / Gross w Operating outdoor temperature Operation modes	weight  Cooling / Heating  DHW  Space cooling	(W×D×H)	pcs x mm² mm dB(A) dB(A) mm mm kg °C °C	640×239×448  46  60  1135 × 488 × 803  1260 × 488 × 982  99 / 114  -5-43 / -25-35  -25-43  Heating and cooling  7-25
Bracket spacing Sound pressure level Sound power level Net dimensions Gross dimensions Net weight / Gross w Operating outdoor temperature Operation modes Leaving water	weight Cooling / Heating DHW Space cooling Space heating DHW (tank)	(W×D×H)	pcs x mm² mm dB(A) dB(A) mm kg °C °C °C	640×239×448  46  60  1135 × 488 × 803  1260 × 488 × 982  99 / 114  -5-43 / -25-35  -25-43  Heating and cooling  7-25  25-65
Bracket spacing Sound pressure leve Sound power level Net dimensions Gross dimensions Net weight / Gross w Operating outdoor temperature Operation modes Leaving water temperature	weight Cooling / Heating DHW  Space cooling Space heating DHW (tank) Power supply	(W×D×H)	pcs x mm² mm dB(A) dB(A) mm mm kg °C °C C V-Hz, Ø	640×239×448  46  60  1135 × 488 × 803  1260 × 488 × 982  99 / 114  -5-43 / -25-35  -25-43  Heating and cooling  7-25  25-65  25-60  220-240-50, 1f
Bracket spacing Sound pressure level Sound power level Net dimensions Gross dimensions Net weight / Gross w Operating outdoor temperature Operation modes Leaving water	weight Cooling / Heating DHW  Space cooling Space heating DHW (tank) Power supply Number of heating stages	(W×D×H)	pcs x mm²   mm   dB(A)   dB(A)   dB(A)   mm   kg   °C   °C   °C   °C   °C   °C   V-Hz, Ø   pcs	640×239×448  46  60  1135 × 488 × 803  11260 × 488 × 982  99 / 114  -5-43 / -25-35  -25-43  Heating and cooling  7-25  25-65  25-60  220-240-50, 1f
Bracket spacing Sound pressure leve Sound power level Net dimensions Gross dimensions Net weight / Gross w Operating outdoor temperature Operation modes Leaving water temperature	weight Cooling / Heating DHW  Space cooling Space heating DHW (tank) Power supply Number of heating stages Power	(W×D×H)	pcs x mm² mm dB(A) dB(A) mm kg °C °C °C C V-Hz, Ø pcs kW	640×239×448  46  60  1135×488×803  1260×488×982  99/114  -5-43/-25-35  -25-43  Heating and cooling  7-25  25-65  25-60  220-240-50, 1f  1  3
Bracket spacing Sound pressure leve Sound power level Net dimensions Gross dimensions Net weight / Gross w Operating outdoor temperature Operation modes Leaving water temperature	weight Cooling / Heating DHW  Space cooling Space heating DHW (tank) Power supply Number of heating stages Power Maximum operating current	(W×D×H)	pcs x mm²	640×239×448  46  60  1135 × 488 × 803  1260 × 488 × 982  99 / 114  5-94 3/ -25-35  -25-43  Heating and cooling  7-25  25-65  25-60  220-240-50, 1f  1  3  13,6
Bracket spacing Sound pressure leve Sound power level Net dimensions Gross dimensions Net weight / Gross w Operating outdoor temperature Operation modes Leaving water temperature	weight Cooling / Heating DHW  Space cooling Space heating DHW (tank) Power supply Number of heating stages Power	(W×D×H)	pcs x mm² mm dB(A) dB(A) mm kg °C °C °C C V-Hz, Ø pcs kW	640×239×448  46  60  1135×488×803  1260×488×982  99/114  -5-43/-25-35  -25-43  Heating and cooling  7-25  25-65  25-60  220-240-50, 1f  1  3
Bracket spacing Sound pressure leve Sound power level Net dimensions Gross dimensions Net weight / Gross w Operating outdoor temperature Operation modes Leaving water temperature	weight Cooling / Heating DHW  Space cooling Space heating DHW (tank) Power supply Number of heating stages Power Maximum operating current	(W×D×H)	pcs x mm²	640×239×448  46  60  1135 × 488 × 803  1260 × 488 × 982  99 / 114  5-94 3/ -25-35  -25-43  Heating and cooling  7-25  25-65  25-60  220-240-50, 1f  1  3  13,6
Bracket spacing Sound pressure leve Sound power level Net dimensions Gross dimensions Net weight / Gross w Operating outdoor temperature Operation modes Leaving water temperature	weight  Cooling / Heating  DHW  Space cooling  Space heating  DHW (tank)  Power supply  Number of heating stages  Power  Maximum operating current  Water connections	(W×D×H)	pcs x mm³ mm dB(A) dB(A) mm mm kg °C °C °C VHz, Q pcs kW A mm (inch)	640×239×448  46  60  1135 × 488 × 803  1260 × 488 × 982  99 / 114  -5-43 / -25-35  -25-43  Heating and cooling  7-25  25-65  22-65  220-240-50, 1f  1  3  13,6  Ф33 (1,30)
Bracket spacing Sound pressure leve Sound power level Net dimensions Gross dimensions Net weight / Gross w Operating outdoor temperature Operation modes Leaving water temperature	weight Cooling / Heating DHW  Space cooling Space heating DHW (tank) Power supply Number of heating stages Power Maximum operating current Water connections Pressure relief valve	(W×D×H)	pcs x mm² mm dB(A) dB(A) mm mm kg °C °C C V-Hz, Ø pcs kW A mm (nich)	640×239×448  46  60  1135 × 488 × 803  1260 × 488 × 982  99 / 114  -5-43 / -25-35  -25-43  Heating and cooling  7-25  25-65  25-60  220-240-50, 1f  1  3  13.6  Ф33 (1,30)  0,3
Bracket spacing Sound pressure leve Sound power level Net dimensions Gross dimensions Net weight / Gross w Operating outdoor temperature Operation modes Leaving water temperature	weight Cooling / Heating DHW  Space cooling Space heating DHW (tank) Power supply Number of heating stages Power Maximum operating current Water connections Pressure relief valve	(W x D x H) (W x D x H)	pcs x mm² mm dB(A) dB(A) mm mm kg °C °C °C V-Hz, Ø pcs kW A mm (inch) MPa mm	640×239×448  46  60  1135 × 488 × 803  11260 × 488 × 982  99 / 114  -5-43 / -25-35  -25-43  Heating and cooling  7-25  25-65  25-60  220-240-50, 1f  1  3  13.6  433 (1,30)  0.3  412,7  5
Bracket spacing Sound pressure leve Sound power level Net dimensions Gross dimensions Operating outdoor temperature Operation modes Leaving water temperature Electric heater	weight Cooling / Heating DHW  Space cooling Space heating DHW (tank) Power supply Number of heating stages Power Maximum operating current Water connections Pressure relief valve	(W x D x H) (W x D x H)  Total volume  Actual volume	pcs x mm² mm dB(A) dB(A) mm mm kg °C °C °C C V-Hz, Ø pcs kW A mm (inch) MPa mm I	640×239×448  46  60  1135×488×803  1260×488×982  99/114  -5-43/-25-35  -25-43  Heating and cooling  7-25  25-65  25-60  220-240-50, 1f  1  3  13,6  033 (1,30)  0,3  012,7  5  2
Bracket spacing Sound pressure leve Sound power level Net dimensions Gross dimensions Net weight / Gross w Operating outdoor temperature Operation modes Leaving water temperature	weight Cooling / Heating DHW  Space cooling Space heating DHW (tank) Power supply Number of heating stages Power Waximum operating current Water connections Pressure relief valve Condensate drain	(W x D x H) (W x D x H)  Total volume Actual volume Maximum pressure	pcs x mm² mm dB(A) dB(A) mm mm kg °C °C °C °C VHz, Ø pcs kW A mm (inch) MPa mm I	640×239×448  46  60  1135 × 488 × 803  1260 × 488 × 982  99 / 114  -5-43 / -25-35  -25-43  Heating and cooling  7-25  25-65  25-60  220-240-50, 1f  1 3 3 13,6  Ф33 (1,30) 0,3  Ф12,7  5 2 0,5
Bracket spacing Sound pressure leve Sound power level Net dimensions Gross dimensions Operating outdoor temperature Operation modes Leaving water temperature Electric heater	weight Cooling / Heating DHW  Space cooling Space heating DHW (tank) Power supply Number of heating stages Power Waximum operating current Water connections Pressure relief valve Condensate drain	(W x D x H) (W x D x H)  Total volume  Actual volume	pcs x mm² mm dB(A) dB(A) mm mm kg °C °C °C C V-Hz, Ø pcs kW A mm (inch) MPa mm I	640×239×448  46 60 1135 × 488 × 803 11260 × 488 × 982 99 / 114 -5-43 / -25-35 -25-43 Heating and cooling 7-25 25-65 25-66 25-60 220-240-50, 1f 1 3 3 13,6 Φ33 (1,30) 0,3 Φ12,7 5 2 0,5 0,15
Bracket spacing Sound pressure leve Sound power level Net dimensions Gross dimensions Operating outdoor temperature Operation modes Leaving water temperature Electric heater	weight Cooling / Heating DHW  Space cooling Space heating DHW (tank) Power supply Number of heating stages Power Maximum operating current Water connections Pressure relief valve Condensate drain  Expansion tank	(W x D x H) (W x D x H)  Total volume Actual volume Maximum pressure	pcs x mm² mm dB(A) dB(A) mm mm kg °C °C °C °C VHz, Ø pcs kW A mm (inch) MPa mm I	640×239×448  46  60  1135 × 488 × 803  1260 × 488 × 982  99 / 114  -5-43 / -25-35  -25-43  Heating and cooling  7-25  25-65  25-60  220-240-50, 1f  1 3 3 13,6  Ф33 (1,30) 0,3  Ф12,7  5 2 0,5
Bracket spacing Sound pressure leve Sound power level Net dimensions Gross dimensions Operating outdoor temperature Operation modes Leaving water temperature Electric heater	weight Cooling / Heating DHW  Space cooling Space heating DHW (tank) Power supply Number of heating stages Power Waximum operating current Water connections Pressure relief valve Condensate drain	(W x D x H) (W x D x H)  Total volume Actual volume Maximum pressure Initial pressure	pcs x mm² mm dB(A) dB(A) mm mm kg °C °C °C °C VHz, Ø pcs kW A mm (inch) MPa mm I	640×239×448  46 60 1135 × 488 × 803 11260 × 488 × 982 99 / 114 - 5-43 / -25-35 - 25-43 Heating and cooling 7-25 25-65 25-66 25-60 220-240-50, 1f 1 3 3 13,6 Φ33 (1,30) 0,3 Φ12,7 5 2 2 0,5 0,15
Bracket spacing Sound pressure leve Sound power level Net dimensions Gross dimensions Operating outdoor temperature Operation modes Leaving water temperature Electric heater	weight Cooling / Heating DHW  Space cooling Space heating DHW (tank) Power supply Number of heating stages Power Maximum operating current Water connections Pressure relief valve Condensate drain  Expansion tank Heat exchanger	(W x D x H) (W x D x H)  Total volume Actual volume Maximum pressure Initial pressure	pcs x mm² mm dB(A) dB(A) mm mm kg °C °C °C C V-Hz, Ø pcs kW A mm (inch) MPa mm I I I MPa MPa MPa Umin	640×239×448  46 60 1135×488×803 11260×488×982 99/114 -5-43/-25-35 -25-43 Heating and cooling 7-25 25-65 25-65 25-60 220-240-50, 1f 1 3 3 13,6 433 (1,30) 0,3 4012,7 5 2 0,5 0,5 0,15 PHE / plate heat exchanger
Bracket spacing Sound pressure leve Sound power level Net dimensions Gross dimensions Operating outdoor temperature Operation modes Leaving water temperature Electric heater	weight Cooling / Heating DHW  Space cooling Space heating DHW (tank) Power supply Number of heating stages Power Maximum operating current Water connections Pressure relief valve Condensate drain  Expansion tank Heat exchanger Water pump head	(W x D x H) (W x D x H)  Total volume Actual volume Maximum pressure Initial pressure	pcs x mm³ mm dB(A) dB(A) mm mm kg °C °C °C V-Hz, Ø pcs kW A mm (inch) MPa mm I MPa	640×239×448  46  60  1135 × 488 × 803  11260 × 488 × 802  99 / 114  -5-43 / -25-35  -25-43  Heating and cooling  7 -25  25-65  25-60  220-240-50, 1f  1  3  13,6  433 (1,30)  0,3  412,7  5  2  0,5  0,15  PHE / plate heat exchanger  10
Bracket spacing Sound pressure leve Sound power level Net dimensions Gross dimensions Operating outdoor temperature Operation modes Leaving water temperature Electric heater	weight  Cooling / Heating DHW  Space cooling Space heating DHW (tank) Power supply Number of heating stages Power Maximum operating current Water connections Pressure relief valve Condensate drain  Expansion tank  Heat exchanger Water pump head Water pump head Water pump type	(W x D x H) (W x D x H)  Total volume Actual volume Maximum pressure Initial pressure	pcs x mm² mm dB(A) dB(A) mm mm kg °C °C °C °C °C V-Hz, Ø pcs kW A mm(nch) MPa mm I I MPa MPa MPa	640×239×448  46 60 1135 × 488 × 803 11260 × 488 × 802 99/114
Bracket spacing Sound pressure leve Sound power level Net dimensions Gross dimensions Operating outdoor temperature Operation modes Leaving water temperature Electric heater	weight Cooling / Heating DHW  Space cooling Space heating DHW (tank) Power supply Number of heating stages Power Maximum operating current Water connections Pressure relief valve Condensate drain  Expansion tank Heat exchanger Water pump head	(W x D x H) (W x D x H)  Total volume Actual volume Maximum pressure Initial pressure	pcs x mm² mm dB(A) dB(A) mm mm kg °C °C °C C V-Hz, Ø pcs kW A mm (inch) MPa mm I I I MPa MPa MPa Umin	640×239×448  46  60  1135×488×803  1260×488×982  99./114  -5-43/-25-35  -25-43  Heating and cooling  7-25  25-65  25-60  220-240-50, 1f  1  3  13.6  4033 (1,30)  0.3  4012,7  5  2  0.5  0.15  PHE / plate heat exchanger  10  9

<sup>(1)</sup> Seasonal energy efficiency class measured under average climate conditions.

(T) Seasonal energy enlicative Custom Readured United average united Exhibitions.

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.