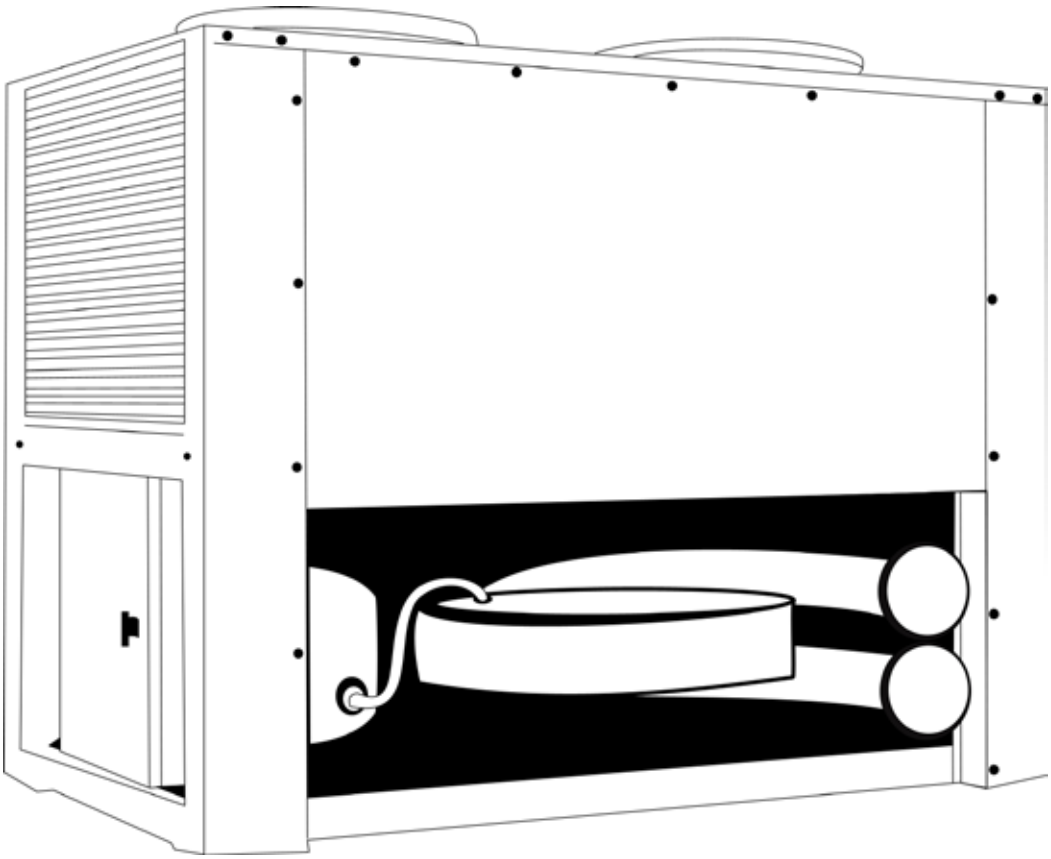
AIR MAGNA 300-100

Green Energy ANTEK®

MODULAR AIR COOLED
HEAT PUMP FOR HEATING,
COOLING AND DOMESTIC WATER



MODULAR TYPE AIR COOLED CHILLER AND HEAT PUMP

AIR MAGNA 300-100

Cooling capacity: 101.3÷810.4 kW
Heating capacity: 106.3÷850.4 kW

Features

• The master module can work independently or together with up to 7 slave modules, capacity from 101.3 to 810.4kW.
• Units with W type heat exchanger: panels, frame and base are made from galvanized steel protected with polyester powder painting to ensure total resistance to atmospheric agents.
• Units with U type heat exchanger: bearing structure in aluminum, panels in stainless steel, and base in painted section steel.
• 3-phase scroll type compressor, with built-in thermal overload cut-out and crankcase heater, mounted on rubber vibration dampers.
• External rotor type axial fans, equipped with three phase direct drive motors, low noise 8 poles, protection level IP54, provided with a protective outlet grille.
• Evaporator built with high efficiency tube in tube type heat exchanger, factory insulated with flexible close cell material.
• Condenser built with seamless internal screw thread copper tubes mechanically expanded into blue wave hydrophilic aluminum fins.
• Refrigerant circuit complete with charge valves, filter drier, sight glass, gas-liquid separator, thermostatic expansion valve, high & low pressure switch. The heat pump unit is completed also with 4-way valve, liquid receiver and one way valve.
• Hydraulic circuit built with galvanized pipe, complete with water discharge connection for tube in tube heat exchanger and flange type hydraulic connectors in two directions easy for connections from both sides of the units.
• Electric panel consist of: Compressor contactor, fan motor contactor, compressor protection breaker, fan protection breaker, phase sequence relay and microprocessor with function display (display only for master/packaged unit)
• Automatic operation dramatically reducing maintenance cost thanks to reliable microprocessor system.

OPTIONAL
· Paddle flow switch;
· Metallic filter for hydraulic circuit;
· Water pump;
· Rubber antivibration mounting.

NOMENCLATURE

R	F	C	100	U	M
①	②	③	④	⑤	⑥

① Unit type:
R: Heat pump
-: Cooling only

② Air cooled
F

③ Refrigerant type
A: R410A
B: R290
C: R407C

④ Size
100

⑤ Finned teat
U: U type coil
W: W type coil

⑥ Module type
M: master module
S: slave module
P: packaged type

Technical Data

Model AIR MAGNA 300-100		100x1	100x2	100x3	100x4	100x5	100x6	100x7	100x8
Cooling capacity*	kW	101.3	202.6	303.9	405.2	506.5	607.8	709.1	810.4
Heating capacity**	kW	106.3	212.6	318.9	425.2	531.5	637.8	744.1	850.4
Compressor									
Qty/refrigerant circuit	Nr.	2/2	4/4	6/6	8/8	10/10	12/12	14/14	16/16
Cooling power input*	kW	2×17.6	4×17.6	6×17.6	8×17.6	10×17.6	12×17.6	14×17.6	16×17.6
Heating power input**	kW	2×16.9	4×16.9	6×16.9	8×16.9	10×16.9	12×16.9	14×16.9	16×16.9
Energy adjustment	%				0-50-100 (Single unit)				
Axial fan									
Quantity	Nr.	2	4	6	8	10	12	14	16
Airflow	m³/h	48000	96000	144000	192000	240000	288000	336000	384000
Evaporator									
Water flow	m³/h	17.1	34.2	51.3	68.4	85.5	102.6	119.7	136.8
Water side pressure drop ***	kPa	38	<<<- - -		From 30 to 50			- - ->>>	
Power supply	/				400V/3Ph/50Hz				
Noise level***	dB(A)	69	70	71	72	73	74	75	76
Dimensions									
Length	mm				2160 (Single unit)				
Width	mm				1560 (Single unit)				
Height	mm				2360 (Single unit)				
Net weight	kg	1410x1	1410x2	1410x3	1410x4	1410x5	1410x6	1410x7	1410x8

* Ambient temperature 35ºC; evaporator water in/out 12/7 ºC;
** Ambient temperature DB 7 ºC, WB 6 ºC; condenser water in/out temperature 40/45 ºC;
*** In the nominal water flow condition the pressure drop is between this range.
**** Sound pressure measured at a distance of 1 m and a height of 1.5 m above the ground in a dear field (fan side).

OVERALL DIMENSIONS

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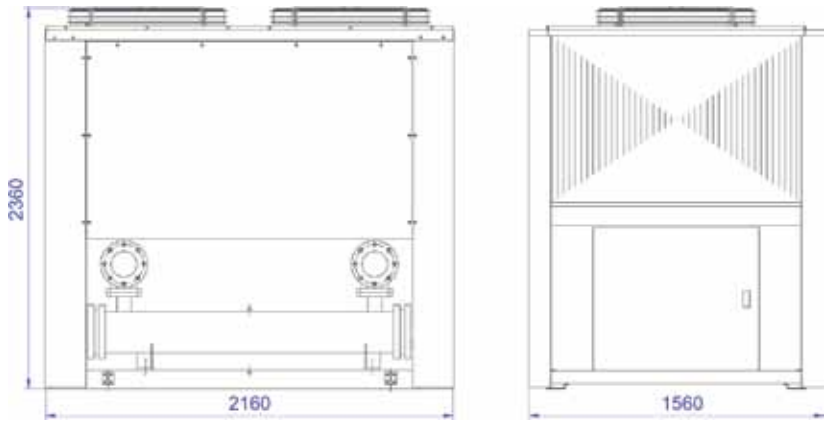

The technical data in this document are not binding.
Antek Green Energy Systems reserves the right to make whatever modifications it deems necessary to improve the product at any time.

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