

NRB 0800-2406 B

Air-cooled chiller with free cooling (glycol-free)

Cooling capacity 211 ÷ 680 kW

- Microchannel coil
- Night mode
- Operation up to 50 °C outdoor air
- High efficiency also at partial loads



DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential/commercial complexes or industrial applications.

Outdoor units with scroll compressors, axial flow fans, micro-channel coil (source side), plate heat exchanger and thermostatic expansion valve (mechanical or electronic, depending on the model).

The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

- A** High efficiency
- E** Silenced high efficiency
- N** Silenced very high efficiency
- U** Very high efficiency

FEATURES

Operating field

Operation at full load up to 50 °C external air temperature depending on the size and version. For more information refer to the dedicated documents or the selection program Magellano.

Dual-circuit unit

Unit with 2 refrigerant circuits designed to provide maximum efficiency at full load, ensuring high efficiency at partial loads also and ensuring continuity in case one of the circuits stops.

Condensation control temperature

Fitted as standard with a device for electronic condensation control so that the unit can work even with low temperatures, adapting the air flow rate to the actual system request in order to reduce consumption.

Aluminium microchannel coils

The whole range uses microchannel condenser coils allowing reduction of refrigerant charge but keeping the same high efficiency.

Free-cooling water coils

These units also have a water coil dedicated to free-cooling mode. Free-cooling offers significant energy saving in applications that require cooling all year round. As soon as the outside air temperature allows, a valve makes the water flow towards the free-cooling battery which is cooled directly by the air. The

compressors are completely shut down, if possible, leading to considerable electrical savings.

- If a higher output is needed in free cooling, there is also the "G" free cooling plus model with boosted water coil.

Free cooling with glycol water

Intermediate plate heat exchanger that creates two circuits:

1. Glycol hydraulic circuit (glycol is added to protect the coil from freezing).
2. Primary hydraulic circuit for glycol-free systems.

Electronic expansion valve

The units from size 1805 to 2406 have an electronic expansion valve as standard.

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

Integrated hydronic kit

To obtain a solution that allows you to save money and to facilitate installation. These units can be configured with an integrated hydronic system. The kit contains the main hydraulic components, and is available in various configurations with a single pump or a standby pump too, so the customer can choose the right useful head.

CONTROL

Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.

- The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.
- **Night mode:** only in the **non-silenced** versions is it possible to set a silenced operating mode, which is useful for example at night for greater acoustic comfort but always guarantees performance even at peak load times.

Ver	1600	1805	2006	2206	2406
N, U	RIFNRB1601	RIFNRB1815	RIFNRB2016	RIFNRB2216	RIFNRB2416

A grey background indicates the accessory must be assembled in the factory

Anti-intrusion grid

Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
A	GP2VN	GP2VN	GP3VNF	GP3VNF	GP3VNF	GP3VNF	-	-	-	-	-
E	GP3VNF	GP3VNF	GP3VNF	GP4VN	GP4VN	GP4VN	-	-	-	-	-
N	GP4VN	GP4VN	GP4VN	GP5VN	GP5VN	GP5VN	GP6V	GP7V	GP7V	GP8V	GP8V
U	GP3VNF	GP3VNF	GP3VNF	GP4VN	GP4VN	GP4VN	GP5VN	GP6V	GP6V	GP7V	GP7V

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field	Description
1,2,3	NRB
4,5,6,7	Size 0800, 0900, 1000, 1100, 1200, 1400, 1600, 1805, 2006, 2206, 2406
8	Operating field
X	Electronic thermostatic expansion valve
Y	Low temperature mechanic thermostatic valve
Z	Low temperature electronic thermostatic valve
◦	Standard mechanic thermostatic valve
9	Model
B	Free-cooling glycol free
G	Free-cooling glycol free plus (1)
10	Heat recovery
D	With desuperheater (2)
◦	Without heat recovery
11	Version
A	High efficiency
E	Silenced high efficiency
N	Silenced very high efficiency
U	Very high efficiency
12	Coils / free-cooling coils
I	Copper-aluminium / Copper-aluminium
O	Painted aluminium microchannel / Copper painted aluminium
R	Copper-copper/Copper-copper
S	Copper-Tinned copper / Copper -Tinned copper
V	Copper-painted aluminium / Copper-painted aluminium
◦	Alluminium microchannel / Copper - aluminium
13	Fans
J	Inverter
◦	Standard
14	Power supply
◦	400V~3 50Hz with magnet circuit breakers
15,16	Integrated hydronic kit
OO	Without hydronic kit
PA	Pump A
PB	Pump B
PC	Pump C
PD	Pump D
PE	Pump E
PF	Pump F
PG	Pump G
PH	Pump H
PI	Pump I
PJ	Pump J (3)
DA	Pump A + stand-by pump
DB	Pump B + stand-by pump
DC	Pump C + stand-by pump
DE	Pump E + stand-by pump
DF	Pump F + stand-by pump
DG	Pump G + stand-by pump
DH	Pump H + stand-by pump
DI	Pump I + stand-by pump
DJ	Pump J + stand-by pump (3)

(1) The Free cooling Plus "G" models are only compatible with "oo" and "O" coils.

(2) The temperature of the water in the heat exchanger inlet must never drop below 35°C.

(3) For all configurations including pump J please contact the factory.

FANS DATA

Size	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: B											
Fan											
Type	A,E N,U	type	axials	axials	axials	axials	axials	-	-	-	-
Number	A E N U	no.	4 6 8 6	4 6 8 6	6 8 10 8	6 8 10 8	6 8 10 8	-	-	-	-
Air flow rate	A E N U	m³/h	57600 64800 86400 86400	57600 64800 86400 86400	86400 86400 108000 86400	86400 86400 108000 115200	86400 86400 108000 115200	-	-	-	-
Size											
	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: G											
Fan											
Type	A,E N,U	type	axials	axials	axials	axials	axials	-	-	-	-
Number	A E N U	no.	4 6 8 6	4 6 8 6	6 8 10 8	6 8 10 8	6 8 10 8	-	-	-	-
Air flow rate	A E N U	m³/h	57600 64800 86400 86400	57600 64800 86400 86400	86400 86400 108000 115200	86400 86400 108000 115200	86400 86400 108000 115200	-	-	-	-
Size											
	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406

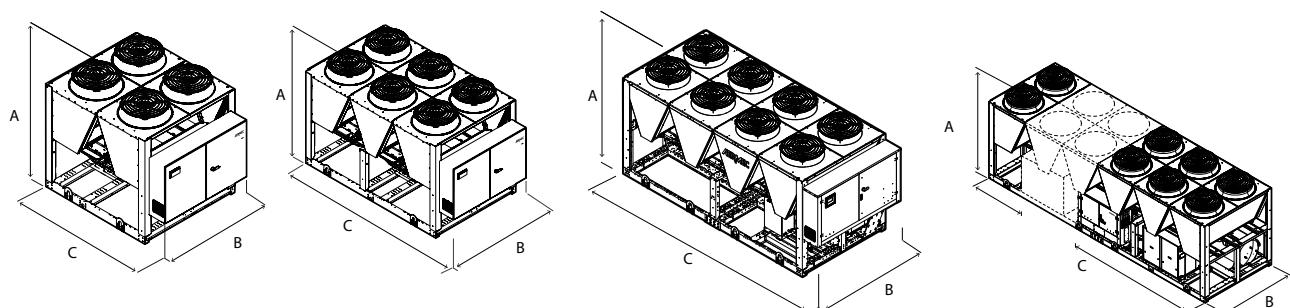
DIMENSIONS

NRB 0800-0900 A

NRB 1000-1400 A
NRB 0800-1000 E-U

NRB 1100-1400 E-U
NRB 0800-1000 N

NRB 1100-2406 N
NRB 1600-2406 U



Size	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Dimensions and weights											
A	A,E N,U	mm	2450 2450	2450 2450	2450 2450	2450 2450	2450 2450	-	-	-	-
B	A,E N,U	mm	2200 2200	2200 2200	2200 2200	2200 2200	2200 2200	-	-	-	-
C	A E N U	mm	2780 3970 4760 3970	2780 3970 4760 3970	3970 4760 5950 4760	3970 4760 5950 4760	3970 4760 5950 4760	-	-	-	-

■ For the weights please contact the factory.

Aermec reserves the right to make any modifications deemed necessary.
All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

Aermec S.p.A.
Via Roma, 996 - 37040 Bevilacqua (VR) - Italia
Tel. 0442633111 - Telefax 044293577
www.aermec.com