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AIRCOOLAIR

Air cooled condensing units



AIR COOLED R410A

19,7 - 228 kW

19,8 - 218 kW

- **Highly efficient** design that allows modulation between each circuit.
- Alternate defrost cycles improve system **reliability** and allows constant heating operation.
- Morning anticipation can be programmed to **ensure comfort** before the occupation periods.
- **High adaptability** to any load variation by managing up to four different operating modes and adapting the set point according to outdoor temperature.

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.

eCLIMATIC



DS
Service display



DM
Multi-Rooftop display



DC
Comfort display





CASING & DESIGN

- Casing made of galvanized steel sheet metal painted with a white RAL 9002 powdered polyester paint.
- Rigid, hot dipped galvanized chassis.
- Unit lifting and handling via the base frame.
- Side grilles as option to protect the unit during transportation.

EASY MAINTENANCE

- Refrigerant pressures and superheat on each circuit can be read directly on the service display.
- Units equipped with high and low-pressure transducers and refrigerant suction temperature sensors.
- No need to access to refrigerant pressure gauges.

Photos and illustrations are not contractual.

REFRIGERANT CIRCUIT

Tandem scroll compressors allowing capacity modulation.
High performance fan blades to improve efficiency and reduce noise level.
Large surface exchangers for highly efficient heat transfer.
Crankcase heater as standard on heat pump and optional with winter operation down to 0°C for cooling only units.
Active Acoustic Attenuation System with variable fan speed allows progressive adaptation of the unit to the building load while respecting the noise level constraints and the operating limits (option).







REFRIGERANT CIRCUIT

Two circuits allow capacity modulation from units 045D to 230D.
On cooling only units, each circuit includes as standard:
- High pressure switch with automatic reset.
- Low and high-pressure transducers.
On heat pumps units, each circuit includes in addition, as standard:
- Four-way valve.
- Liquid receiver.
- Thermostatic expansion valve.
- Filter drier.

ENERGY SAVINGS

Dynamic and alternate defrost.
Morning anticipation and dynamic set point.
Scheduling / Time zone Management.

A(A) S(B) C(C) 020(D) S(E) N(F) M(G) 3(H) M(I)

(A) **A** = AIRCOOLAIR
(B) **S** = Condensing unit
(C) **C** = Cooling only - **H** = Heat pump
(D) Cooling capacity in kW
(E) **S** = 1 circuit - **D** = 2 circuits
(F) **N** = Not used
(G) **M** = R410A
(H) Revision number
(I) **M** = 400V/3/50Hz

Air cooled version

AIRCOOLAIR		020S	025S	030S	035S	040S	045D	055D
Nominal thermal performances - Cooling mode (ASC)								
Cooling capacity (1)	kW	19,7	24,7	28,4	36,1	42,0	49,4	56,7
Total Power Input	kW	6,4	8,1	9,6	11,9	14,1	16,2	19,3
EER net (1)		3,06	3,05	2,95	3,03	2,98	3,05	2,94
Nominal thermal performances - Heating mode (ASH)								
Heating capacity (2)	kW	19,8	25,0	28,6	36,0	40,2	50,1	57,1
Total Power Input	kW	6,2	7,8	9,2	11,1	13,5	15,6	18,4
COP net (2)		3,20	3,2	3,12	3,24	2,98	3,21	3,10
Acoustic data - Standard unit								
Sound power level	dB(A)	76	78	81	80	81	81	84
Electrical data								
Maximum power	kW	8,6	10,8	12,5	16,4	17,7	21,6	25,0
Voltage		400V - 3Ph - 50Hz						
Refrigeration circuit								
Number of circuits		1	1	1	1	1	2	2
Number of compressors		1	1	1	1	1	2	2
Capacity steps		1	1	1	1	1	2	2

(1) **Cooling mode :** Evaporating temperature = 7°C / Ambient temperature = 35°C
(2) **Heating mode : Condensing temperature = 50°C / Ambient temperature = 7°C DB/6°C WB**

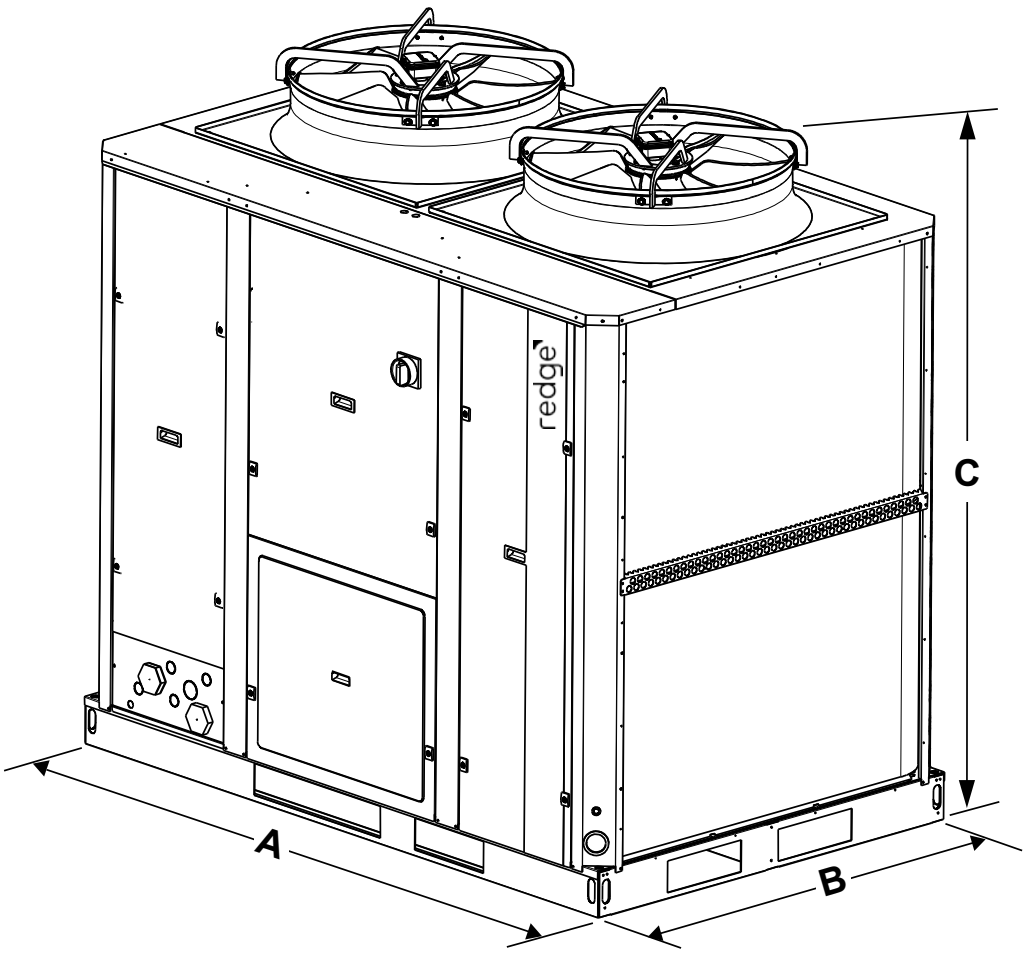
Air cooled version

AIRCOOLAIR		070D	085D	100D	120D	140D	200D	230D
Nominal thermal performances - Cooling mode (ASC)								
Cooling capacity (1)	kW	72,1	83,9	104,0	115,0	141,0	197,0	228,0
Total Power Input	kW	23,7	28,3	34,3	37,1	46,2	63,3	74,5
EER net (1)		3,04	2,96	3,03	3,10	3,05	3,11	3,06
Nominal thermal performances - Heating mode (ASH)								
Heating capacity (2)	kW	71,9	80,3	105,0	114,0	137,0	191,0	218,0
Total Power Input	kW	22,2	25,9	32,4	35,6	43,8	59,9	71,2
COP net (2)		3,24	3,10	3,24	3,20	3,13	3,19	3,1
Acoustic data - Standard unit								
Sound power level	dB(A)	83	84	87	87	90	89	82
Electrical data								
Maximum power	kW	32,8	35,5	45,6	48,7	59,9	83,0	96,2
Voltage		400V - 3Ph - 50Hz						
Refrigeration circuit								
Number of circuits		2	2	2	2	2	2	2
Number of compressors		2	2	3	3	3	4	4
Capacity steps		2	2	2	2	2	2	2

(1) **Cooling mode :** Evaporating temperature = 7°C / Ambient temperature = 35°C
(2) **Heating mode :** Condensing temperature = 50°C / Ambient temperature = 7°C DB/6°C WB

Air cooled version

AIRCOOLAIR		020S	025S	030S	035S	040S	045D	055D	070D	085D	100D	120D	140D	200D	230D
A	mm	1195	1195				1960				2250			2250	
B		660	980				1195				1420			2300	
C		1375	1635				1635				2155			2250	
Weight of standard units															
Basic unit	kg	168	219	221	239	258	452	463	499	537	748	828	932	1684	1704



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NEXT LEVEL HVAC SOLUTIONS