

Egea RWV

Water cooled chillers and motoevaporating units.
Capacities from 111 to 441 kW

THE EGEA - RWV series is a product designed for the climate control of large environments such as hotels, exhibitions and trade fairs. 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.

Stepless capacity control from 25% to 100% of the cooling capacity enables the unit to operate as per the real system demand, increasing the efficiency and reducing the energy consumption. The available versions make it possible to select the model and the solution best adapted for the type of system served.



> Versions

- SF** cooling only version available in 9 different sizes.
- SM** motoevaporating unit available in 9 different sizes.

> Accessories

- Evaporator electric heater.
- Oil level control.
- Compressor discharge temperature control.
- Antivibration mounts.
- MODBUS gateway.
- RS 485 /232 card.
- Stainless steel plate desuperheaters.
- Second high pressure switch.



>Main technical data

		111	141	161	191	221	281	331	401	441
Cooling capacity ¹	kW	113,1	140,2	155,0	181,4	211,1	256,5	301,6	366,5	409,3
Input power ¹	kW	31,9	39,8	42,0	42,4	54,8	66,3	81,2	95,0	104,8
Power supply	400V - 3 - 50 Hz									
Nominal input current	A	51,8	66,1	69,0	70,4	89,0	110,1	136,4	149,2	164,6
Compressor type	Screw type semi-hermetic									
Compressors / Circuits	n°	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
Capacity steps	Continuous from 25% to 100%									
Evaporator / number	Plate / 1									
Liquid flow rate	m ³ /h	19,5	24,1	26,7	31,2	36,3	44,1	51,9	63,0	70,4
Pressure drop	kPa	24	29	49	38	40	42	46	47	47
Condenser / number	Plate / 1 (SM version excluded)									
Liquid flow rate	m ³ /h	24,9	31,0	33,9	38,5	45,7	55,5	65,8	79,4	88,4
Pressure drop	kPa	33	34	34	33	35	35	36	38	38
Sound pressure 	dB(A)	66	66	67	67	67	68	68	69	69
Total maximum current	A	65,0	82,0	96,0	124,0	140,0	168,0	196,0	225,0	245,0
Starting current	A	139,0	172,0	195,0	159,0	193,0	254,0	276,0	354,0	374,0
Hydraulic connections	2"		2"	2"	DN 80 Victaulic					

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



>Characteristics

Compressors: semi-hermetic, twin screw type with internal thermal protection and crankcase heater. Y/Δ start up to reduce the starting currents. Cooling capacity control is through the control of the position of the slide valve. The cooling capacity can be varied from 25 to 100% using this device.

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.

Condenser: stainless steel brazed-plate type.

Control and safety devices: microprocessor type control including the control of the cooling capacity from 25% to 100% based on the control of the temperature of the water sent to the system, setting of operating parameters, display of the evaporator inlet and outlet temperature, display of the evaporation and condensation pressure, display of the alarms, setting of the compressor protection timing functions, reset of the alarms and automatic start up after power failures.

Electrical panel: made in double door execution, it includes: automatic general switch, secondary circuit protecting thermomagnetic

switch, contactors for compressors and fans. Terminal plate.

Cooling circuit all the cooling circuit components are welded. It includes: drier-filter, electronic expansion valve, high and low pressure transducer, manual reset high pressure switch, automatic reset low pressure switch, high and low pressure safety valves.

Structure: base and structural part made of high-thickness galvanised steel sheet epoxy painted. Stainless steel bolts and screws.





>Sizes and weights

			111	141	161	191	221	281	331	401	441
Length	L	mm	1.600	1.600	1.600	1.600	1.600	1.600	1.600	1.800	1.800
Width	W	mm	721	721	721	721	721	721	721	1.000	1.000
Height	H	mm	1.845	1.845	1.845	1.845	1.845	1.845	1.845	1.915	1.915
Weight		kg	727	768	782	846	873	1.002	1.036	1.580	1.675



>Accessories compatibility

	111-161	191-281	331-441
Main switch	●	●	●
Differential pressure switch	●	●	●
Microprocessor	●	●	●
Stepless capacity control from 25% to 100%	●	●	●
Electronic expansion valve	●	●	●
On/off free contact	●	●	●
General alarm free contact	●	●	●
Electronic expansion valve	●	●	●
Refrigerant pressure gauges	●	●	●
Antivibration mounts	○	○	○
Evaporator electric heater	○	○	○
Oil level control	○	○	○
Compressor discharge temperature control	●	●	●
MODBUS gateway	○	○	○
RS 485 /232 card	○	○	○
Second high pressure switch	●	●	●
Desuperheater	○	○	○
Remote control	○	○	○

● Standard, ○ Optional, – Not available.