



EWMIG

Heat pump



Inverter

Class A++

1+ i



AIR-WATER CHILLERS | AXIAL
1 SCROLL + 1 SCROLL DC INVERTER

Modulating equipment. Minimal amount of water in the circuit

Reversible monobloc water chillers and heat pumps with air condensation and axial fans. Series with scroll compressor + 1 scroll DC Inverter and refrigerant gas R410A.

MAIN CHARACTERISTICS

- Cooling capacities: 34.3 to 58.3 kW
- Heating capacities: 39.9 to 68.9 kW
- 1 hermetic rotary compressor scroll speed
- 1 hermetic rotary compressor scroll DC Inverter thermal protection and crankcase heater
- Water Side Exchanger: Stainless Steel Plates thermally insulated, with anti-frost resistance and differential pressure switch for water flow
- Air-side heat exchanger: finned coil with copper tubes and aluminium fins, with protective grilles
- Fan: axial type electric fans with external rotor and internal thermal protection, protection grilles and proportional electronic device for continuous regulation of the fan rotation speed (condensation control)
- Control: microprocessed electronics with Adaptive Function Plus logic
- Structure: galvanised and painted sheet steel

In addition, the unit includes:

- Interior air temperature probe
- High and low pressure display of the refrigeration circuit
- Electronic expansion valve
- Master/Slave management up to 4 units in parallel
- Clock card

ADVANTAGES

- Operation up to -15°C outside air temperature
- Temperature of produced water may be up to 60°C
- Plug&Play unit with integrated hydraulic module
- Option EC fans and circulation pump Inverter
- Versatile for 2 pipe + DHW installations (with option RC100)
- Integrated MASTER/SLAVE management

VERSIONS

- High Efficiency

MODELS

- Heat pump unit

PUMP EQUIPMENT

Pumping unit equipped with single or double electric pump; in the latter case, one of them is in stand-by with automatic operation; it includes expansion vessel, air purge valve, safety valve and manometer on the water side. The electric pumps are available in low or high pressure versions and with Inverter drive

TANK & PUMP EQUIPMENT

Pumping unit with buffer tank and single or double electric pump, with one in stand-by with automatic drive, expansion vessel, air purge valves, safety valve and manometer on the water side. The electric pumps are available in low or high pressure versions and with Inverter drive

REGULATION

Integrated control:
MINI PGD



Remote control accessory:
PGD



See regulation and control on page 107

AVAILABLE OPTIONS

FACTORY-ASSEMBLED ACCESSORIES

- Pre-painted copper/aluminium coils, with hydrophilic treatment or copper/copper
- Desuperheater
- 100% heat recovery
- 3-way diverter valve for hot water production health, managed by the control
- Condensation control -15°C with fans with EC motor
- Base anti-freeze resistance
- Anti-freeze heater storage tank and electric pumps
- Forced Download. Partialization or shutdown of compressors to limit power and current consumption (digital input)
- Refrigerant leak detector
- Double setpoint by digital enabling
- Variable setpoint via analogue signal 4-20 mA
- Measurement of energy parameters
- Silenced equipment
- High and low pressure gauges of the refrigeration circuit

ACCESSORIES SUPPLIED SEPARATELY

- 3-way valve for the production of domestic hot water, managed by the control
- Interior air temperature probe managed by remote control, as an alternative to the standard built-in external air probe
- Supporting electric heater for managed heat pump by regulation
- Anti-vibration rubber supports
- Water filter
- Thermostat with display
- Remote keyboard with display
- Serial interfaces for communication with other devices
- RS485/USB series converter
- Hitecsa supervising systems for remote monitoring and management of the unit

SERIES EWMIG

MODEL		236	245	250	260	
(2)	Heating capacity min./nom./max.	kW	8.9 / 39.9/41.2	10.4/50.5/52.3	13/56.5/58.2	14.1/68.9/71.3
(2)	Nom. power consumption	kW	12.4	15.3	17.5	21.5
(2)	C.O.P. nom.		3.22	3.3	3.23	3.2
(3)	Heating capacity min./nom./max.	kW	9.7/39.3/40.5	12/51.3/53	13.9/54.7/56.4	16.3/70.3/72.6
(3)	Nom. power consumption	kW	10.4	13.3	14.1	18.3
(3)	C.O.P. nom.		3.77	3.85	3.89	3.84
(4)	Heating capacity min./nom./max.	kW	8.3/28.6/29.2	10.9/38.6/39.4	11.4/39/39.7	14.9/53/54.1
(4)	Nom. power consumption	kW	11.7	15.1	14.9	20.7
(4)	C.O.P. nom.		2.45	2.56	2.61	2.56
(1)	Cooling capacity min./nom./max.	kW	11/34.3/35.2	14.7/45.7/46.9	16/50/51.3	18.2/58.3/59.9
(1)	E.E.R. nom.		2.56	2.96	2.96	2.71
SEASONAL COOLING PERFORMANCE						
(Δ)	P _{designc} (EN 14825)	kW	34.3	45.7	50	58.3
(Δ)	SEER (EN 14825)		4.41	4.36	4.31	4.22
(□)	η _{s,c}	%	173	171	169	166
SEASONAL HEATING PERFORMANCE						
(▲)	P _{designh} (EN 14825)	kW	33	44	45	60
(▲)	SCOP (EN 14825)		4.23	4.06	4.36	4.24
(■)	η _s	%	166	159	171	167
(■)	Energy class		A++	A++	A++	A++
SOUND LEVEL						
(5)	Sound pressure	dB(A)	54	56	56	57
(5)	Silenced equipment sound pressure	dB(A)	51	53	53	54
OTHER DETAILS						
	Scroll inverter compressor	n.	1+i	1+i	1+i	1+i
	Circuits	n.	1	1	1	1
	Buffer tank capacity (TANK & PUMP)	l	80	150	150	150
(1)	Nominal working pressure base pump	kPa	129	101	114	111
	Electric power supply	V-ph-Hz	400-3+N-50	400-3+N-50	400-3+N-50	400-3+N-50
DIMENSIONS AND WEIGHTS						
	L - Length	mm	1,660	2,660	2,660	2,660
	H - Height	mm	1,570	1,570	1,570	1,570
	D - Depth	mm	1,000	1,000	1,000	1,000
(6)	Weight	kg	507	717	732	760

(1) Air: 35 °C B.S. - Water: 12/7 °C.

(2) Air: 7 °C B.S. - 6 °C B.H. - Water: 40/45 °C.

(3) Air: 7 °C B.S. - 6 °C B.H. - Water: 30/35 °C.

(4) Air: -7 °C B.S. - Water: 30/35 °C.

(5) In open field (Q = 2) at 5 m from the unit.

(6) Weight referred to the most complete equipment.

In accordance with EN 14511:2013.

(Δ) Low temperature application (7 °C).

(□) Seasonal energy efficiency: low temperature cooling (Regulation (EU) 2016/2281).

(▲) In medium climatic conditions, low temperature application (35 °C).

(■) Seasonal energy efficiency: low-temperature heating in a medium climate (EU Regulations No. 811/213 and No. 813/2013).

