



Idra RWS

**Water cooled chillers and heat pumps
Motoevaporating units
Capacities from 5 to 17 kW**

The IDRA – RWS series is a product that has been designed for the climate control of small areas such as houses, offices, shops and bars. The carefully manufactured product uses a water-type condensation process through a brazed plate heat exchanger thereby creating the conditions for the construction of compact units that are efficient and extremely quiet compared with radial and axial fans ones.

The available versions make it possible to select the model and the solution best adapted for the type of system served.



> Versions

- F** cooling only version available in 6 different sizes.
- H** heat pump version with cycle inversion on refrigerant circuit available in 6 different sizes.
- H** heat pump version with cycle inversion on hydraulic circuit available in 6 different sizes.
- ME** motoevaporating unit available in 6 different sizes.

> Accessories

- Evaporator electric heater.**
- Remote control.**
- Antivibration mounts**
- Refrigerant pressure gauges.**
- Pressure switch valve (ME excluded).**





>Main technical data

F-ME versions		5	7	9m	9	14	17
Cooling capacity ¹	kW	5,6	7,4	9,3	9,3	14,0	17,6
Input power ¹	kW	1,8	2,3	2,2	2,2	3,3	4,0
Power supply		230V - 1 - 50 Hz			400V - 3 - 50 Hz		
Nominal input current	A	5,5	7,0	6,7	3,7	5,5	6,7
Compressors / Circuits	n°	Hermetic 1/1		Scroll 1/1			
Evaporator / number		Plate / 1					
Liquid flow rate	m ³ /h	1,0	1,3	1,6	1,6	2,4	3,0
Pressure drop	kPa	10	10	10	10	40	32
Condenser / number		Plate / 1 (ME version excluded)					
Liquid flow rate	m ³ /h	1,3	1,7	2,0	2,0	3,0	3,7
Pressure drop	kPa	17	17	15	15	61	48
Sound pressure	dB(A)	49	49	51	51	52	52
Total maximum current	A	22,0	17,8	24	9,7	12,5	14,8
Starting current	A	55	91	85	45	67	76
Hydraulic connections		1"	1"	1"	1"	1"	1"

cooling

heating

- ¹ Inlet/outlet temp. 30/35 °C, evap. inlet/outlet 12/7 °C.
For ME version: cond. temp. 40 °C, inlet/outlet temp. 12/7 °C.
 Sound pressure at 1 m in free field.

H-HW Versions		5	7	9m	9	14	17
Cooling capacity ¹	kW	5,6	7,4	9,3	9,3	14,0	17,6
Input power ¹	kW	1,8	2,3	2,2	2,2	3,3	4,0
Heating capacity ²	kW	7,5	9,9	12,1	12,1	18,1	22,8
Power supply		230V - 1 - 50 Hz			400V - 3 50 Hz		
Nominal input current	A	5,5	7,0	6,7	3,7	5,5	6,7
Compressors / Circuits	n°	Hermetic 1/1		Scroll 1/1			
Evaporator / number		Plate / 1					
Liquid flow rate	m ³ /h	1,0	1,3	1,6	1,6	2,4	3,0
Pressure drop	kPa	10	10	10	10	40	32
Condenser / number		Plate / 1 (ME version excluded)					
Liquid flow rate	m ³ /h	1,3	1,7	2,0	2,0	3,0	3,7
Pressure drop	kPa	17	17	15	15	61	48
Sound pressure	dB(A)	49	49	51	51	52	52
Total maximum current	A	22,0	17,8	24	9,7	12,5	14,8
Starting current	A	55	91	85	45	67	76
Hydraulic connections		1"	1"	1"	1"	1"	1"

cooling

heating

- ¹ Inlet/outlet temp.30/35 °C, evap inlet/outlet12/7 °C.
² Inlet/outlet temp.40/45 °C, evap inlet/outlet 15/10 °C.
 Sound pressure at 1 m in free field.

> Characteristics

Compressors: reciprocating hermetic compressors for sizes 5 and 7. Hermetic scroll versions complete with internal thermal protection for all the other sizes. Direct start up. The compressors are housed in a special soundproof compartment coated with open cell polyurethane.

Evaporators: of the brazed plate stainless steel heat exchanger type with anti-condensate closed-cell polyurethane insulation. A differential pressure switch is installed on all the units to protect the exchanger.

Condensers (ME version excluded): stainless steel plate type. In the HW version, a differential pressure switch is installed to protect the exchanger.

Control and safety devices: microprocessor type including the control of the cooling capacity based on the monitoring of the water back from the system, setting of the operating parameters, display of the evaporator inlet and outlet temperature, display of the alarms, setting of the compressor protection timing functions and alarm reset, automatic restart after power failure.

Electrical panel: made in a weatherproof special compartment, it includes: power supply board, automatic general switch, automatic fan and secondary circuit switch, compressor contactor.

Cooling circuit all the cooling circuit components are welded. It includes: drier-filter, thermostatic expansion valve, high pressure switch with manual reset, low pressure switch with automatic reset, discharge and suction shut-off valves (only ME version).

Structure: Base and structural part made of high-thickness galvanized steel sheet epoxy painted, panels made of aluminium/magnese alloy. Stainless steel bolts and screws.



Single frame for all the sizes

Compact unit with water condensation

Very quiet operation



> Sizes and weights

			5	7	9m	9	14	17
Length	L	mm	423	423	423	423	423	423
Width	W	mm	408	408	408	408	408	408
Height	H	mm	866	866	866	866	866	866
Weight		kg	66	71	81	81	108	124



> Accessories compatibility

	5	7	9m	9	14	17
Main switch	●	●	●	●	●	●
Differential pressure switch	●	●	●	●	●	●
Microprocessor	●	●	●	●	●	●
On/off free contact	●	●	●	●	●	●
General alarm free contact	●	●	●	●	●	●
Antivibration mounts	○	○	○	○	○	○
Evaporator electric heater	○	○	○	○	○	○
Refrigerant pressure gauges	○	○	○	○	○	○
Pressure switch valve (ME off)	○	○	○	○	○	○
Remote control	○	○	○	○	○	○

● Standard, ○ Optional, – Not available.