

AIM11 EMX/3PH data sheet



Powerful, for large residential or commercial spaces

The 11-kW monobloc unit from the iM range is able to heat and cool extensive residential and commercial spaces. The unit is available in the single-phase and three-phase versions. It can be connected to the EMIX or to EMIX TANK to produce domestic hot water directly from the thermodynamic source, using heat recovery during air-conditioning mode in the summer.



Data based on the EN 14511-3:2013 standard

Heating

LWT [°C]	Outdoor air temperature - Dry Bulb (Wet Bulb) - °C									
	-7 (-8)		-2 (-3)		2 (1)		7 (6)		12 (11)	
	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP	Qh [kW]	COP
35	7.40	2.62	7.39	2.89	8.04	3.34	10.40	4.09	11.46	4.62
45	6.90	2.33	7.30	2.48	7.70	2.79	9.80	3.28	10.80	3.06
55	6.20	1.67	6.64	1.89	6.75	2.10	8.30	2.36	9.53	2.61

LWT: Leaving water temperature
Qh: Heat capacity
COP: Coefficient of performance

Application data
Water inlet/outlet temperature difference = 5 °C, 8 °C for
LWT = 55 °C

Cooling

LWT [°C]	Inlet outdoor air temperature - °C	
	35	
	Qc [kW]	EER
7	6.30	2.29
18	7.70	3.53

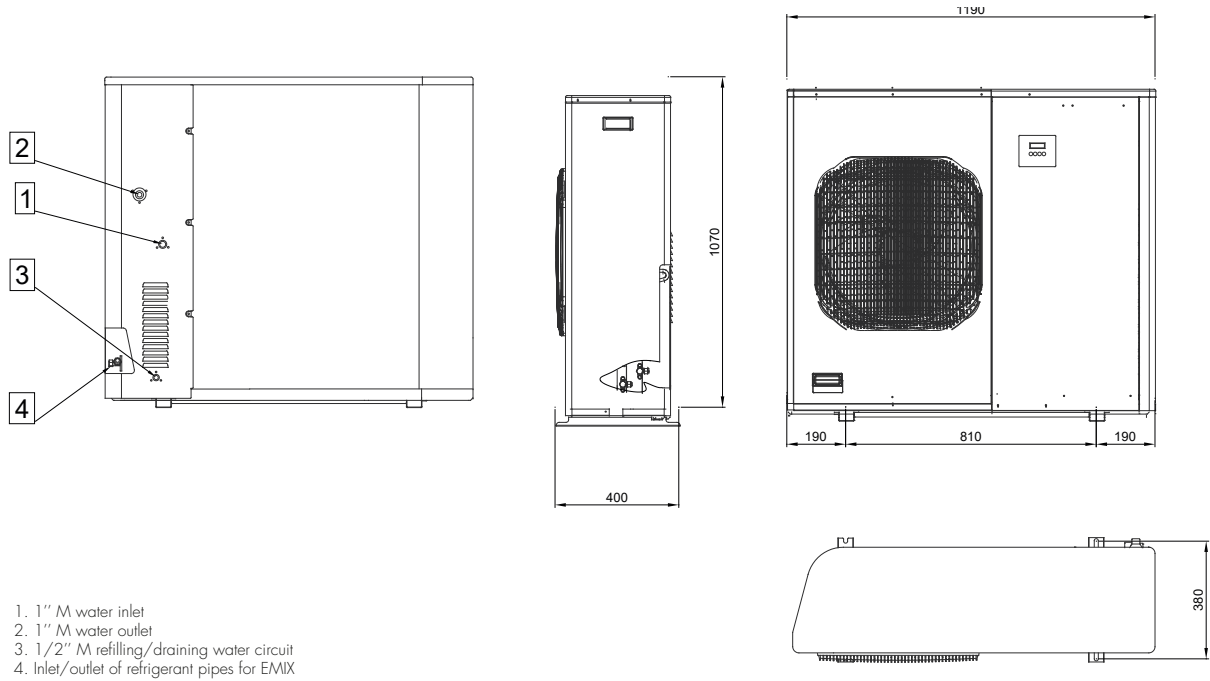
LWT: Leaving water temperature
Qc: Cooling capacity
EER: Energy efficiency ratio

Application data
Water inlet/outlet temperature difference = 5 °C

OUTDOOR UNIT				AIM 1 1EMX AIM 1 1EMX3PH		
Matchable units for Domestic Hot Water (DWH) production				EMIX TANK V2 (200-300 liters)		
				EMIX V1 + External Tank		
				External Tank + 3-way valve		
				Cooling	Heating	
Performance according to EN 14511	Air +35°C - Water 23/18°C Air + 7°C - Water 30/35°C	Nominal-max. Cooling/Heating capacity	kW	7.70-9.00	10.40-12.50	
		Nominal electric power input	kW _{el}	2.18	2.54	
		Nominal EER/COP		3.53	4.00	
	Air +35°C - Water 12/7°C Air - 7°C - Water 30/35 °C	Nominal-max. Cooling/Heating capacity	kW	6.30-7.20	7.70	
		Nominal electric power input	kW _{el}	2.65	2.18	
		Nominal EER/COP		2.38	3.53	
Performance according to ERP Ecodesign EN 14825	LOW TEMPERATURE AVERAGE season	Nominal Heating capacity	kW	10.00		
		Seasonal energy efficiency η _s	%	156		
		SCOP		3.97		
	MEDIUM TEMPERATURE AVERAGE season	Energy efficiency class		A++		
		Nominal Heating capacity	kW	8.00		
		Seasonal energy efficiency η _s	%	113		
DHW Performance according to EN 16147	With 300L tank and diverting valve	SCOP		2.9		
		Energy efficiency class		A+		
		Load profile		XL		
		Energy efficiency class		A		
	With Emix Tank 300 V2	DHW COP		2.14		
		ERP efficiency	%	89		
Unit operation data		Heating-up time from 10°C to 47°C	h:m	2:40		
		Load profile		XL		
		Energy efficiency class		A		
		DHW COP		2.55		
		ERP efficiency	%	106		
		Heating-up time from 10°C to 48°C	h:m	2:25		
Components and dimensions		Maximum outlet water temperature	°C	Up to 58		
		Outdoor temperature range (heating)	°C	-20 / +35		
		Outdoor temperature range (cooling)	°C	+10 / +47		
		Nominal water flow rate	m ³ /h	at 35 °C	1.78	
				at 45 °C	1.68	
				at 55 °C	0.89	
		Minimum efficient water volume of the system	l	80		
		Power supply (Voltage/Phases/Frequency)	V/Ph/Hz	230/1+T /50-60 - 400/3+N+T/50		
		Maximum electric consumption	kW/A	4.2/19.1 (1ph) - 4.2/8.0 (3ph)		
		Fuse		25 A (1ph) / 30 A (3ph)		
		Sound pressure	dB(A)	46		
Expansion vessel		l	4			
Maximum pump pressure		m _{H2O}	7.5 (see H/Q diagrams)			
Water connections		inch (")	1"			
Refrigerant pipes to eMIX/eMIX TANK	Safety valve	bar	3			
	Weight	kg	90			
	Dimensions H/W/D	mm	1070/1190/400			
	Compressor type		Twin Rotary			
	Diameters (gas/liquid)	inch (")	3/8"			
Refrigerant	Maximum length	m	10			
	Minimum length	m	5			
	Max height difference IU-OU	m	10			
Refrigerant	Type and GWP		R410A / 2088 kg CO ₂ eq.			
	Standard charge		2.50 kg / 5.22 Tons CO ₂ eq.			

The equipment described in this catalogue contains HFC-410A-type fluorinated greenhouse gases. The installation of these products must be carried out by qualified operators in accordance with the European standards 303/2008 and 517/2014. PRELIMINARY data declared in accordance with REGULATION (EU) No 811/2013 of 18 February 2013 with regard to the energy labelling of space heaters, combination heaters, packages of space heater, temperature control and solar device and packages of combination heater, temperature control and solar devices, packages of combination heater, temperature control and solar devices, and with COMMISSION REGULATION (EU) No 813/2013 of 2 August 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for space heaters and combination heaters. Argoclima reserves the right to amend the data presented in this catalogue at any time and without notice.

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Characteristic curve of the pump and load losses in the unit

