

NRB 0800W-2406W

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 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 supervision systems with MODBUS protocol.

AERBACP: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP

AERLINK: Wifi Gateway with an RS485 serial port that can be installed on all machines or on all controllers having an RS485 serial port themselves. The module is capable of simultaneously activating the AP WIFI (Access point) and WIFI Station functions, the latter making it possible to connect to the home or business LAN both with VMF-E5 and E6. To facilitate certain management and control operations of the unit, the AERAPP application is available both for Android and iOS systems.

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 unit); also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.

FL: Flow switch.

MULTICHILLER_EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring constant flow rate to the evaporators.

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

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	.	.	.	.	.	.	.	.	.	.	.
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	.	.	.	.	.	.	.	.	.	.	.

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

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	RIFNRB1101	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
°	Standard mechanic thermostatic valve
X	Electronic thermostatic expansion valve
9	Model
W	Heat pump with shell and tube heat exchanger
10	Heat recovery
°	Without heat recovery
D	With desuperheater (1)
11	Version
°	Standard
A	High efficiency
E	Silenced high efficiency
L	Standard silenced
12	Coils
°	Copper-aluminium
R	Copper pipes-copper fins
S	Copper pipes-Tinned copper fins
V	Copper pipes-Coated aluminium fins
13	Fans
°	Standard
J	Inverter
14	Power supply

Field	Description
°	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 (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
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	131,0	150,0	163,0	189,0	207,0	242,0	263,0	296,0	331,0	365,0	398,0
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	33794	37515	43314	48020	54046	60853	66910	78531	86311	97783	105939
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	125,0	138,0	158,0	175,0	195,0	212,0	236,0	274,0	304,0	340,0	369,0
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	37311	41207	47745	53116	59705	63585	71640	83071	91620	102803	111681
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
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	126,0	133,0	150,0	176,0	203,0	220,0	252,0	280,0	321,0	347,0	390,0
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	34040	39194	42596	47339	51779	61758	67431	78030	85114	95003	101921
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	119,0	139,0	152,0	171,0	187,0	216,0	234,0	272,0	299,0	336,0	363,0
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	36429	43447	47619	52924	58032	68469	74854	86379	94306	105817	113644
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
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	127,0	141,0	157,0	179,0	203,0	225,0	254,0	285,0	321,0	352,0	389,0
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	35459	41942	45909	51076	56619	66291	73125	83982	92547	103407	111966
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	120,0	142,0	155,0	172,0	187,0	219,0	240,0	277,0	303,0	342,0	368,0
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	37204	44148	48436	53909	59226	69618	76226	87877	96076	107669	115772
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
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	115,0	132,0	144,0	164,0	187,0	208,0	230,0	261,0	296,0	322,0	362,0
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	36053	41586	45538	50642	56185	64960	74341	84155	92932	102793	111352
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	122,0	140,0	153,0	170,0	188,0	216,0	244,0	278,0	305,0	341,0	367,0
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	38791	44787	49248	54989	60660	70010	79655	90422	99327	110122	118791
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.

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

ENERGY INDICES (REG. 2016/2281 EU)

NRB H°

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
UE 813/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 400 kW (1)												
Pdesignh	kW	203	224	260	289	325	346	296	343	379	425	462
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	143	143	144	143	141	146	143	149	146	149
SEER - 12/7 (EN14825:2018) with standard fans (2)												
SEER	W/W	3,79	3,66	3,88	3,81	3,91	3,80	3,89	3,92	3,80	-(3)	-(3)
Seasonal efficiency	%	148,40	143,50	152,20	149,50	153,20	149,10	152,70	153,80	149,00	-(3)	-(3)
SEER - (EN14825:2018) 12/7 with inverter fans (2)												
SEER	W/W	-	-	-	-	-	-	-	-	-	-(3)	-(3)
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	-(3)	-(3)
SEER - 23/18 (EN14825: 2018) with standard fans (4)												
SEER	W/W	-	-	-	-	-	-	-	-	-	4,67	4,76
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	183,90	187,30
SEER - 23/18 (EN14825: 2018) with inverter fans												
SEER	W/W	-	-	-	-	-	-	-	-	-	4,88	5,02
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	-	-
SEPR - (EN14825: 2018) High temperature with standard fans (4)												
SEPR	W/W	-	-	-	-	-	-	-	-	-	5,53	5,54
SEPR - (EN14825: 2018) High temperature with inverter fans (4)												
SEPR	W/W	-	-	-	-	-	-	-	-	-	5,53	5,54

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

(2) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.

(3) Non-compliant with 2016/2281 EU regulation for comfort applications 12°C / 7°C

(4) Calculation performed with FIXED water flow rate.

NRB HL

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
UE 813/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 400 kW (1)												
Pdesignh	kW	197	235	258	286	314	370	306	353	385	433	464
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	147	147	144	144	146	154	150	155	150	154
SEER - 12/7 (EN14825:2018) with standard fans (2)												
SEER	W/W	3,83	4,01	3,92	3,90	3,82	4,05	3,99	4,04	3,87	-(3)	-(3)
Seasonal efficiency	%	150,30	157,20	153,90	149,60	159,00	156,40	156,60	158,60	151,80	-(3)	-(3)
SEER - (EN14825:2018) 12/7 with inverter fans (2)												
SEER	W/W	-	-	-	-	-	-	-	-	-	-(3)	-(3)
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	-(3)	-(3)
SEER - 23/18 (EN14825: 2018) with standard fans (4)												
SEER	W/W	-	-	-	-	-	-	-	-	-	4,72	4,67
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	185,70	183,60
SEER - 23/18 (EN14825: 2018) with inverter fans												
SEER	W/W	-	-	-	-	-	-	-	-	-	5,08	5,11
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	-	-
SEPR - (EN14825: 2018) High temperature with standard fans (4)												
SEPR	W/W	-	-	-	-	-	-	-	-	-	5,51	5,51
SEPR - (EN14825: 2018) High temperature with inverter fans (4)												
SEPR	W/W	-	-	-	-	-	-	-	-	-	5,51	5,51

- (1) Efficiencies for low temperature applications (35 °C)
- (2) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
- (3) Non-compliant with 2016/2281 EU regulation for comfort applications 12°C / 7°C
- (4) Calculation performed with FIXED water flow rate.

NRB HA

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (1)												
Pdesignh	kW	196	233	255	284	312	367	304	351	384	430	462
SCOP	W/W	3,03	3,08	3,03	3,08	3,03	3,10	3,13	3,08	3,30	3,08	3,15
ηsh	%	118	120	118	120	118	121	122	120	129	120	123
SEER - 12/7 (EN14825:2018) with standard fans (2)												
SEER	W/W	3,96	4,13	4,09	4,09	4,07	4,23	4,22	4,22	4,10	-(3)	-(3)
Seasonal efficiency	%	155,40	162,10	160,40	160,60	159,70	166,10	165,60	165,80	161,0	-(3)	-(3)
SEER - (EN14825:2018) 12/7 with inverter fans (2)												
SEER	W/W	-	-	-	-	-	-	-	-	-	4,58	4,57
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	180,3%	179,6%
SEER - 23/18 (EN14825: 2018) with standard fans (4)												
SEER	W/W	-	-	-	-	-	-	-	-	-	4,96	5,01
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	195,30	197,40
SEER - 23/18 (EN14825: 2018) with inverter fans												
SEER	W/W	-	-	-	-	-	-	-	-	-	4,58	4,57
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	-	-
SEPR - (EN14825: 2018) High temperature with standard fans (4)												
SEPR	W/W	-	-	-	-	-	-	-	-	-	5,52	5,52
SEPR - (EN14825: 2018) High temperature with inverter fans (4)												
SEPR	W/W	-	-	-	-	-	-	-	-	-	5,52	5,52

- (1) Efficiencies for average temperature applications (55 °C)
- (2) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
- (3) Non-compliant with 2016/2281 EU regulation for comfort applications 12°C / 7°C
- (4) Calculation performed with FIXED water flow rate.

NRB HE

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (1)												
Pdesignh	kW	204	236	259	290	320	369	318	361	397	440	474
SCOP	W/W	3,05	3,08	3,05	3,10	3,03	3,08	3,13	3,05	3,30	3,08	3,15
ηsh	%	119	120	119	121	118	120	122	119	129	120	123
SEER - 12/7 (EN14825:2018) with standard fans (2)												
SEER	W/W	4,16	4,15	4,18	4,19	4,16	4,27	4,39	4,36	4,22	-(3)	-(3)
Seasonal efficiency	%	163,40	163,00	164,10	164,70	163,40	167,90	172,70	171,40	165,80	-(3)	-(3)
SEER - (EN14825:2018) 12/7 with inverter fans (2)												
SEER	W/W	-	-	-	-	-	-	-	-	-	4,71	4,67
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	185,4%	183,7%
SEER - 23/18 (EN14825: 2018) with standard fans (4)												
SEER	W/W	-	-	-	-	-	-	-	-	-	5,17	5,20
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	203,60	204,90
SEER - 23/18 (EN14825: 2018) with inverter fans												
SEER	W/W	-	-	-	-	-	-	-	-	-	4,71	4,67
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	-	-
SEPR - (EN14825: 2018) High temperature with standard fans (4)												
SEPR	W/W	-	-	-	-	-	-	-	-	-	5,52	5,54
SEPR - (EN14825: 2018) High temperature with inverter fans (4)												
SEPR	W/W	-	-	-	-	-	-	-	-	-	5,52	5,54

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

(2) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.

(3) Non-compliant with 2016/2281 EU regulation for comfort applications 12°C / 7°C

(4) Calculation performed with FIXED water flow rate.

GENERAL TECHNICAL DATA

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406	
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,L type							R410A					
	E type												
	° kg	41,0	42,0	55,0	56,0	56,0	58,0	58,0	84,0	84,0	100,0	100,0	
Refrigerant charge (1)	A,L kg	43,0	56,0	58,0	58,0	60,0	84,0	87,0	100,0	103,0	116,0	125,0	
	E kg	56,0	80,0	82,0	82,0	84,0	97,0	113,0	137,0	140,0	153,0	162,0	
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"	

(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.

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

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406	
Fan													
Type	°A,E,L	Axial											
Fan motor	°A	Asynchronous											
	E,L	Asynchronous with phase cut											
Number	°	no.	4	4	6	6	6	6	8	8	10	10	
	A,L	no.	4	6	6	6	6	8	8	10	10	12	12
Air flow rate	E	no.	6	8	8	8	8	10	12	14	14	16	16
	°	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
Sound data calculated in cooling mode (1)	L	m ³ /h	60000	90000	90000	90000	90000	120000	120000	150000	150000	180000	180000
	°	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
Sound pressure level (10 m)	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
	°	dB(A)	57,4	57,4	59,3	59,3	59,3	59,3	59,3	60,7	60,7	61,7	61,7
	A	dB(A)	57,4	59,3	59,3	59,3	59,3	60,7	60,7	61,6	61,6	62,5	62,5
	E	dB(A)	52,4	53,7	53,7	53,7	53,7	54,7	55,5	56,7	57,2	58,2	58,7
L	dB(A)	50,5	52,4	52,4	52,4	52,4	53,8	53,8	55,2	55,7	57,0	57,5	

(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).

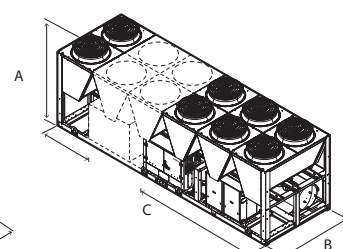
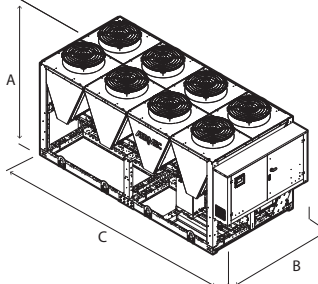
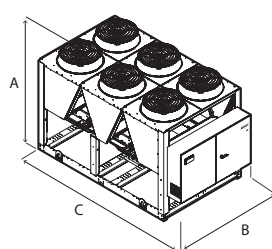
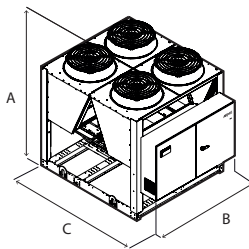
DIMENSIONS

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
	°	mm	2780	2780	3970	3970	3970	3970	5160	5160	6350	6350
C	A,L	mm	2780	3970	3970	3970	3970	4760	4760	6350	6350	7140
	E	mm	3970	4760	4760	4760	4760	5950	7140	8330	8330	9520
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	2670	2730	3310	3360	3400	3460	3490	4350	4520	5190
	A,L	kg	2700	3280	3350	3390	3470	4120	4240	4980	5190	6030
	E	kg	3230	3920	3990	4020	4100	4660	5220	6060	6280	6810

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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