

redge[®]

EVIO EVER R290

High Efficiency Self Secure Rooftop unit



Inverter

AIR COOLED **R-290**

❄️ 26 - 65 kW

🔥 26 - 65 kW

🌀 4000 - 22000 m³/h



- # Thermodynamic components inside ventilated enclosure
- # Discharge pressure relief valve with chimney
- # Optical leak detector sensor in the supply air
- # Light and noisy alarm
- # Pressurized electrical cabinet

SELF-SECURE UNIT

- # Low refrigerant charge, (less than 4 kg per circuit)
- # Higher Ecodesign performance (Part load)
- # Compliant with EN378-2
- # Extended operating limits
- # Low GWP : 0.02
- # ODP = 0
- # PFAS Free (zero impact on health)
- # Widely available on the market
- # Cost effective (no patent)
- # Low pressure refrigerant
- # Pure refrigerant : No glide
- # Safety class : A3

AIR TREATMENT

- # EC motor fans ensure a precise temperature for better comfort and energy savings.
- # IAQ kits for improved indoor air quality within the building:
 - Media filters (M5/ePM10 50% depth 50 or 100mm, F7/ePM1 50%, or F9/ePM1 85% depth 100mm or rigid bag 290mm depth)



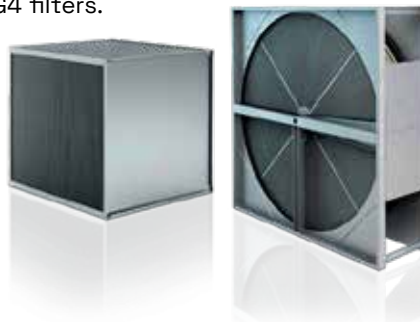
AUXILIARY HEATING DEVICES

- # Different options depending on the energy source available on site:
 - Hot water coil.
 - Electric heater.



HEAT RECOVERY

- # Water coil recovery, to recover free heat or free cool produced by external water systems climates.
- # Plate heat exchanger, to improve the system's efficiency in colder climates by preheating the fresh air stream.
- # Heat recovery wheel, with both fresh and return air sections protected by G4 filters.



CASING & DESIGN

- # New design.
- # Pre-coated steel panels painted in RAL 9003 color, specially designed for corrosion resistance and to ensure long operation lifetime.
- # Compact design for perfect integration in its environment.
- # Same footprint as previous models for plug & play replacement.
- # Inclined removable drain pan in aluminum for easy disinfecting.
- # Double skin metal sheet panel, 50mm insulation $\lambda = 0.025 \text{ W/m.K}$

THERMODYNAMIC SYSTEM

- # R290 refrigerant (GWP = 0.02) enabling a decrease of the carbon dioxide equivalent for potential tax savings.
- # Inverter scroll compressors allowing capacity modulation.
- # Variable refrigerant control with electronic expansion valve.
- # Heat transfer efficiency thanks to new coil design.
- # Easy access to compressors enabling faster maintenance operations.
- # Fan with variable speed EC motor and swept blades, enabling control of the high and low floating pressure for optimum operation.
- # Integrated safety devices for peace of mind.

CONTROL

- # eCLIMATIC electronic controller and intelligent control parameters optimising part-load efficiency.
- # Integrated communication solutions offering flexibility (master/slave, Modbus, BACnet).
- # Several display solutions for different access levels.

REMOTE MONITORING

- # Connectivity through **RedgeCloud** (REDGE WEB PORTAL for Multi sites / Multi units).
- # BMS through: **e-savvy**



eCLIMATIC



DS

Service display



Touchscreen display



DC

Comfort display



Ev_(A) **125**_(B) **A**_(C) **H**_(D) **040**_(E) **S**_(F) **Y**_(G) **V**_(H) **1**_(I)

(A) **Ev** = Evio Ever

(B) **B** = Maximum air flow (x 100 m³/h)

(C) **A** = Air cooled

(D) **H** = Heat pump

(E) **040** = Commercial cooling capacity in kW

(F) **S** = 1 circuit - **D** = 2 circuits

(G) **P** = R32 - **Y** = R290

(H) Scroll compressor : **S** = On/Off - **V** = Inverter

(I) **1** = Revision



Air cooled version

Heat pump units

		125AH		185AH	
Evio Ever		040	060	060	070
Nominal thermal performances - Cooling mode					
Cooling capacity ⁽¹⁾	kW	31,8	44,8	46,8	53,1
Nominal thermal performances - Heating mode					
Heating capacity ⁽²⁾	kW	34,2	49,2	47,7	55,3
Seasonal efficiencies - Cooling mode					
Seasonal energy efficiency - $\eta_{s,c}$ ⁽⁴⁾	%	193	197	206	194
SEER		4.9	4.97	5.2	4.9
Eurovent energy efficiency class - Part load operation		A	A	A+	A
Seasonal efficiencies - Heating mode					
Seasonal energy efficiency - $\eta_{s,h}$ ⁽⁶⁾	%	138	135	143	136
SCOP		3.54	3.45	3.65	3.48
Eurovent energy efficiency class - Part load operation		B	B	A	B
Ventilation data					
Minimum airflow rate	m³/h	5000	7000	7500	9000
Nominal airflow rate		7000	9000	11000	12000
Maximum airflow rate		12500	12500	18500	18500
Boosted airflow rate		13500	13500	22000	22000
Acoustic data - Standard unit					
Outdoor sound power	dB(A)	74	78	78	79
Refrigeration circuit					
Number of circuits		1	1	1	1
Number of compressors		1	1	1	1
Refrigerant load	kg	3,00	3,20	3,30	3,30

(1) **Cooling mode** : According to EN14511 nominal conditions - Outdoor temperature 35°C DB - Indoor temperature 27°C DB / 19°C WB

(2) **Heating mode** : According to EN14511 nominal conditions - Outdoor temperature 7°C DB / 6°C WB - Indoor temperature 20°C DB

(3) SEER in accordance with standard EN14825.

(4) Space cooling energy efficiency following Ecodesign regulation EU 2016/2281

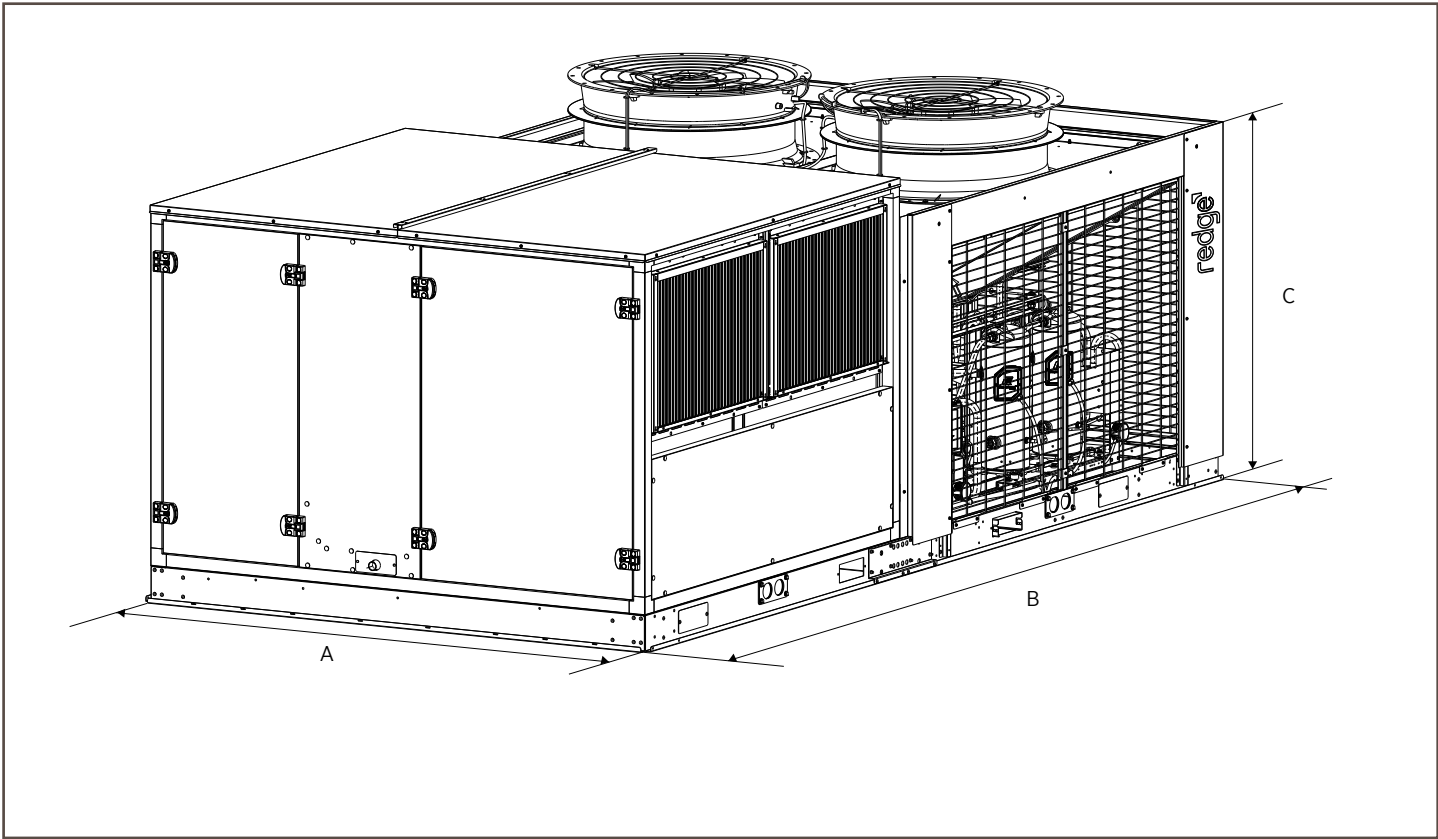
(5) SCOP in accordance with standard EN 14825 (average climate conditions).

(6) Space heating energy efficiency following Ecodesign regulation EU 2016/2281.



Air cooled version

		125AH		185AH	
Evio Ever		040	060	60	70
A	mm	2248	2248	2248	2248
B		2797	2797	3461	3461
C		1620	1620	2122	2122
Weight of standard units					
Basic unit	kg	768	785	911	927





NEXT LEVEL
HVAC SOLUTIONS