

NRB 0800-2406 W

Reversible air/water heat pump with shell and tube heat exchanger

Cooling capacity 196,4 ÷ 647,7 kW
Heating capacity 209,8 ÷ 683,9 kW

- Shell and tube heat exchanger
- High efficiency also at partial loads
- Night mode
- HP floating: ESEER +7% with inverter fans



DESCRIPTION

Reversible outdoor heat pumps for the production of chilled/heated water designed to satisfy the needs of residential and commercial buildings, or for industrial applications. They are outdoor units with axial fan scroll compressors and Shell and tube exchangers. The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

- ° Standard
- A High efficiency
- E Silenced high efficiency
- L Standard silenced

FEATURES

Operating field

Working at full load up to -10 °C outside air temperature in winter, and up to 50 °C in summer. Hot water production up to 55 °C. (for more information, refer to the technical documentation).

Dual-circuit unit

The units are dual-circuit, to ensure maximum efficiency both at full load and at partial load.

Electronic expansion valve

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.

It is standard in all sizes from 1805 to 2406.

Option integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations with one or two pumps, high or low head, to obtain a solution that allows you to save money and to facilitate installation.

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.

- Possibility to control two units in a Master-Slave configuration
- 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.
- **Floating HP control:** available for all models with inverter fans or with DCPX. Together with continuous fan modulation, it optimises unit operation in any working point, enhancing energy efficiency with partial loads. **ESEER up to +7% with inverter fans.**
- **Night mode:** only in the **non-silenced versions with the fan to be, inverter or phase-cut or with the DCPX accessory**, a silenced operation profile can be set, which is useful, for example, at night for greater acoustic comfort, but always ensures performance even at peak load hours.

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.

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.

DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.

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

BRC1: Condensate drip tray. Consider 1 for each V-block.

COMPATIBILITY WITH VMF SYSTEM

For more information about VMF system, refer to the dedicated documentation.

ACCESSORIES COMPATIBILITY

Model	Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
AER485P1	°A,E,L	.	.	.	.	.	.	.	.	.	.	.
AERBAC-ONE	°A,E,L	.	.	.	.	.	.	.	.	.	.	.
AERBACP	°A,E,L	.	.	.	.	.	.	.	.	.	.	.
AERLINK	°A,E,L	.	.	.	.	.	.	.	.	.	.	.
AERNET	°A,E,L	.	.	.	.	.	.	.	.	.	.	.
FL	°A,E,L	.	.	.	.	.	.	.	.	.	.	.
MULTICHILLER-EVO	°A,E,L	.	.	.	.	.	.	.	.	.	.	.
PGD1	°A,E,L	.	.	.	.	.	.	.	.	.	.	.

Remote panel

Model	Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
PR4	°A,E,L	.	.	.	.	.	.	.	.	.	.	.

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											
°	AVX1001	AVX1001	AVX1004	AVX1004	AVX1004	AVX1004	AVX1004	AVX1123	AVX1123	AVX1124	AVX1124
A, L	AVX1001	AVX1004	AVX1004	AVX1004	AVX1004	AVX1123	AVX1123	AVX1124	AVX1124	AVX1115	AVX1115
E	AVX1004	AVX1123	AVX1123	AVX1123	AVX1123	AVX1124	AVX1119	AVX1117	AVX1117	AVX1116	AVX1116
Integrated hydronic kit: DA, DB, DC, DD, DE, DF, DG, DH, DI, DJ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ											
°	-	-	AVX1004	AVX1004	AVX1004	-	-	AVX1123	AVX1123	AVX1124	AVX1124
A, L	-	AVX1004	-	-	-	AVX1123	AVX1123	AVX1124	AVX1124	AVX1115	AVX1115
E	AVX1004	AVX1123	AVX1123	AVX1123	AVX1123	AVX1124	AVX1119	AVX1117	AVX1117	AVX1116	AVX1116

Condensation control temperature

Ver	0800	0900	1000	1100	1200	1400
°	DCPX130	DCPX130	DCPX131	DCPX131	DCPX131	DCPX131
A	DCPX130	DCPX131	DCPX131	DCPX131	DCPX131	DCPX132
E, L	As standard	As standard	As standard	As standard	As standard	As standard

Ver	1600	1805	2006	2206	2406
°	DCPX131	DCPX155	DCPX155	DCPX156	DCPX156
A	DCPX132	DCPX156	DCPX156	DCPX134	DCPX134
E, L	As standard	As standard	As standard	As standard	As standard

Device for peak current reduction

Ver	0800	0900	1000	1100	1200	1400
°A, E, L	DRENRB0800 (1)	DRENRB0900 (1)	DRENRB1000 (1)	DRENRB1100 (1)	DRENRB1200 (1)	DRENRB1400 (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

Ver	1600	1805	2006	2206	2406
°A, E, L	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
°	RIFNRB0800	RIFNRB0900	RIFNRB1000	RIFNRB1100	RIFNRB1200	RIFNRB1400
A, L	RIFNRB0800	RIFNRB0900	RIFNRB1000	RIFNRB1100	RIFNRB1200	RIFNRB1401
E	RIFNRB0800	RIFNRB0901	RIFNRB1001	RIFNRB1001	RIFNRB1201	RIFNRB1401

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

Ver	1600	1805	2006	2206	2406
°	RIFNRB1600	RIFNRB1805	RIFNRB2006	RIFNRB2206	RIFNRB2406
A, L	RIFNRB1601	RIFNRB1805	RIFNRB2006	RIFNRB2216	RIFNRB2416
E	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
Integrated hydronic kit: 00											
°	GP2VN	GP2VN	GP3VN	GP3VN	GP3VN	GP3VN	GP3VN	GP4VN	GP4VN	GP5VN	GP5VN
A	GP2VN	GP3VN	GP3VN	GP3VN	GP3VN	GP4VN	GP4VN	GP5VN	GP4VN	GP6V	GP6V
E	GP3VN	GP4VN	GP4VN	GP4VN	GP4VN	GP4VN	GP6V	GP7V	GP7V	GP8V	GP8V
L	GP2VN	GP3VN	GP3VN	GP3VN	GP3VN	GP5VN	GP4VN	GP5VN	GP5VN	GP6V	GP6V
Integrated hydronic kit: DA, DB, DC, DD, DE, DF, DG, DH, DI, DJ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ											
°	-	-	GP3VN	GP3VN	GP3VN	-	-	GP4VN	GP4VN	GP5VN	GP5VN
A	-	GP3VN	-	-	-	GP4VN	GP4VN	GP5VN	GP4VN	GP6V	GP6V
E	GP3VN	GP4VN	GP4VN	GP4VN	GP4VN	GP4VN	GP6V	GP7V	GP7V	GP8V	GP8V
L	-	GP3VN	-	-	-	GP5VN	GP4VN	GP5VN	GP5VN	GP6V	GP6V

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

Condensate drip

Ver	0800	0900	1000	1100	1200	1400
°	BRC1x2 (1)	BRC1x2 (1)	BRC1x3 (1)	BRC1x3 (1)	BRC1x3 (1)	BRC1x3 (1)
A, L	BRC1x2 (1)	BRC1x3 (1)	BRC1x3 (1)	BRC1x3 (1)	BRC1x3 (1)	BRC1x4 (1)
E	BRC1x3 (1)	BRC1x4 (1)	BRC1x4 (1)	BRC1x4 (1)	BRC1x4 (1)	BRC1x5 (1)

(1) Condensate drip tray. Consider 1 for each V-block.

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

Ver	1600	1805	2006	2206	2406
°	BRC1x3 (1)	BRC1x4 (1)	BRC1x4 (1)	BRC1x5 (1)	BRC1x5 (1)
A, L	BRC1x4 (1)	BRC1x5 (1)	BRC1x5 (1)	BRC1x6 (1)	BRC1x6 (1)
E	BRC1x6 (1)	BRC1x7 (1)	BRC1x7 (1)	BRC1x8 (1)	BRC1x8 (1)

(1) Condensate drip tray. Consider 1 for each V-block.

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
°	Standard mechanic thermostatic valve
9	Model
W	Heat pump with shell and tube heat exchanger
10	Heat recovery
D	With desuperheater (1)
°	Without heat recovery
11	Version
°	Standard
A	High efficiency
E	Silenced high efficiency
L	Standard silenced
12	Coils
R	Copper pipes-copper fins
V	Copper - coated aluminium
°	Copper - aluminium
13	Fans
J	Inverter
°	Standard
14	Power supply
°	400V ~ 3 50Hz with magnet circuit breakers

Field	Description
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 (2)
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 (2)

(1) The desuperheater can only be used with cold running.

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

Compatibility of models with hydronic units available with a configurator

Version	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406	2600	2800	3000	3200	3400	3600
Standard	H°	-	-	•	•	-	-	•	•	•	•	•	•	•	•	•	•
Standard silenced	HL	-	•	-	-	-	-	•	•	•	•	•	•	•	•	•	•
High efficiency	HA	-	•	-	-	-	-	•	•	•	•	•	•	•	•	•	•
Silenced high efficiency	HE	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

PERFORMANCE SPECIFICATIONS

NRB H°

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Fans: °												
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	196,4	218,0	251,8	279,2	314,2	353,8	389,0	456,7	501,9	568,7	616,1
Input power	kW	74,1	86,1	91,7	107,9	119,5	141,6	155,6	172,6	193,2	211,2	231,1
Cooling total input current	A	131,20	149,90	163,10	189,00	207,00	242,20	263,40	296,40	330,50	365,20	397,90
EER	W/W	2,65	2,53	2,74	2,59	2,63	2,50	2,50	2,65	2,60	2,69	2,67
Water flow rate system side	l/h	33.794	37.515	43.314	48.020	54.046	60.853	66.910	78.531	86.311	97.783	105.939
Pressure drop system side	kPa	34	24	32	26	33	31	37	32	38	37	42

Heating performance 40 °C / 45 °C (2)

Heating capacity	kW	215,0	237,4	275,0	306,0	343,9	366,2	412,6	478,4	527,7	592,0	643,2
Input power	kW	70,2	77,7	89,6	99,8	112,3	121,7	137,0	157,3	174,3	193,9	210,7
Heating total input current	A	124,70	137,80	157,60	175,20	195,20	211,60	236,40	274,00	303,60	340,20	369,20
COP	W/W	3,06	3,06	3,07	3,07	3,06	3,01	3,01	3,04	3,03	3,05	3,05
Water flow rate system side	l/h	37.311	41.207	47.745	53.116	59.705	63.585	71.640	83.071	91.620	102.803	111.681
Pressure drop system side	kPa	42	28	38	32	40	34	42	36	42	40	46

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

NRB HL

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Fans: °												
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	197,9	227,9	247,7	275,2	301,1	359,1	392,2	453,8	495,0	552,5	592,9
Input power	kW	75,3	78,6	89,8	106,2	123,2	133,0	153,4	169,0	193,9	208,9	234,1
Cooling total input current	A	126,10	132,70	150,00	176,00	203,40	219,90	252,30	279,50	321,00	347,40	389,90
EER	W/W	2,63	2,90	2,76	2,59	2,44	2,70	2,56	2,69	2,55	2,64	2,53
Water flow rate system side	l/h	34.040	39.194	42.596	47.339	51.779	61.758	67.431	78.030	85.114	95.003	101.921
Pressure drop system side	kPa	14	18	15	19	14	20	18	23	23	29	17

Heating performance 40 °C / 45 °C (2)

Heating capacity	kW	209,8	250,3	274,3	304,8	334,3	394,3	431,0	497,4	543,0	609,3	654,3
Input power	kW	67,1	79,5	87,1	98,9	108,2	126,2	136,7	158,3	173,1	194,8	208,8
Heating total input current	A	118,90	138,80	151,80	170,80	187,00	216,20	234,10	271,60	298,80	336,20	363,30
COP	W/W	3,13	3,15	3,15	3,08	3,09	3,12	3,15	3,14	3,14	3,13	3,13
Water flow rate system side	l/h	36.429	43.447	47.619	52.924	58.032	68.469	74.854	86.379	94.306	105.817	113.644
Pressure drop system side	kPa	15	22	19	23	17	24	21	28	28	35	21

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

NRB HA

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Fans: °												
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	206,2	243,8	266,9	297,0	329,2	385,5	425,3	488,4	538,3	601,4	651,3
Input power	kW	71,8	78,2	88,1	102,2	117,2	129,2	147,2	163,7	184,8	201,3	222,3
Cooling total input current	A	127,40	141,00	156,90	178,90	203,30	225,30	254,00	285,30	321,10	352,30	388,80
EER	W/W	2,87	3,12	3,03	2,91	2,81	2,98	2,89	2,98	2,91	2,99	2,93
Water flow rate system side	l/h	35.459	41.942	45.909	51.076	56.619	66.291	73.125	83.982	92.547	103.407	111.966
Pressure drop system side	kPa	15	21	18	22	17	23	21	27	27	34	21

Heating performance 40 °C / 45 °C (2)

Heating capacity	kW	214,3	254,4	279,0	310,5	341,2	400,9	438,9	506,0	553,2	620,0	666,5
Input power	kW	66,6	79,3	86,7	97,1	106,2	124,8	137,1	157,5	171,8	193,5	207,0
Heating total input current	A	120,50	142,20	154,90	171,50	187,20	219,10	240,10	276,50	303,00	341,50	367,80
COP	W/W	3,22	3,21	3,22	3,20	3,21	3,21	3,20	3,21	3,22	3,20	3,22
Water flow rate system side	l/h	37.204	44.148	48.436	53.909	59.226	69.618	76.226	87.877	96.076	107.669	115.772
Pressure drop system side	kPa	16	23	20	24	18	25	22	29	29	36	22

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

NRB HE

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Fans: °												
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	209,6	241,7	264,7	294,5	326,7	377,8	432,4	489,4	540,5	597,8	647,7
Input power	kW	67,3	77,4	85,0	98,1	112,4	125,3	139,1	157,0	177,4	192,3	215,2
Cooling total input current	A	114,80	131,80	143,70	164,20	187,10	207,90	230,20	261,10	295,90	321,80	361,50
EER	W/W	3,12	3,12	3,11	3,00	2,91	3,02	3,11	3,12	3,05	3,11	3,01
Water flow rate system side	l/h	36.053	41.586	45.538	50.642	56.185	64.960	74.341	84.155	92.932	102.793	111.352
Pressure drop system side	kPa	15	20	18	22	16	22	21	27	27	33	21
Heating performance 40 °C / 45 °C (2)												
Heating capacity	kW	223,4	258,1	283,7	316,7	349,3	403,2	458,7	520,7	571,9	634,1	683,9
Input power	kW	69,3	80,5	87,9	98,5	109,0	126,1	143,1	162,7	177,1	198,2	211,7
Heating total input current	A	122,20	140,20	152,80	169,70	187,90	215,70	244,30	278,10	304,70	341,00	367,20
COP	W/W	3,22	3,21	3,23	3,22	3,20	3,20	3,21	3,20	3,23	3,20	3,23
Water flow rate system side	l/h	38.791	44.787	49.248	54.989	60.660	70.010	79.655	90.422	99.327	110.122	118.791
Pressure drop system side	kPa	17	23	20	25	19	25	24	31	31	38	23

(1) Data EN 14511:2022; Heat exchanger water (services side) 12 °C / 7 °C; outside air 35 °C

(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

ENERGY INDEX**NRB H°**

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Fans: °												
SEER - 12/7 (EN14825: 2018)												
SEER	W/W	3,79	3,66	3,88	3,81	3,90	3,80	3,89	3,92	3,80	-	-
Seasonal efficiency	%	148,40	143,50	152,20	149,50	153,20	149,10	152,70	153,70	148,90	-	-
Water Regulation (1)	type	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	-	-
SEER - 23/18 (EN14825: 2018)												
SEER	W/W	-	-	-	-	-	-	-	-	-	4,67	4,76
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	183,90	187,30
Water Regulation (1)	type	-	-	-	-	-	-	-	-	-	FW/FO	FW/FO
SEPR - (EN 14825: 2018)												
SEPR	W/W	-	-	-	-	-	-	-	-	-	5,53	5,54
Water Regulation (1)	type	-	-	-	-	-	-	-	-	-	FW/FO	FW/FO
Performance in average ambient conditions (average) - 35 °C (2)												
Pdesignh	kW	203,00	224,00	260,00	289,00	325,00	346,00	296,00	343,00	379,00	425,00	462,00
SCOP	W/W	3,65	3,65	3,65	3,68	3,65	3,60	3,73	3,73	3,80	3,73	3,80
ηsh	%	143,00	143,00	143,00	144,00	143,00	141,00	146,00	146,00	149,00	146,00	149,00
Water Regulation (1)	type	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO

(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.

(2) Efficiencies for low temperature applications (35 °C)

NRB HL

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Fans: °												
SEER - 12/7 (EN14825: 2018)												
SEER	W/W	3,83	4,01	3,92	3,90	3,82	4,05	3,99	4,04	3,87	-	-
Seasonal efficiency	%	150,30	157,20	153,90	152,80	149,60	159,00	156,40	158,60	151,70	-	-
Water Regulation (1)	type	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	-	-
SEER - 23/18 (EN14825: 2018)												
SEER	W/W	-	-	-	-	-	-	-	-	-	4,72	4,67
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	185,70	183,60
Water Regulation (1)	type	-	-	-	-	-	-	-	-	-	FW/FO	FW/FO
SEPR - (EN 14825: 2018)												
SEPR	W/W	-	-	-	-	-	-	-	-	-	5,51	5,51
Water Regulation (1)	type	-	-	-	-	-	-	-	-	-	FW/FO	FW/FO
Performance in average ambient conditions (average) - 35 °C (2)												
Pdesignh	kW	197,00	235,00	258,00	286,00	314,00	370,00	306,00	353,00	385,00	433,00	464,00
SCOP	W/W	3,73	3,75	3,75	3,68	3,68	3,73	3,93	3,83	3,95	3,83	3,93
ηsh	%	146,00	147,00	147,00	144,00	144,00	146,00	154,00	150,00	155,00	150,00	154,00
Water Regulation (1)	type	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO

(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.

(2) Efficiencies for low temperature applications (35 °C)

NRB HA

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Fans: °												
SEER - 12/7 (EN14825: 2018)												
SEER	W/W	3,96	4,13	4,09	4,09	4,07	4,23	4,22	4,22	4,10	-	-
Seasonal efficiency	%	155,40	162,10	160,40	160,60	159,70	166,10	165,60	165,60	160,90	-	-
Water Regulation (1)	type	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	-	-
SEER - 23/18 (EN14825: 2018)												
SEER	W/W	-	-	-	-	-	-	-	-	-	4,96	5,01
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	195,30	197,40
Water Regulation (1)	type	-	-	-	-	-	-	-	-	-	FW/FO	FW/FO
SEPR - (EN 14825: 2018)												
SEPR	W/W	-	-	-	-	-	-	-	-	-	5,52	5,52
Water Regulation (1)	type	-	-	-	-	-	-	-	-	-	FW/FO	FW/FO
Performance in average ambient conditions (average) - 35 °C (2)												
Pdesignh	kW	201,00	239,00	262,00	292,00	320,00	284,00	311,00	359,00	392,00	584,00	627,00
SCOP	W/W	3,78	3,83	3,78	3,80	3,78	3,88	3,75	3,68	3,88	3,68	3,80
ηsh	%	148,00	150,00	148,00	149,00	148,00	152,00	147,00	144,00	152,00	144,00	149,00
Water Regulation (1)	type	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO
Performance in average ambient conditions (average) - 55 °C (3)												
Pdesignh	kW	-	-	-	-	-	-	-	-	-	-	-
SCOP	W/W	-	-	-	-	-	-	-	-	-	-	-
ηsh	%	-	-	-	-	-	-	-	-	-	-	-
Water Regulation (1)	type	-	-	-	-	-	-	-	-	-	-	-

(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.

(2) Efficiencies for low temperature applications (35 °C)

(3) Efficiencies for average temperature applications (55 °C)

NRB HE

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Fans: °												
SEER - 12/7 (EN14825: 2018)												
SEER	W/W	4,16	4,15	4,18	4,19	4,16	4,27	4,39	4,36	4,22	-	-
Seasonal efficiency	%	163,40	163,00	164,10	164,70	163,40	167,90	172,70	171,20	165,70	-	-
Water Regulation (1)	type	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	-	-
SEER - 23/18 (EN14825: 2018)												
SEER	W/W	-	-	-	-	-	-	-	-	-	5,16	5,20
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	203,60	204,90
Water Regulation (1)	type	-	-	-	-	-	-	-	-	-	FW/FO	FW/FO
SEPR - (EN 14825: 2018)												
SEPR	W/W	-	-	-	-	-	-	-	-	-	5,52	5,54
Water Regulation (1)	type	-	-	-	-	-	-	-	-	-	FW/FO	FW/FO
Performance in average ambient conditions (average) - 35 °C (2)												
Pdesignh	kW	210,00	242,00	266,00	298,00	328,00	328,00	286,00	325,00	369,00	597,00	643,00
SCOP	W/W	3,78	3,83	3,78	3,83	3,75	3,75	3,85	3,75	3,65	3,68	3,80
ηsh	%	148,00	150,00	148,00	150,00	147,00	147,00	151,00	147,00	143,00	144,00	149,00
Water Regulation (1)	type	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO
Performance in average ambient conditions (average) - 55 °C (3)												
Pdesignh	kW	-	-	-	-	-	-	-	-	-	-	-
SCOP	W/W	-	-	-	-	-	-	-	-	-	-	-
ηsh	%	-	-	-	-	-	-	-	-	-	-	-
Water Regulation (1)	type	-	-	-	-	-	-	-	-	-	-	-

(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.

(2) Efficiencies for low temperature applications (35 °C)

(3) Efficiencies for average temperature applications (55 °C)

ELECTRIC DATA

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406	
Electric data													
Maximum current (FLA)	°	A	168,6	185,0	209,8	239,2	268,5	297,5	326,5	423,4	487,6	516,6	570,9
	A _L	A	168,6	193,5	209,8	239,2	268,5	306,0	335,0	468,1	512,9	561,3	590,3
	E	A	177,1	202,0	218,3	247,7	277,0	314,5	352,0	487,5	532,3	580,7	609,7
Peak current (LRA)	°	A	357,2	412,4	437,2	489,9	519,2	631,7	660,7	757,6	821,8	850,8	905,1
	A _L	A	357,2	420,9	437,2	489,9	519,2	640,2	669,2	802,3	847,1	895,5	924,5
	E	A	365,7	429,4	445,7	498,4	527,7	648,7	686,2	821,7	866,5	914,9	943,9

GENERAL TECHNICAL DATA

Refrigerant circuit

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Fans: °													
Compressor													
Type	° ,A,E,L	type	Scroll										
Compressor regulation	° ,A,E,L	type	On-Off										
Number	° ,A,E,L	no.	4	4	4	4	4	4	4	5	6	6	6
Circuits	° ,A,E,L	no.	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	° ,A,E,L	type	R410A										
Total refrigerant charge (1)	°	kg	44,00	44,00	54,00	62,00	62,00	60,00	60,00	81,00	82,00	100,00	95,00
	A	kg	44,00	60,00	64,00	62,00	66,00	81,00	78,00	99,00	102,00	117,00	119,00
	E	kg	58,00	76,50	78,00	76,00	78,00	93,00	112,00	136,00	143,00	152,00	152,00
	L	kg	44,00	60,00	64,00	62,00	66,00	78,00	78,00	104,00	102,00	117,00	117,00
Potential global heating (GWP)	° ,A,E,L		2088										
Equivalent CO ₂	°	tCO ₂ eq	91,88	91,88	112,75	129,45	129,45	125,28	125,28	169,12	171,21	208,80	198,36
	A	tCO ₂ eq	91,88	125,30	133,63	129,45	137,80	169,12	162,86	206,71	212,97	244,29	248,47
	E	tCO ₂ eq	121,10	159,70	162,86	158,68	162,86	194,18	233,85	283,96	298,58	317,37	317,37
	L	tCO ₂ eq	91,88	125,30	133,63	129,45	137,80	162,86	162,86	217,15	212,97	244,29	244,29

(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
System side heat exchanger													
Type	° ,A,E,L	type	Shell and tube										
Hydraulic connections													
Connections (in/out)	° ,A,E,L	Type	Grooved joints										
Hydraulic connections without hydronic kit													
Sizes (in/out)	°	Ø	5"	5"	5"	5"	5"	5"	5"	6"	6"	6"	6"
	A,E,L	Ø	5"	5"	5"	5"	6"	6"	6"	6"	6"	6"	6"
Hydraulic connections with hydronic kit													
Sizes (in/out)	°	Ø	-	-	3"	3"	3"	-	-	4"	4"	4"	4"
	A,L	Ø	-	3"	-	-	-	3"	4"	4"	4"	4"	4"
	E	Ø	3"	3"	3"	3"	3"	3"	4"	4"	4"	4"	4"

Water filter not supplied. Installation is mandatory or the guarantee will void.

Fans

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Fans: °													
Fan													
Type	° ,A,E,L	type	Axial										
Fan motor	° ,A	type	Asynchronous										
	E,L	type	Asynchronous with phase cut										
Number	°	no.	4	4	6	6	6	6	6	8	8	10	10
	A,L	no.	4	6	6	6	6	8	8	10	10	12	12
	E	no.	6	8	8	8	8	10	12	14	14	16	16
Air flow rate	°	m ³ /h	80000	80000	120000	120000	120000	120000	120000	160000	160000	200000	200000
	A	m ³ /h	80000	120000	120000	120000	120000	160000	160000	200000	200000	240000	240000
	E	m ³ /h	90000	120000	120000	120000	120000	150000	180000	210000	210000	240000	240000
	L	m ³ /h	60000	90000	90000	90000	90000	120000	120000	150000	150000	180000	180000

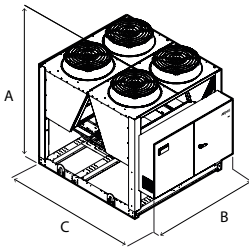
Sound data

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Fans: °													
Sound data calculated in cooling mode (1)													
Sound power level	°	dB(A)	89,5	89,5	91,6	91,6	91,6	91,6	91,6	93,1	93,1	94,2	94,2
	A	dB(A)	89,5	91,6	91,6	91,6	91,6	93,1	93,1	94,2	94,2	95,1	95,1
	E	dB(A)	84,6	86,1	86,1	86,1	86,1	87,2	88,2	89,4	89,9	91,1	91,6
	L	dB(A)	82,6	84,6	84,6	84,6	84,6	86,1	86,1	87,7	88,2	89,6	90,1

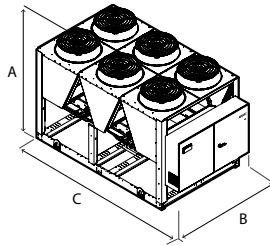
(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS

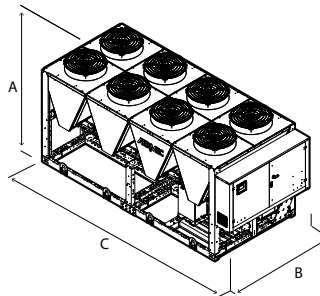
NRB 0800 - 0900 °
NRB 0800 L/A



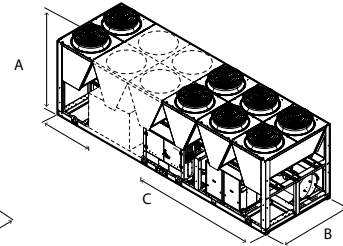
NRB 1000 - 1600 °
NRB 0900 - 1200 L/A
NRB 0800 E



NRB 1805 - 2006 °
NRB 1400 - 1600 L/A
NRB 0900 - 1200 E



NRB 2206 - 2406 °
NRB 1805 - 2406 L/A
NRB 1400 - 2406 E



Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406	
Dimensions and weights without hydronic kit														
A	°	A,E,L	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	
B	°	A,E,L	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	
C	°		mm	2780	2780	3970	3970	3970	3970	5160	5160	6350	6350	
		A,L	mm	2780	3970	3970	3970	3970	4760	4760	6350	6350	7140	7140
Empty weight	E		mm	3970	4760	4760	4760	4760	5950	7140	8330	8330	9520	9520
	°		kg	2.630	2.710	3.280	3.330	3.380	3.430	3.460	4.260	4.350	5.040	5.120
Empty weight	A,L		kg	2.680	3.250	3.330	3.360	3.460	4.120	4.220	4.870	4.980	5.500	5.870
	E		kg	3.210	3.890	3.970	4.000	4.100	4.650	5.200	5.940	6.040	6.610	6.950
Dimensions and weights with pump/s														
A	°		mm	-	-	2450	2450	2450	-	-	2450	2450	2450	
	A,L		mm	-	2450	-	-	-	2450	2450	2450	2450	2450	
	E		mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	
B	°		mm	-	-	2200	2200	2200	-	-	2200	2200	2200	
	A,L		mm	-	2200	-	-	-	2200	2200	2200	2200	2200	
	E		mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	
C	°		mm	-	-	3970	3970	3970	-	-	5160	5160	6350	
	A,L		mm	-	3970	-	-	-	4760	4760	6350	6350	7140	
	E		mm	3970	4760	4760	4760	4760	5950	7140	8330	8330	9520	
Integrated hydronic kit: 00														
Weights														
Empty weight	°		kg	2.670	2.730	3.310	3.360	3.400	3.460	3.490	4.350	4.520	5.190	5.230
	A,L		kg	2.700	3.280	3.350	3.390	3.470	4.120	4.240	4.980	5.190	5.690	6.030
	E		kg	3.230	3.920	3.990	4.020	4.100	4.660	5.220	6.060	6.280	6.810	7.100

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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