



Refrigerant  
R290 | GWP=3



Screw  
compressor



Axial fan



Brazen plate  
heat exchanger

### Solution

B - Base

### Version

ST - Standard

LN - Low noise

### Equipment

AS - Standard equipment

Cooling Capacity 249,6 - 631,9 kW

<b>Housing</b>	Structure specifically designed for outdoor installation. Basement and frame in galvanized shaped sheet steel with a suitable thickness. All parts are polyester-powder painted to assure total weather resistance. Panels are internally coated to reduce the noise level (LN Accessories only).
<b>Compressor</b>	SCREW SEMI-HERMETIC type, complete with motor thermal protection, Part-Winding or Star Delta start, crankcase electrical heater and discharge intercepting valve. The compressor is mechanically optimized for use with Hydrocarbons. Some components are ATEX certified.
<b>Fan</b>	Low speed, axial-flow fans fitted with accident-prevention protective grille; directly coupled motor with built-in thermal cutout and IP 54 protection degree; aerodynamic housing and wing profile blades increase efficiency and decrease noise level. The grille on the air-inlet side reduces the noise emissions and minimizes disturbing low frequency tones. (LN Accessory only)
<b>Air heat exchanger</b>	Microchannel technology increases the primary to secondary surface area ratio and reduces the tubes' air shadow to provide maximum heat exchange through our condensers. Due to their small hydraulic diameter, microchannel aluminium tubes transfer heat more efficiently than the traditional round copper tubes.
<b>Water heat exchanger</b>	Brazen plate-type heat exchanger, stainless steel AISI 316 made. The heat exchanger design provides high thermal exchange and high performance results, furthermore it guarantees small dimensions and easy installation and maintenance. Heat exchangers that work at low temperature are thermally insulated with closed-cell neoprene anti-condensate material. Air vent valve included.
<b>Electrical board</b>	Each unit is equipped with electric panel, built, wired and fully tested at the factory. Wiring numeration and optimized layout facilitate troubleshooting. The installed components are identified by nameplates to better identify the application and the type of action. Switchboard is completely made according to standards IEC 204-1/EN60204-1 and it is complete with contactor and protection for compressor and fans, main isolator switch and door interlock safety device. To ensure higher level of security the panel is hung outside the unit, on one side of the machine.
<b>Control</b>	The microprocessor controls the unit capacity by timing the compressors and checks the operating alarms with the possibility to connect to BMS.
<b>Refrigerant circuit</b>	Filter drier, moisture-liquid sight glass, solenoid valve, shut-off valve on the liquid line, electronic expansion valve, safety pressure high / low switch. Solenoid valves and pressure switches are ATEX certified.
<b>Additional safety device</b>	To ensure high-safety-level the unit is equipped with a special gas detector for flammable gases, ATEX certified and with external dedicated power supply. The sensor is provided with three alarm levels, respectively set at 5%, 10% and 20% of Lower Flammability Limit (LFL). These alarms, managed by microprocessor, activate LED status indicator.

### ACCESSORIES

- Spring vibration isolation
- Rubber vibration isolation
- Modulating fan speed condensing control (standard)
- EC condensing Fans
- Max and min voltage relay
- Refrigerant gauges (standard)
- Electromechanical flow switch
- Wall mounted remote control panel
- ModBus® (RS 485) interface

RKO.E	1402 V	1602 V	1802 V	2002 V	2202 V	2402 V	2502 V	2802 V
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COOLING									
Cooling capacity (1)	kW	249,6	315,9	346,3	412,0	444,3	492,3	529,2	631,9
Cooling capacity (1) (EN 14511 VALUE)	kW	248,8	314,9	345,2	411	443,3	491,1	528	630,1
Total compressors power input (1)	kW	99,1	109,6	128,5	140,4	153,9	158,5	175,5	207,3
EER - Energy Efficiency Ratio	-	2,37	2,66	2,52	2,70	2,68	2,84	2,78	2,80
Saved CO2 equivalent Ton (*)	Ton	85800	100100	114400	143000	157300	171600	185900	200200

REFRIGERANT CIRCUIT									
Refrigerant	-	R290	R290	R290	R290	R290	R290	R290	R290
Independent gas circuit	n°	2	2	2	2	2	2	2	2
Compressors type	-	Semihhermetic screw							
Compressors quantity	n°	2	2	2	2	2	2	2	2
Fans type	-	Axial (AC)							
Fans quantity	n°	4	6	6	8	8	10	10	12
Total air flow	m3/h	78000	117000	117000	156000	156000	195000	195000	234000
Fans power input (1)	kW	6	9	9	12	12	15	15	18
Evaporator water flow (1)	m3/h	42,8	54,2	59,4	70,7	76,2	84,5	90,8	108,4
Evaporator pressure drop (1)	kPa	31	37	36	27	27	28	27	35

Electrical Data									
Power supply	V/ph/Hz + T	400/3/50 + 230/1/50 (for gas detector)							
Maximum power input without pump	kW	125,6	144,8	165,0	190,6	206,0	219,4	235,4	274,8
Locked rotor current – LRA without pump	A	442,0	542,0	589,0	695,0	650,0	740,0	788,0	880,0
Maximum absorbed current - FLA without pump	A	272,0	314,0	344,0	382,0	400,0	430,0	476,0	538,0

Noise levels (2)									
Total sound power - ST Version	dB(A)	103	103	105	106	106	109	110	112
Total sound pressure - ST Version	dB(A)	71	71	73	74	74	76	77	79
Total sound power - LN Version	dB(A)	100	100	102	103	103	106	107	109
Total sound pressure - LN Version	dB(A)	68	68	70	71	71	73	74	76

DIMENSIONS AND WEIGHT - Base Solution									
Length (L)	mm	2950	4300	4300	5550	5550	6800	6800	8050
Depth (P)	mm	2345	2345	2345	2345	2345	2345	2345	2345
Height (H)	mm	2465	2465	2465	2465	2465	2465	2465	2465
Shipping weight	Kg	2510	3260	3280	3820	4560	4370	5070	5840

#### Reference conditions:

(1) Condenser air intake temperature = 35°C - Evaporator water temperature IN/OUT = 12/7°C - Fluid: pure water - Condensing coil: Microchannel

(2) Sound power level in compliance with ISO 3744 - Sound pressure level (average) at 10 meter distance, unit in a free field on a reflective surface; non-binding value obtained from the sound power level

(\*) CO2 equivalent tons saved to the Environment compared to the choice of an EUROKLIMAT unit with similar cooling capacity and HFC refrigerant

#### Compliance with "Eco-Design"

The units comply with the European Directive 2009/125/EU, the Commission Regulation (EU) 2016/2281 and with the Harmonized Directives.

The relevant information related to each model (eg.: **SEER<sub>on</sub>**, **Rated cooling capacity**, **Seasonal space cooling energy efficiency**, ....) are published on our website

[www.euroklimat.it](http://www.euroklimat.it)



Euroklimat has developed an online software called "wEKool" that allows you to select the most suitable solution to meet the specific request and all the available accessories for each model. For more information, please contact your sales representative.