

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



AERMEC AI

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 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.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.

AERBAC-ONE: Ethernet communication interface for Bacnet/IP and Modbus TCP/IP protocols, HTTPS protocol for web interface, encrypted communication protocols and access credential management in accordance with the latest standards. One accessory is provided for each unit control board.

AERBACP: Ethernet communication interface for Bacnet/IP and Modbus TCP/IP protocols. 1 accessory is provided for each unit control board.

AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.

AERNET: The device remotely controls, manages and remotely monitors a chiller/heat pump using a PC, smartphone or table via a Cloud connection. AERNET acts as Master while each connected unit is configured as Slave up to a maximum of 6 control cards. The connection is made via cable and/or USB key. Wi-Fi connectivity is not available. It is also possible to save a log file with all the data from the connected units to your terminal with a simple click for possible post-analysis. With the purchase of the Router, the Customer benefits from a 24-month free period during which he can use the Aernet Service at no additional cost. At the end of this initial period, the Service

may be renewed by subscribing to a 1, 2 or 3 year subscription. For further details on costs and renewal methods, please contact our office or consult the technical documentation available on our website. www.aermec.com.

FB1: Air filter to protect the micro-channel coils. Formed of a frame and a composite baffle in micro-expanded aluminium mesh, with particularly low pressure drops.

FL: Flow switch.

MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.

PGD1: Allows you to control the unit at a distance.

PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

■ *The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.*

AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

GP : Anti-intrusion grid kit

T6: Double safety valve with exchange cock, both on the high and low pressure branches.

ACCESSORIES COMPATIBILITY

Model	Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
AER485P1	A,E	*	*	*	*	*	*	*				
	N,U	*	*	*	*	*	*	*	*	*	*	*
AERBAC-ONE	A,E	*	*	*	*	*	*	*				
	N,U	*	*	*	*	*	*	*	*	*	*	*
AERBACP	A,E	*	*	*	*	*	*	*				
	N,U	*	*	*	*	*	*	*	*	*	*	*
AERLINK	A,E	*	*	*	*	*	*	*				
	N,U	*	*	*	*	*	*	*	*	*	*	*
AERNET	A,E	*	*	*	*	*	*	*				
	N,U	*	*	*	*	*	*	*	*	*	*	*
FB1	A,E	*	*	*	*	*	*	*				
	N,U	*	*	*	*	*	*	*	*	*	*	*
FL	A,E	*	*	*	*	*	*	*				
	N,U	*	*	*	*	*	*	*	*	*	*	*
MULTICHILLER-EVO	A,E	*	*	*	*	*	*	*				
	N,U	*	*	*	*	*	*	*	*	*	*	*
PGD1	A,E	*	*	*	*	*	*	*				
	N,U	*	*	*	*	*	*	*	*	*	*	*

Remote panel

Model	Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
PR4	A,E	*	*	*	*	*	*	*				
	N,U	*	*	*	*	*	*	*	*	*	*	*

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

Antivibration

Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Integrated hydronic kit: 00, DA, DB, DC, DE, DF, DG, DH, DI, DJ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ											
A, E, N, U	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)

(1) Contact us.

Device for peak current reduction

Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
A, E	DRENRB0800 (1)	DRENRB0900 (1)	DRENRB1000 (1)	DRENRB1100 (1)	DRENRB1200 (1)	DRENRB1400 (1)	-	-	-	-	-
	DRENRB0800 (1)	DRENRB0900 (1)	DRENRB1000 (1)	DRENRB1100 (1)	DRENRB1200 (1)	DRENRB1400 (1)	DRENRB1600 (1)	DRENRB1805 (1)	DRENRB2006 (1)	DRENRB2206 (1)	DRENRB2406 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.

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

Power factor correction

Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
A	RIFNRB0800	RIFNRB0900	RIFNRB1000	RIFNRB1100	RIFNRB1200	RIFNRB1400	-	-	-	-	-
E	RIFNRB0800	RIFNRB0900	RIFNRB1000	RIFNRB1101	RIFNRB1201	RIFNRB1401	-	-	-	-	-
N	RIFNRB0801	RIFNRB0901	RIFNRB1001	RIFNRB1101	RIFNRB1201	RIFNRB1401	RIFNRB1601	RIFNRB1815	RIFNRB2016	RIFNRB2216	RIFNRB2416

Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
U	RIFNRB0800	RIFNRB0900	RIFNRB1000	RIFNRB1101	RIFNRB1201	RIFNRB1401	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
V	Copper-painted aluminium / Copper-painted aluminium
°	Aluminium microchannel / Copper - aluminium
13	Fans
J	Inverter
°	Standard
14	Power supply
°	400V~3 50Hz with magnet circuit breakers
15,16	Integrated hydronic kit
00	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
DD	Pump D + 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 "non" 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.

PERFORMANCE SPECIFICATIONS

NRB - A

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: B												
Cooling performance chiller operation (1)												
Cooling capacity	kW	211,8	234,3	273,4	307,1	335,9	373,3	-	-	-	-	-
Input power	kW	76,0	88,0	93,9	108,9	124,8	145,6	-	-	-	-	-
Cooling total input current	A	133,70	152,10	165,50	189,40	215,10	248,20	-	-	-	-	-
EER	W/W	2,79	2,66	2,91	2,82	2,69	2,56	-	-	-	-	-
Water flow rate system side	l/h	36.397	40.249	46.968	52.762	57.713	64.138	-	-	-	-	-
Pressure drop system side	kPa	53	58	66	74	88	100	-	-	-	-	-
Cooling performances with free-cooling glycol-free (2)												
Cooling capacity	kW	116,3	118,3	160,6	167,3	170,9	175,9	-	-	-	-	-
Input power	kW	9,8	9,8	14,3	14,3	14,4	14,4	-	-	-	-	-
Free cooling total input current	A	17,3	17,0	25,3	25,0	24,8	24,5	-	-	-	-	-
EER	W/W	11,84	12,04	11,21	11,66	11,89	12,22	-	-	-	-	-

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%

(2) System side water heat exchanger 12 °C / °C; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: G												
Cooling performance chiller operation (1)												
Cooling capacity	kW	210,3	232,4	271,9	305,1	333,3	369,6	-	-	-	-	-
Input power	kW	76,8	89,2	94,8	110,0	126,2	147,6	-	-	-	-	-
Cooling total input current	A	134,80	153,70	166,70	190,90	217,20	251,00	-	-	-	-	-
EER	W/W	2,74	2,61	2,87	2,77	2,64	2,50	-	-	-	-	-
Water flow rate system side	l/h	36.136	39.921	46.723	52.411	57.266	63.506	-	-	-	-	-
Pressure drop system side	kPa	53	57	65	73	87	98	-	-	-	-	-
Cooling performances with free-cooling glycol-free (2)												
Cooling capacity	kW	121,7	123,8	166,9	174,2	178,1	183,6	-	-	-	-	-
Input power	kW	9,9	9,9	14,5	14,5	14,6	14,6	-	-	-	-	-
Free cooling total input current	A	17,4	17,1	25,5	25,2	25,0	24,8	-	-	-	-	-
EER	W/W	12,24	12,45	11,51	11,99	12,24	12,60	-	-	-	-	-

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%

(2) System side water heat exchanger 12 °C / °C; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

NRB - E

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: B												
Cooling performance chiller operation (1)												
Cooling capacity	kW	220,6	242,6	265,3	310,3	344,7	379,2	-	-	-	-	-
Input power	kW	73,4	84,2	95,7	106,6	122,4	142,0	-	-	-	-	-
Cooling total input current	A	125,50	142,40	160,10	179,20	204,60	235,80	-	-	-	-	-
EER	W/W	3,00	2,88	2,77	2,91	2,82	2,67	-	-	-	-	-
Water flow rate system side	l/h	37.902	41.688	45.573	53.310	59.226	65.155	-	-	-	-	-
Pressure drop system side	kPa	48	53	61	68	84	102	-	-	-	-	-
Cooling performances with free-cooling glycol-free (2)												
Cooling capacity	kW	134,9	137,3	139,4	182,1	186,7	189,4	-	-	-	-	-
Input power	kW	11,0	11,0	11,0	14,6	14,6	14,6	-	-	-	-	-
Free cooling total input current	A	18,7	18,5	18,3	24,5	24,4	24,3	-	-	-	-	-
EER	W/W	12,31	12,53	12,72	12,50	12,78	12,97	-	-	-	-	-

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%

(2) System side water heat exchanger 12 °C / °C; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: G												
Cooling performance chiller operation (1)												
Cooling capacity	kW	219,4	241,1	263,2	308,4	342,1	375,8	-	-	-	-	-
Input power	kW	74,1	85,1	96,8	107,7	123,7	143,8	-	-	-	-	-
Cooling total input current	A	126,40	143,50	161,50	180,60	206,50	238,40	-	-	-	-	-
EER	W/W	2,96	2,83	2,72	2,86	2,76	2,61	-	-	-	-	-
Water flow rate system side	l/h	37.695	41.419	45.215	52.979	58.785	64.562	-	-	-	-	-
Pressure drop system side	kPa	47	52	61	67	83	100	-	-	-	-	-
Cooling performances with free-cooling glycol-free (2)												
Cooling capacity	kW	140,0	142,6	144,8	189,1	194,0	196,9	-	-	-	-	-
Input power	kW	11,1	11,1	11,1	14,7	14,8	14,8	-	-	-	-	-
Free cooling total input current	A	18,9	18,7	18,5	24,7	24,6	24,5	-	-	-	-	-
EER	W/W	12,64	12,88	13,08	12,85	13,14	13,34	-	-	-	-	-

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%

(2) System side water heat exchanger 12 °C / °C; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

NRB - U

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: B												
Cooling performance chiller operation (1)												
Cooling capacity	kW	227,3	250,9	275,8	320,4	357,9	396,3	455,4	515,9	569,2	633,7	680,9
Input power	kW	73,7	83,6	94,1	106,4	120,6	138,5	153,5	173,2	195,2	215,9	238,4
Cooling total input current	A	133,20	149,20	165,70	188,70	211,50	240,00	266,70	303,50	341,30	379,50	417,90
EER	W/W	3,08	3,00	2,93	3,01	2,97	2,86	2,97	2,98	2,92	2,94	2,86
Water flow rate system side	l/h	39.046	43.104	47.382	55.045	61.497	68.087	78.245	88.642	97.793	108.881	116.982
Pressure drop system side	kPa	51	56	66	72	90	111	75	92	112	133	126
Cooling performances with free-cooling glycol-free (2)												
Cooling capacity	kW	154,8	158,0	160,8	209,0	215,3	219,0	275,7	335,8	350,8	397,2	401,3
Input power	kW	14,3	14,3	14,3	19,1	19,1	19,1	24,1	31,6	32,0	36,8	36,8
Free cooling total input current	A	25,9	25,6	25,2	33,8	33,5	33,1	41,8	55,3	56,0	64,6	64,4
EER	W/W	10,80	11,03	11,22	10,97	11,27	11,47	11,45	10,64	10,95	10,81	10,92

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%

(2) System side water heat exchanger 12 °C / °C; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: G												
Cooling performance chiller operation (1)												
Cooling capacity	kW	226,2	249,6	274,2	318,8	356,0	393,8	452,9	513,3	565,9	630,2	676,8
Input power	kW	74,4	84,4	95,0	107,4	121,8	139,9	154,8	174,8	197,2	218,0	240,9
Cooling total input current	A	134,10	150,20	166,90	189,90	213,20	242,00	268,60	305,70	344,00	382,40	421,40
EER	W/W	3,04	2,96	2,89	2,97	2,92	2,82	2,93	2,94	2,87	2,89	2,81
Water flow rate system side	l/h	38.871	42.893	47.115	54.781	61.158	67.658	77.819	88.186	97.229	108.280	116.278
Pressure drop system side	kPa	50	56	66	72	89	109	74	91	111	132	125
Cooling performances with free-cooling glycol-free (2)												
Cooling capacity	kW	160,6	164,1	167,1	216,9	223,8	227,8	287,0	350,1	367,2	414,5	419,0
Input power	kW	14,5	14,5	14,5	19,3	19,3	19,3	24,4	31,9	32,4	37,2	37,2
Free cooling total input current	A	26,2	25,8	25,5	34,1	33,8	33,5	42,3	55,8	56,5	65,2	65,0
EER	W/W	11,07	11,31	11,52	11,24	11,57	11,78	11,77	10,97	11,33	11,15	11,27

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%

(2) System side water heat exchanger 12 °C / °C; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

NRB - N

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: B												
Cooling performance chiller operation (1)												
Cooling capacity	kW	228,3	252,4	278,0	320,3	358,3	397,2	454,4	510,9	563,3	628,5	675,3
Input power	kW	72,5	82,2	92,3	104,6	118,7	136,3	151,0	171,5	194,0	213,5	236,4
Cooling total input current	A	124,40	140,10	156,30	176,60	199,30	227,40	251,40	286,80	325,40	359,50	398,60
EER	W/W	3,15	3,07	3,01	3,06	3,02	2,91	3,01	2,98	2,90	2,94	2,86
Water flow rate system side	l/h	39.222	43.370	47.761	55.033	61.559	68.239	78.074	87.785	96.785	107.983	116.017
Pressure drop system side	kPa	46	50	60	72	91	103	71	90	110	131	124
Cooling performances with free-cooling glycol-free (2)												
Cooling capacity	kW	168,7	172,6	176,0	212,0	218,8	228,0	284,9	321,4	337,3	375,3	379,1
Input power	kW	14,5	14,5	14,5	18,1	18,2	18,2	24,8	28,3	28,9	31,6	31,6
Free cooling total input current	A	25,0	24,8	24,6	30,6	30,5	30,4	41,3	47,3	48,5	53,2	53,3
EER	W/W	11,60	11,86	12,10	11,70	12,03	12,51	11,48	11,37	11,67	11,88	12,00

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%

(2) System side water heat exchanger 12 °C / °C; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: G												
Cooling performance chiller operation (1)												
Cooling capacity	kW	227,4	251,4	276,7	318,8	356,3	394,6	451,9	508,1	559,8	624,6	670,7
Input power	kW	73,1	82,8	93,1	105,5	119,8	137,7	152,4	173,0	195,9	215,7	239,0
Cooling total input current	A	125,10	140,90	157,20	177,70	200,70	229,30	253,20	289,00	328,00	362,50	402,20
EER	W/W	3,11	3,03	2,97	3,02	2,98	2,87	2,97	2,94	2,86	2,90	2,81
Water flow rate system side	l/h	39.073	43.187	47.536	54.768	61.222	67.801	77.644	87.290	96.173	107.317	115.226
Pressure drop system side	kPa	46	50	59	72	90	101	71	89	108	130	123
Cooling performances with free-cooling glycol-free (2)												
Cooling capacity	kW	174,6	178,8	182,6	219,5	226,9	236,7	296,4	333,9	351,1	390,3	394,4
Input power	kW	14,7	14,7	14,7	18,3	18,4	18,4	25,0	28,5	29,2	31,9	31,9
Free cooling total input current	A	25,2	25,0	24,8	30,8	30,8	30,7	41,6	47,6	48,8	53,6	53,7
EER	W/W	11,88	12,17	12,42	12,00	12,35	12,86	11,84	11,71	12,04	12,23	12,36

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%

(2) System side water heat exchanger 12 °C / °C; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

ENERGY DATA

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: B													
SEPR - (EN 14825: 2018)													
SEPR	A	W/W	5,61	5,25	5,27	5,43	5,25	5,05	-	-	-	-	-
	E	W/W	6,07	5,58	5,44	5,59	5,50	5,13	-	-	-	-	-
	N	W/W	6,38	6,09	5,91	5,92	5,78	5,41	5,67	5,51	5,56	5,58	5,53
	U	W/W	6,22	5,87	5,69	5,84	5,71	5,56	5,73	5,52	5,60	5,58	5,53
Water Regulation (1)	A,E	type	FW/FO	FW/FO	FW/FO	FW/FO	FW/FO	FW/FO	-	-	-	-	-
	N,U	type	FW/FO	FW/FO	FW/FO	FW/FO	FW/FO	FW/FO	FW/FO	FW/FO	FW/FO	FW/FO	FW/FO

(1) VW/VO - variable water flow rate/variable outlet temperature; FW/VO - fixed water flow rate/variable outlet temperature; VW/FO - variable water flow rate/fixed outlet temperature; FW/FO - fixed water flow rate/fixed outlet temperature.

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: G													
SEPR - (EN 14825: 2018)													
SEPR	A	W/W	5,82	5,37	5,48	5,60	5,37	4,87	-	-	-	-	-
	E	W/W	6,42	5,83	5,62	5,85	5,69	5,10	-	-	-	-	-
	N,U	W/W	6,96	6,54	6,28	6,28	6,08	5,63	6,13	5,90	5,77	5,73	5,58
	A,E	type	FW/FO	FW/FO	FW/FO	FW/FO	FW/FO	FW/FO	-	-	-	-	-
Water Regulation (1)	N,U	type	FW/FO	FW/FO	FW/FO	FW/FO	FW/FO	FW/FO	FW/FO	FW/FO	FW/FO	FW/FO	FW/FO

(1) VW/VO - variable water flow rate/variable outlet temperature; FW/VO - fixed water flow rate/variable outlet temperature; VW/FO - variable water flow rate/fixed outlet temperature; FW/FO - fixed water flow rate/fixed outlet temperature.

ELECTRIC DATA

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Electric data													
Maximum current (FLA)	A	A	190,4	206,8	242,5	271,9	301,2	330,2	-	-	-	-	-
	E	A	209,8	226,2	242,5	291,3	320,6	349,6	-	-	-	-	-
	N	A	229,2	245,6	261,9	310,7	340,0	369,0	423,3	487,5	532,3	580,7	609,7
	U	A	209,8	226,2	242,5	291,3	320,6	349,6	398,0	468,1	512,9	561,3	590,3
Peak current (LRA)	A	A	379,0	434,2	469,9	522,6	551,9	664,4	-	-	-	-	-
	E	A	398,4	453,6	469,9	542,0	571,3	683,8	-	-	-	-	-
	N	A	417,8	473,0	489,3	561,4	590,7	703,2	757,5	821,7	866,5	914,9	943,9
	U	A	398,4	453,6	469,9	542,0	571,3	683,8	732,2	802,3	847,1	895,5	924,5

GENERAL TECHNICAL DATA

Refrigerant circuit

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Compressor													
Type	A,E	type	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	-	-	-	-	-
	N,U	type						Scroll					
Compressor regulation	A,E	type	On-Off	On-Off	On-Off	On-Off	On-Off	On-Off	-	-	-	-	-
	N,U	type						On-Off					
Number	A,E	no.	4	4	4	4	4	4	-	-	-	-	-
	N,U	no.	4	4	4	4	4	4	4	5	6	6	6
Circuits	A,E	no.	2	2	2	2	2	2	-	-	-	-	-
	N,U	no.	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	A,E	type	R410A	R410A	R410A	R410A	R410A	R410A	-	-	-	-	-
	N,U	type						R410A					
Total refrigerant charge (1)	A	kg	29,00	30,00	40,00	44,00	45,00	43,00	-	-	-	-	-
	E	kg	41,00	40,00	43,00	53,00	53,00	53,00	-	-	-	-	-
	N	kg	52,00	53,00	53,00	59,00	59,00	70,00	84,00	91,00	90,00	124,00	124,00
	U	kg	41,00	40,00	43,00	53,00	53,00	53,00	62,00	75,00	76,00	113,00	112,00
Potential global heating (GWP)	A,E		2088	2088	2088	2088	2088	2088	-	-	-	-	-
	N,U							2088					
Equivalent CO ₂	A	tCO ₂ eq	60,55	62,64	83,52	91,87	93,96	89,78	-	-	-	-	-
	E	tCO ₂ eq	85,61	83,52	89,78	110,66	110,66	110,66	-	-	-	-	-
	N	tCO ₂ eq	108,58	110,66	110,66	123,19	123,19	146,16	175,39	190,01	187,92	258,91	258,91
	U	tCO ₂ eq	85,61	83,52	89,78	110,66	110,66	110,66	129,46	156,60	158,69	235,94	233,86

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

System side heat exchanger

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Hydraulic connections													
Connections (in/out)	A,E	Type	Grooved joints	Grooved joints	Grooved joints	Grooved joints	Grooved joints	Grooved joints	-	-	-	-	-
	N,U	Type	Grooved joints										
Hydraulic connections without hydronic kit													
Sizes (in/out)	A,E	Ø	3"	3"	3"	3"	3"	3"	-	-	-	-	-
	N,U	Ø	3"	3"	3"	3"	3"	3"	4"	4"	4"	4"	4"
Hydraulic connections with hydronic kit													
Sizes (in/out)	A,E	Ø	3"	3"	3"	3"	3"	3"	-	-	-	-	-
	N,U	Ø	3"	3"	3"	3"	3"	3"	4"	4"	4"	4"	4"

In the versions without a hydronic kit, the water filter is supplied with a connection point for making the connection. In the versions with a hydronic kit, it is supplied ready-mounted.

Fans

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: B													
Fan													
Type	A,E	type	axials	axials	axials	axials	axials	axials	-	-	-	-	-
	N,U	type	axials										
Number	A	no.	4	4	6	6	6	6	-	-	-	-	-
	E	no.	6	6	6	8	8	8	-	-	-	-	-
	N	no.	8	8	8	10	10	10	12	14	14	16	16
	U	no.	6	6	6	8	8	8	10	12	12	14	14
Air flow rate	A	m ³ /h	57600	57600	86400	86400	86400	86400	-	-	-	-	-
	E	m ³ /h	64800	64800	64800	86400	86400	86400	-	-	-	-	-
	N	m ³ /h	86400	86400	86400	108000	108000	108000	129600	151200	151200	172800	172800
	U	m ³ /h	86400	86400	86400	115200	115200	115200	144000	172800	172800	201600	201600

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: G													
Fan													
Type	A,E	type	axials	axials	axials	axials	axials	axials	-	-	-	-	-
	N,U	type	axials										
Number	A	no.	4	4	6	6	6	6	-	-	-	-	-
	E	no.	6	6	6	8	8	8	-	-	-	-	-
	N	no.	8	8	8	10	10	10	12	14	14	16	16
	U	no.	6	6	6	8	8	8	10	12	12	14	14
Air flow rate	A	m ³ /h	57600	57600	86400	86400	86400	86400	-	-	-	-	-
	E	m ³ /h	64800	64800	64800	86400	86400	86400	-	-	-	-	-
	N	m ³ /h	86400	86400	86400	108000	108000	108000	129600	151200	151200	172800	172800
	U	m ³ /h	86400	86400	86400	115200	115200	115200	144000	172800	172800	201600	201600

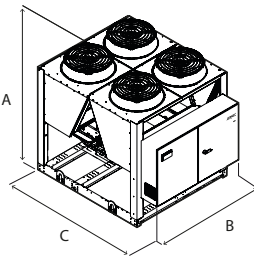
Sound data

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Sound data calculated in cooling mode (1)													
Sound power level	A	dB(A)	88,0	88,1	90,3	90,2	90,2	90,2	-	-	-	-	-
	E	dB(A)	85,0	85,1	85,1	86,5	86,5	86,5	-	-	-	-	-
	N	dB(A)	86,5	86,6	86,6	87,7	87,7	87,7	88,7	90,0	90,5	91,7	92,2
	U	dB(A)	90,2	90,3	90,3	91,7	91,7	91,7	92,9	94,4	94,9	96,2	96,7
Sound pressure level (10 m)	A	dB(A)	55,9	56,0	58,0	57,9	57,9	57,9	-	-	-	-	-
	E	dB(A)	52,9	53,0	52,8	54,3	54,3	54,3	-	-	-	-	-
	N	dB(A)	54,4	54,5	54,4	55,4	55,4	55,4	56,3	57,6	58,0	59,2	59,6
	U	dB(A)	58,0	58,1	58,0	59,4	59,4	59,4	60,5	62,0	62,4	63,7	64,0

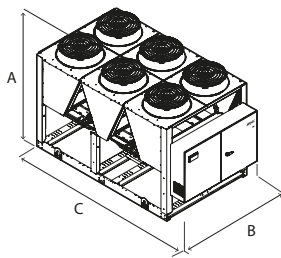
(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS

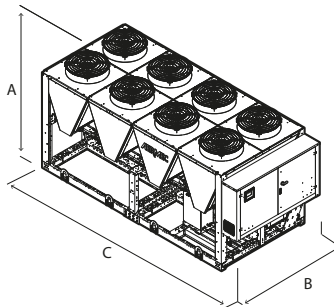
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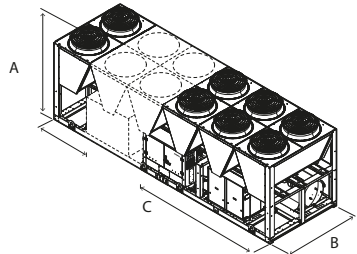
NRB 1000-1400 A
NRB 0800-1000 E-U



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	mm	2450	2450	2450	2450	2450	2450	-	-	-	-	-
	N,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	A,E	mm	2200	2200	2200	2200	2200	2200	-	-	-	-	-
	N,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	A	mm	2780	2780	3970	3970	3970	3970	-	-	-	-	-
	E	mm	3970	3970	3970	4760	4760	4760	-	-	-	-	-
	N	mm	4760	4760	4760	5950	5950	5950	7140	8330	8330	9520	9520
	U	mm	3970	3970	3970	4760	4760	4760	5950	7140	7140	8330	8330

■ 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.

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