

NRP 0804-3606

Air-water multipurpose

Cooling capacity 207 ÷ 963 kW
Heating capacity 208 ÷ 988 kW

- Units designed for 2 or 4-pipe systems
- High efficiency also at partial loads
- Simultaneous and independent production of hot and chilled water
- Also available with Shell and tube heat exchanger



DESCRIPTION

Multipurpose external units designed for 2 or 4-pipe systems. With just one unit simultaneous and independent requests for hot and chilled water can be accommodated all year round.

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

VERSIONS

- A High efficiency
- E Silenced high efficiency

FEATURES

Operating field

Working at full load up to -15 °C outside air temperature in winter, and up to 50 °C in summer. Hot water production up to 55 °C (for more details refer to the selection software and technical documentation).

Dual-circuit unit

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

Exchangers

All the units have plate heat exchangers on service and recovery as standard but, upon request, they can be supplied with a shell & tube heat exchanger as well.

If the customer chooses a unit with tube core exchangers, it is not possible to add a hydronic kit.

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.

Option integrated hydronic kit

To obtain a solution that offers economic savings and easy installation, these units can be configured with an integrated hydronic kit on both the service side and the recovery side.

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.

- *The flow switch is available as an accessory for both the system side and the recovery side, and is compulsory; if it is not installed, the warranty will be considered invalid.*

Electronic expansion valve

The units from size 1604 to 3606 have an electronic expansion valve as standard.

There are significant benefits in particular when the unit is working with partial loads, increasing the energy efficiency level.

CONTROL PCO⁵

Microprocessor adjustment, with keyboard and LCD display, for easy access on the unit is a menu available in several languages.

- 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.

ACCESSORIES

AER485P1: RS-485 interface for supervision systems with MODBUS protocol.

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.

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_V: Anti-intrusion grid kit

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

BRC1R: Condensate drip tray with heater. Consider 1 for each V-block.

ACCESSORIES COMPATIBILITY

Model	Ver	0804	0904	1004	1104	1204	1414	1604	1805	2006	2206	2406	2606	2806	3006	3206	3406	3606
AER485P1	A,E	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
AERNET	A,E	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
FL	A,E	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
MULTICHILLER_EVO	A,E	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
PGD1	A,E	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

			0804	0904	1004	1104	1204	1414	1604	1805	2006	
A	IDR IMP	IDR REC										
	00	00	AVX882	AVX887	AVX887	AVX887	AVX887	AVX887	AVX871	AVX871	AVX875	AVX875
	PA-DJ	00	AVX886	AVX887	AVX887	AVX887	AVX887	AVX887	AVX872	AVX872	AVX875	AVX884
	00	RA-SJ	AVX886	AVX887	AVX887	AVX887	AVX883	AVX883	AVX873	AVX873	AVX876	AVX876
	PA-DJ	RA-SJ	AVX870	AVX883	AVX883	AVX883	AVX883	AVX883	AVX874	AVX874	AVX876	AVX884
E	00	00	AVX886	AVX871	AVX871	AVX871	AVX871	AVX871	AVX875	AVX877	AVX878	AVX878
	PA-DJ	00	AVX886	AVX872	AVX872	AVX872	AVX872	AVX872	AVX875	AVX877	AVX878	AVX865
	00	RA-SJ	AVX870	AVX873	AVX873	AVX873	AVX873	AVX873	AVX876	AVX877	AVX865	AVX865
	PA-DJ	RA-SJ	AVX870	AVX874	AVX874	AVX874	AVX874	AVX874	AVX876	AVX877	AVX879	AVX865
			2206	2406	2606	2806	3006	3206	3406	3606		
A	IDR IMP	IDR REC										
	00	00	AVX877	AVX877	AVX865	AVX865	AVX866	AVX866	AVX869	AVX869	AVX869	
	PA-DJ	00	AVX877	AVX885	AVX865	AVX865	AVX866	AVX866	AVX868	AVX868	AVX868	
	00	RA-SJ	AVX885	AVX885	AVX865	AVX865	AVX867	AVX867	AVX869	AVX869	AVX869	
	PA-DJ	RA-SJ	AVX885	AVX885	AVX865	AVX865	AVX867	AVX867	AVX868	AVX868	AVX868	
E	00	00	AVX866	AVX866	AVX869	AVX869	AVX880	AVX880	AVX881	AVX881	AVX881	
	PA-DJ	00	AVX866	AVX866	AVX868	AVX868	AVX880	AVX880	AVX881	AVX881	AVX881	
	00	RA-SJ	AVX867	AVX867	AVX869	AVX869	AVX880	AVX880	AVX888	AVX888	AVX888	
	PA-DJ	RA-SJ	AVX867	AVX867	AVX868	AVX868	AVX880	AVX880	AVX888	AVX888	AVX888	

Anti-intrusion grid

Ver	0804	0904	1004	1104	1204	1414	1604	1805	2006
A	GP2VN	GP3VN	GP3VN	GP3VN	GP3VN	GP4VN	GP4VN	GP5VN	GP5V
E	GP3VN	GP4VN	GP4VN	GP4VN	GP4VN	GP5VN	GP6V	GP7V	GP7V

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

Ver	2206	2406	2606	2806	3006	3206	3406	3606
A	GP6V	GP6V	GP7V	GP7V	GP8V	GP8V	GP9VN	GP9VN
E	GP8V	GP8V	GP9VN	GP9VN	GP10V	GP10V	GP11V	GP11V

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

Device for peak current reduction

Ver	0804	0904	1004	1104	1204	1414	1604	1805	2006
A,E	DRENR0804	DRENR0904	DRENR1004	DRENR1104	DRENR1204 (1)	DRENR1414	DRENR1604 (1)	DRENR1805	DRENR2006

(1) Only for power supply 400V 3N ~ 50Hz e 400V 3 ~ 50Hz.

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Ver	2206	2406	2606	2806	3006	3206	3406	3606
A,E	DRENR2206	DRENR2406	-	-	-	-	-	-

The accessory cannot be fitted on the configurations indicated with -

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Power factor correction

Ver	0804	0904	1004	1104	1204	1414	1604	1805	2006
A	RIFNRP0804A	RIFNRP0904A	RIFNRP1004A	RIFNRP1104A	RIFNRP1204A	RIFNRP1414	RIFNRP1604	RIFNRP1805	RIFNRP2006
E	RIFNRP0804E	RIFNRP0904E	RIFNRP1004E	RIFNRP1104E	RIFNRP1204E	RIFNRP1414	RIFNRP1604	RIFNRP1805	RIFNRP2006

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

Ver	2206	2406	2606	2806	3006	3206	3406	3606
A,E	RIFNRP2206	RIFNRP2406	RIFNRP2606	RIFNRP2806	RIFNRP3006	RIFNRP3206	RIFNRP3406	RIFNRP3606

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Ver	0804	0904	1004	1104	1204	1414	1604	1805	2006
A,E	BRC1 (1)	BRC1 (1)	BRC1 (1)	BRC1 (1)	BRC1 (1)	BRC1 (1)	BRC1 (1)	BRC1 (1)	BRC1 (1)

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

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

Ver	2206	2406	2606	2806	3006	3206	3406	3606
A,E	BRC1R (1)	BRC1R (1)	BRC1R (1)	BRC1R (1)	BRC1R (1)	BRC1R (1)	BRC1R (1)	BRC1R (1)

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

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

Ver	0804	0904	1004	1104	1204	1414	1604	1805	2006
A,E	BRC1R (1)	BRC1R (1)	BRC1R (1)	BRC1R (1)	BRC1R (1)	BRC1R (1)	BRC1R (1)	BRC1R (1)	BRC1R (1)

(1) Consider 1 for each V-block.

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

Ver	2206	2406	2606	2806	3006	3206	3406	3606
A,E	BRC1R (1)	BRC1R (1)	BRC1R (1)	BRC1R (1)	BRC1R (1)	BRC1R (1)	BRC1R (1)	BRC1R (1)

(1) Consider 1 for each V-block.

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

CONFIGURATOR

Field	Description
1,2,3	NRP
4,5,6,7	Size (1) 0804, 0904, 1004, 1104, 1204, 1414, 1604, 1805, 2006, 2206, 2406, 2606, 2806, 3006, 3206, 3406, 3606
8	Version
A	High efficiency (2)
E	Silenced high efficiency
9	System type
2	2-pipe system
4	4-pipe system
10	Coils
°	Copper-aluminium
R	Copper-copper
S	Copper-Tinned copper
V	Copper-painted aluminium
11	Fans
°	AC standard
J	EC Inverter motors
12	Power supply
°	400V ~ 3 50Hz with magnet circuit breakers
13,14	Integrated hydronic kit, user side (3)
00	Without hydronic kit
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
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
15,16	Integrated hydronic kit, recovery side (3)
00	Without hydronic kit
RA	Pump A
RB	Pump B
RC	Pump C
RD	Pump D
RE	Pump E
RF	Pump F
RG	Pump G
RH	Pump H
RI	Pump I
RJ	Pump J
SA	Pump A + stand-by pump
SB	Pump B + stand-by pump
SC	Pump C + stand-by pump

Field	Description
SD	Pump D + stand-by pump
SE	Pump E + stand-by pump
SF	Pump F + stand-by pump
SG	Pump G + stand-by pump
SH	Pump H + stand-by pump
SI	Pump I + stand-by pump
SJ	Pump J + stand-by pump

(1) The units from size 1805 to 3606 have an electronic expansion valve as standard.

(2) Unit 804 version A cannot be configured with a twin pump on both the system side and the recovery side.

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

PERFORMANCE SPECIFICATIONS

NRP - 2-pipe system version A

Size		0804 (1)	0904 (1)	1004 (1)	1104 (1)	1204 (1)	1414 (1)	1604 (1)	1805 (1)	2006 (1)
Cooling system side 2-pipe system (2)										
Cooling capacity	kW	206,7	230,6	259,2	299,6	332,2	386,3	426,2	490,5	544,3
Input power	kW	69,4	76,3	86,1	99,5	116,2	128,1	146,7	165,5	189,8
Cooling total input current	A	124,0	138,0	155,0	172,0	195,0	218,0	247,0	280,0	319,0
EER	W/W	2,98	3,02	3,01	3,01	2,86	3,02	2,91	2,96	2,87
Water flow rate system side	l/h	35565	39671	44593	51536	57151	66430	73295	84370	93611
Pressure drop system side	kPa	24	33	34	42	43	36	36	49	54
Heating system side 2-pipe system (3)										
Heating capacity	kW	209,9	246,0	272,7	306,2	340,5	396,2	437,6	504,8	562,7
Input power	kW	66,8	79,6	85,5	95,7	107,8	125,7	136,8	159,6	180,8
Heating total input current	A	120,0	143,0	154,0	166,0	183,0	214,0	233,0	272,0	306,0
COP	W/W	3,14	3,09	3,19	3,20	3,16	3,15	3,20	3,16	3,11
Water flow rate system side	l/h	36426	42701	47339	53155	59117	68781	75976	87653	97701
Pressure drop system side	kPa	25	34	39	50	41	52	35	47	51
Heating domestic hot water side 2-pipe system (4)										
Heating capacity	kW	209,9	246,0	272,7	306,2	340,6	396,2	437,6	504,9	562,7
Input power	kW	66,9	79,8	85,6	95,7	108,3	125,4	137,0	159,8	180,9
Heating total input current	A	120,0	143,0	154,0	166,0	183,0	214,0	233,0	272,0	306,0
COP	W/W	3,14	3,08	3,19	3,20	3,15	3,16	3,19	3,16	3,11
Water flow rate domestic hot water side	l/h	36426	42701	47339	53155	59117	68781	75976	87653	97701
Pressure drop domestic hot water side	kPa	34	47	39	49	61	42	44	53	55
Simultaneous operation (heating + cooling), 2 pipes (5)										
Cooling capacity	kW	211,2	236,7	258,2	306,9	350,5	398,0	446,2	510,6	584,4
Recovered heating power	kW	270,3	304,4	331,0	392,1	448,5	510,5	570,1	653,9	749,6
Input power	kW	62,8	72,4	77,7	91,3	105,2	120,2	132,4	153,7	177,2
Water flow rate system side	l/h	35565	39671	44593	51536	57151	66430	73295	84370	93611
Pressure drop system side	kPa	24	33	34	42	43	36	36	49	54
Water flow rate domestic hot water side	l/h	36426	42701	47339	53155	59117	68781	75976	87653	97701
Pressure drop domestic hot water side	kPa	34	47	39	49	61	42	44	53	55

- (1) The units from size 1805 to 3606 have an electronic expansion valve as standard.
(2) Data 14511:2018; System side water heat exchanger 12 °C/7 °C; External air 35 °C; All units are Eurovent certified
(3) Data 14511:2018; System side water heat exchanger 40 °C/ 45 °C; Outside air 7 °C d.b. / 6 °C w.b.
(4) Water exchanger to the total recovery side 40 °C/ 45 °C;
(5) Water exchanger to the total recovery side * / 45 °C; Water to the system side heat exchanger * / 7 °C;

NRP - 2-pipe system version A

Size		2206 (1)	2406 (1)	2606 (1)	2806 (1)	3006 (1)	3206 (1)	3406 (1)	3606 (1)
Cooling system side 2-pipe system (2)									
Cooling capacity	kW	598,2	638,8	699,7	743,3	810,1	853,8	919,4	963,0
Input power	kW	202,0	220,3	235,7	257,3	273,7	295,4	312,1	333,7
Cooling total input current	A	341,0	371,0	403,0	441,0	474,0	511,0	544,0	582,0
EER	W/W	2,96	2,90	2,97	2,89	2,96	2,89	2,95	2,89
Water flow rate system side	l/h	102896	109845	120321	127822	139307	146824	158090	165596
Pressure drop system side	kPa	64	47	43	48	52	57	66	73
Heating system side 2-pipe system (3)									
Heating capacity	kW	618,6	660,8	723,7	772,5	829,5	888,9	940,2	988,2
Input power	kW	199,7	209,7	230,5	247,9	265,5	286,7	304,3	321,9
Heating total input current	A	337,0	356,0	395,0	427,0	462,0	489,0	533,0	565,0
COP	W/W	3,10	3,15	3,14	3,12	3,12	3,10	3,09	3,07
Water flow rate system side	l/h	107407	114743	125675	134158	144044	154357	163276	171605
Pressure drop system side	kPa	62	47	42	48	50	57	63	70
Heating domestic hot water side 2-pipe system (4)									
Heating capacity	kW	618,7	660,8	723,7	772,6	829,5	888,9	940,2	988,2
Input power	kW	199,9	209,9	230,6	248,2	265,8	287,3	304,0	321,6
Heating total input current	A	337,0	356,0	395,0	427,0	462,0	489,0	533,0	565,0
COP	W/W	3,10	3,15	3,14	3,11	3,12	3,09	3,09	3,07
Water flow rate domestic hot water side	l/h	107407	114743	125675	134158	144044	154357	163276	171605
Pressure drop domestic hot water side	kPa	66	50	44	53	56	67	57	66
Simultaneous operation (heating + cooling), 2 pipes (5)									
Cooling capacity	kW	630,2	680,0	736,5	788,3	857,7	909,8	966,0	1019,1
Recovered heating power	kW	810,9	871,0	945,6	1015,4	1098,5	1168,6	1242,9	1313,5
Input power	kW	194,7	204,6	223,6	243,4	258,4	278,4	297,9	317,4
Water flow rate system side	l/h	102896	109845	120321	127822	139307	146824	158090	165596
Pressure drop system side	kPa	64	47	43	48	52	57	66	73
Water flow rate domestic hot water side	l/h	107407	114743	125675	134158	144044	154357	163276	171605
Pressure drop domestic hot water side	kPa	66	50	44	53	56	67	57	66

- (1) The units from size 1805 to 3606 have an electronic expansion valve as standard.
(2) Data 14511:2018; System side water heat exchanger 12 °C/7 °C; External air 35 °C; All units are Eurovent certified
(3) Data 14511:2018; System side water heat exchanger 40 °C/ 45 °C; Outside air 7 °C d.b. / 6 °C w.b.
(4) Water exchanger to the total recovery side 40 °C/ 45 °C;
(5) Water exchanger to the total recovery side * / 45 °C; Water to the system side heat exchanger * / 7 °C;

NRP - 2-pipe system version E

Size		0804 (1)	0904 (1)	1004 (1)	1104 (1)	1204 (1)	1414 (1)	1604 (1)	1805 (1)	2006 (1)
Cooling system side 2-pipe system (2)										
Cooling capacity	kW	200,7	225,7	255,3	296,9	332,7	382,2	427,0	487,6	549,9
Input power	kW	66,0	73,4	83,2	96,4	113,0	125,6	139,1	159,0	182,6
Cooling total input current	A	113,0	125,0	142,0	159,0	182,0	203,0	225,0	256,0	294,0
EER	W/W	3,04	3,07	3,07	3,08	2,94	3,04	3,07	3,07	3,01
Water flow rate system side	l/h	34534	38826	43915	51070	57226	65736	73434	83856	94585
Pressure drop system side	kPa	25	33	34	43	44	37	38	49	54
Heating system side 2-pipe system (3)										
Heating capacity	kW	207,4	240,7	262,4	300,7	338,4	389,4	436,7	503,3	567,2
Input power	kW	63,8	74,6	80,5	92,8	104,9	121,1	134,3	155,5	181,7
Heating total input current	A	109,0	126,0	136,0	153,0	170,0	195,0	217,0	250,0	293,0
COP	W/W	3,25	3,22	3,26	3,24	3,23	3,22	3,25	3,24	3,12
Water flow rate system side	l/h	35981	41776	45554	52195	58753	67603	75830	87384	98488
Pressure drop system side	kPa	25	33	37	48	40	50	35	46	52
Heating domestic hot water side 2-pipe system (4)										
Heating capacity	kW	207,3	240,7	262,4	300,7	338,5	389,4	436,8	503,3	567,3
Input power	kW	64,0	74,8	80,5	92,8	105,4	120,8	134,6	155,7	181,9
Heating total input current	A	109,0	126,0	136,0	153,0	170,0	195,0	217,0	250,0	293,0
COP	W/W	3,24	3,22	3,26	3,24	3,21	3,22	3,24	3,23	3,12
Water flow rate domestic hot water side	l/h	35981	41776	45554	52195	58753	67603	75830	87384	98488
Pressure drop domestic hot water side	kPa	34	45	38	48	60	41	44	53	55
Simultaneous operation (heating + cooling), 2 pipes (5)										
Cooling capacity	kW	211,0	236,8	258,3	306,6	350,0	397,8	445,0	509,9	583,9
Recovered heating power	kW	270,0	304,5	331,0	391,9	448,2	510,5	569,2	653,4	749,1
Input power	kW	62,8	72,3	77,6	91,4	105,3	120,3	132,7	153,9	177,3
Water flow rate system side	l/h	34534	38826	43915	51070	57226	65736	73434	83856	94585
Pressure drop system side	kPa	25	33	34	43	44	37	38	49	54
Water flow rate domestic hot water side	l/h	35981	41776	45554	52195	58753	67603	75830	87384	98488
Pressure drop domestic hot water side	kPa	34	45	38	48	60	41	44	53	55

- (1) The units from size 1805 to 3606 have an electronic expansion valve as standard.
 (2) Data 14511:2018; System side water heat exchanger 12 °C/7 °C; External air 35 °C; All units are Eurovent certified
 (3) Data 14511:2018; System side water heat exchanger 40 °C/ 45 °C; Outside air 7 °C d.b. / 6 °C w.b.
 (4) Water exchanger to the total recovery side 40 °C / 45 °C;
 (5) Water exchanger to the total recovery side * / 45 °C; Water to the system side heat exchanger * / 7 °C;

NRP - 2-pipe system version E

Size		2206 (1)	2406 (1)	2606 (1)	2806 (1)	3006 (1)	3206 (1)	3406 (1)	3606 (1)
Cooling system side 2-pipe system (2)									
Cooling capacity	kW	598,5	639,4	695,8	739,2	801,8	844,7	906,4	948,9
Input power	kW	195,9	214,0	230,3	252,1	269,0	291,1	308,1	330,4
Cooling total input current	A	315,0	344,0	375,0	413,0	444,0	482,0	512,0	551,0
EER	W/W	3,05	2,99	3,02	2,93	2,98	2,90	2,94	2,87
Water flow rate system side	l/h	102947	109954	119646	127107	137868	145260	155858	163168
Pressure drop system side	kPa	64	48	43	48	51	57	65	71
Heating system side 2-pipe system (3)									
Heating capacity	kW	618,5	661,8	714,3	763,4	816,0	864,2	922,4	970,1
Input power	kW	199,3	209,7	223,0	240,3	256,1	273,3	293,1	310,5
Heating total input current	A	320,0	338,0	363,0	395,0	424,0	456,0	490,0	521,0
COP	W/W	3,10	3,16	3,20	3,18	3,19	3,16	3,15	3,12
Water flow rate system side	l/h	107379	114913	124046	132574	141707	150072	160181	168462
Pressure drop system side	kPa	62	47	41	47	48	54	61	67
Heating domestic hot water side 2-pipe system (4)									
Heating capacity	kW	618,5	661,8	714,3	763,5	816,0	864,2	922,4	970,1
Input power	kW	199,5	209,9	223,1	240,6	256,5	273,8	292,8	310,3
Heating total input current	A	320,0	338,0	363,0	395,0	424,0	456,0	490,0	521,0
COP	W/W	3,10	3,15	3,20	3,17	3,18	3,16	3,15	3,13
Water flow rate domestic hot water side	l/h	107379	114913	124046	132574	141707	150072	160181	168462
Pressure drop domestic hot water side	kPa	66	50	43	52	55	63	55	63
Simultaneous operation (heating + cooling), 2 pipes (5)									
Cooling capacity	kW	630,2	679,9	737,0	788,9	858,6	911,1	967,3	1018,8
Recovered heating power	kW	810,9	871,0	946,0	1015,9	1099,3	1169,6	1244,0	1313,7
Input power	kW	194,7	204,7	223,3	243,1	258,1	277,8	297,4	317,5
Water flow rate system side	l/h	102947	109954	119646	127107	137868	145260	155858	163168
Pressure drop system side	kPa	64	48	43	48	51	57	65	71
Water flow rate domestic hot water side	l/h	107379	114913	124046	132574	141707	150072	160181	168462
Pressure drop domestic hot water side	kPa	66	50	43	52	55	63	55	63

- (1) The units from size 1805 to 3606 have an electronic expansion valve as standard.
 (2) Data 14511:2018; System side water heat exchanger 12 °C/7 °C; External air 35 °C; All units are Eurovent certified
 (3) Data 14511:2018; System side water heat exchanger 40 °C/ 45 °C; Outside air 7 °C d.b. / 6 °C w.b.
 (4) Water exchanger to the total recovery side 40 °C / 45 °C;
 (5) Water exchanger to the total recovery side * / 45 °C; Water to the system side heat exchanger * / 7 °C;

NRP - 4-pipe system version A

Size		0804 (1)	0904 (1)	1004 (1)	1104 (1)	1204 (1)	1414 (1)	1604 (1)	1805 (1)	2006 (1)
Cooling system side 4-pipe system (2)										
Cooling capacity	kW	206,7	230,6	259,2	299,6	332,2	386,3	426,2	490,5	544,3
Input power	kW	69,4	76,3	86,1	99,5	116,2	128,1	146,7	165,5	189,8
Cooling total input current	A	124,0	138,0	155,0	172,0	195,0	218,0	247,0	280,0	319,0
EER	W/W	2,98	3,02	3,01	3,01	2,86	3,02	2,91	2,96	2,87
Water flow rate system side	l/h	35565	39671	44593	51536	57151	66430	73295	84370	93611
Pressure drop system side	kPa	24	33	34	42	43	36	36	49	54

Heating system side 4-pipe system (3)										
Heating capacity	kW	209,9	246,0	272,7	306,2	340,6	396,2	437,6	504,9	562,7
Input power	kW	66,9	79,8	85,6	95,7	108,3	125,4	137,0	159,8	180,9
Heating total input current	A	120,0	143,0	154,0	166,0	183,0	214,0	233,0	272,0	306,0
COP	W/W	3,14	3,08	3,19	3,20	3,15	3,16	3,19	3,16	3,11
Water flow rate system side	l/h	36426	42701	47339	53155	59117	68781	75976	87653	97701
Pressure drop system side	kPa	34	47	39	49	61	42	44	53	55

Simultaneous operation (heating + cooling), 4 pipes (4)										
Cooling capacity	kW	211,2	236,7	258,2	306,9	350,5	398,0	446,2	510,6	584,4
Recovered heating power	kW	270,3	304,4	331,0	392,1	448,5	510,5	570,1	653,9	749,6
Input power	kW	62,8	72,4	77,7	91,3	105,2	120,2	132,4	153,7	177,2
Water flow rate cold side	l/h	35565	39671	44593	51536	57151	66430	73295	84370	93611
Pressure drop cold side	kPa	24	33	34	42	43	36	36	49	54
Water flow rate hot side	l/h	36426	42701	47339	53155	59117	68781	75976	87653	97701
Pressure drop hot side	kPa	34	47	39	49	61	42	44	53	55

- (1) The units from size 1805 to 3606 have an electronic expansion valve as standard.
 (2) Data 14511:2018; System side water heat exchanger 12 °C/7 °C; External air 35 °C
 (3) Data 14511:2018; System side water heat exchanger 40 °C/ 45 °C; Outside air 7 °C d.b. / 6 °C w.b.
 (4) Water exchanger to the total recovery side * / 45 °C; Water to the system side heat exchanger * / 7 °C;

NRP - 4-pipe system version A

Size		2206 (1)	2406 (1)	2606 (1)	2806 (1)	3006 (1)	3206 (1)	3406 (1)	3606 (1)
Cooling system side 4-pipe system (2)									
Cooling capacity	kW	598,2	638,8	699,7	743,3	810,1	853,8	919,4	963,0
Input power	kW	202,0	220,3	235,7	257,3	273,7	295,4	312,1	333,7
Cooling total input current	A	341,0	371,0	403,0	441,0	474,0	511,0	544,0	582,0
EER	W/W	2,96	2,90	2,97	2,89	2,96	2,89	2,95	2,89
Water flow rate system side	l/h	102896	109845	120321	127822	139307	146824	158090	165596
Pressure drop system side	kPa	64	47	43	48	52	57	66	73

Heating system side 4-pipe system (3)									
Heating capacity	kW	618,7	660,8	723,7	772,6	829,5	888,9	940,2	988,2
Input power	kW	199,9	209,9	230,6	248,2	265,8	287,3	304,0	321,6
Heating total input current	A	337,0	356,0	395,0	427,0	462,0	489,0	533,0	565,0
COP	W/W	3,10	3,15	3,14	3,11	3,12	3,09	3,09	3,07
Water flow rate system side	l/h	107407	114743	125675	134158	144044	154357	163276	171605
Pressure drop system side	kPa	66	50	44	53	56	67	57	66

Simultaneous operation (heating + cooling), 4 pipes (4)									
Cooling capacity	kW	630,2	680,0	736,5	788,3	857,7	909,8	966,0	1019,1
Recovered heating power	kW	810,9	871,0	945,6	1015,4	1098,5	1168,6	1242,9	1313,5
Input power	kW	194,7	204,6	223,6	243,4	258,4	278,4	297,9	317,4
Water flow rate cold side	l/h	102896	109845	120321	127822	139307	146824	158090	165596
Pressure drop cold side	kPa	64	47	43	48	52	57	66	73
Water flow rate hot side	l/h	107407	114743	125675	134158	144044	154357	163276	171605
Pressure drop hot side	kPa	66	50	44	53	56	67	57	66

- (1) The units from size 1805 to 3606 have an electronic expansion valve as standard.
 (2) Data 14511:2018; System side water heat exchanger 12 °C/7 °C; External air 35 °C
 (3) Data 14511:2018; System side water heat exchanger 40 °C/ 45 °C; Outside air 7 °C d.b. / 6 °C w.b.
 (4) Water exchanger to the total recovery side * / 45 °C; Water to the system side heat exchanger * / 7 °C;

NRP - 4-pipe system version E

Size		0804 (1)	0904 (1)	1004 (1)	1104 (1)	1204 (1)	1414 (1)	1604 (1)	1805 (1)	2006 (1)
Cooling system side 4-pipe system (2)										
Cooling capacity	kW	200,7	225,7	255,3	296,9	332,7	382,2	427,0	487,6	549,9
Input power	kW	66,0	73,4	83,2	96,4	113,0	125,6	139,1	159,0	182,6
Cooling total input current	A	113,0	125,0	142,0	159,0	182,0	203,0	225,0	256,0	294,0
EER	W/W	3,04	3,07	3,07	3,08	2,94	3,04	3,07	3,07	3,01
Water flow rate system side	l/h	34534	38826	43915	51070	57226	65736	73434	83856	94585
Pressure drop system side	kPa	25	33	34	43	44	37	38	49	54
Heating system side 4-pipe system (3)										
Heating capacity	kW	207,3	240,7	262,4	300,7	338,5	389,4	436,8	503,3	567,3
Input power	kW	64,0	74,8	80,5	92,8	105,4	120,8	134,6	155,7	181,9
Heating total input current	A	109,0	126,0	136,0	153,0	170,0	195,0	217,0	250,0	293,0
COP	W/W	3,24	3,22	3,26	3,24	3,21	3,22	3,24	3,23	3,12
Water flow rate system side	l/h	35981	41776	45554	52195	58753	67603	75830	87384	98488
Pressure drop system side	kPa	34	45	38	48	60	41	44	53	55
Simultaneous operation (heating + cooling), 4 pipes (4)										
Cooling capacity	kW	211,0	236,8	258,3	306,6	350,0	397,8	445,0	509,9	583,9
Recovered heating power	kW	270,0	304,5	331,0	391,9	448,2	510,5	569,2	653,4	749,1
Input power	kW	62,8	72,3	77,6	91,4	105,3	120,3	132,7	153,9	177,3
Water flow rate cold side	l/h	34534	38826	43915	51070	57226	65736	73434	83856	94585
Pressure drop cold side	kPa	25	33	34	43	44	37	38	49	54
Water flow rate hot side	l/h	35981	41776	45554	52195	58753	67603	75830	87384	98488
Pressure drop hot side	kPa	34	45	38	48	60	41	44	53	55

- (1) The units from size 1805 to 3606 have an electronic expansion valve as standard.
 (2) Data 14511:2018; System side water heat exchanger 12 °C/7 °C; External air 35 °C
 (3) Data 14511:2018; System side water heat exchanger 40 °C/ 45 °C; Outside air 7 °C d.b. / 6 °C w.b.
 (4) Water exchanger to the total recovery side * / 45 °C; Water to the system side heat exchanger * / 7 °C;

NRP - 4-pipe system version E

Size		2206 (1)	2406 (1)	2606 (1)	2806 (1)	3006 (1)	3206 (1)	3406 (1)	3606 (1)
Cooling system side 4-pipe system (2)									
Cooling capacity	kW	598,5	639,4	695,8	739,2	801,8	844,7	906,4	948,9
Input power	kW	195,9	214,0	230,3	252,1	269,0	291,1	308,1	330,4
Cooling total input current	A	315,0	344,0	375,0	413,0	444,0	482,0	512,0	551,0
EER	W/W	3,05	2,99	3,02	2,93	2,98	2,90	2,94	2,87
Water flow rate system side	l/h	102947	109954	119646	127107	137868	145260	155858	163168
Pressure drop system side	kPa	64	48	43	48	51	57	65	71
Heating system side 4-pipe system (3)									
Heating capacity	kW	618,5	661,8	714,3	763,5	816,0	864,2	922,4	970,1
Input power	kW	199,5	209,9	223,1	240,6	256,5	273,8	292,8	310,3
Heating total input current	A	320,0	338,0	363,0	395,0	424,0	456,0	490,0	521,0
COP	W/W	3,10	3,15	3,20	3,17	3,18	3,16	3,15	3,13
Water flow rate system side	l/h	107379	114913	124046	132574	141707	150072	160181	168462
Pressure drop system side	kPa	66	50	43	52	55	63	55	63
Simultaneous operation (heating + cooling), 4 pipes (4)									
Cooling capacity	kW	630,2	679,9	737,0	788,9	858,6	911,1	967,3	1018,8
Recovered heating power	kW	810,9	871,0	946,0	1015,9	1099,3	1169,6	1244,0	1313,7
Input power	kW	194,7	204,7	223,3	243,1	258,1	277,8	297,4	317,5
Water flow rate cold side	l/h	102947	109954	119646	127107	137868	145260	155858	163168
Pressure drop cold side	kPa	64	48	43	48	51	57	65	71
Water flow rate hot side	l/h	107379	114913	124046	132574	141707	150072	160181	168462
Pressure drop hot side	kPa	66	50	43	52	55	63	55	63

- (1) The units from size 1805 to 3606 have an electronic expansion valve as standard.
 (2) Data 14511:2018; System side water heat exchanger 12 °C/7 °C; External air 35 °C
 (3) Data 14511:2018; System side water heat exchanger 40 °C/ 45 °C; Outside air 7 °C d.b. / 6 °C w.b.
 (4) Water exchanger to the total recovery side * / 45 °C; Water to the system side heat exchanger * / 7 °C;

ENERGY DATA

Size			0804 (1)	0904 (1)	1004 (1)	1104 (1)	1204 (1)	1414 (1)	1604 (1)	1805 (1)	2006 (1)
Fans: °											
Cooling capacity with low leaving water temp (UE n° 2016/2281)											
SEER	A	W/W	3,94	4,04	4,00	3,89	4,03	4,14	4,21	4,23	4,24
	E	W/W	4,22	4,30	4,21	4,08	4,12	4,25	4,24	4,28	4,27
η _{sc}	A	%	154,60	158,50	156,90	152,80	158,20	162,50	165,50	166,00	166,60
	E	%	166,00	169,00	165,40	160,10	161,70	167,00	166,80	168,20	167,80
UE 813/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 400 kW (2)											
Pdesignh	A	kW	188,98	221,78	246,64	276,68	309,44	358,27	395,99	-	-
	E	kW	184,95	215,78	235,92	269,81	305,13	350,22	391,37	-	-
SCOP	A		3,53	3,27	3,44	3,49	3,60	3,53	3,66	-	-
	E		3,71	3,59	3,69	3,70	3,82	3,70	3,75	-	-
η _{sh}	A	%	138,30	127,70	134,50	136,70	140,90	138,40	143,60	-	-
	E	%	145,50	140,60	144,70	144,90	149,70	145,20	147,20	-	-
Fans: J											
Cooling capacity with low leaving water temp (UE n° 2016/2281)											
SEER	A	W/W	4,25	4,36	4,32	4,21	4,35	4,47	4,55	4,56	4,58
	E	W/W	4,56	4,64	4,55	4,40	4,45	4,59	4,58	4,62	4,61
η _{sc}	A	%	167,20	171,40	169,70	165,20	171,10	175,80	179,00	179,50	180,10
	E	%	179,50	182,80	178,80	173,10	174,90	180,60	180,30	181,80	181,50
UE 813/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 400 kW (2)											
Pdesignh	A	kW	188,98	221,78	246,64	276,68	309,44	358,27	395,99	-	-
	E	kW	184,95	215,78	235,92	269,81	305,13	350,22	391,37	-	-
SCOP	A		3,53	3,27	3,44	3,49	3,60	3,53	3,66	-	-
	E		3,71	3,59	3,69	3,70	3,82	3,70	3,75	-	-
η _{sh}	A	%	138,30	127,70	134,50	136,70	140,90	138,40	143,60	-	-
	E	%	145,50	140,60	144,70	144,90	149,70	145,20	147,20	-	-

(1) The units from size 1805 to 3606 have an electronic expansion valve as standard.

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

Size			2206 (1)	2406 (1)	2606 (1)	2806 (1)	3006 (1)	3206 (1)	3406 (1)	3606 (1)
Fans: °										
Cooling capacity with low leaving water temp (UE n° 2016/2281)										
SEER	A	W/W	4,24	4,25	4,24	4,22	4,24	4,22	4,22	4,23
	E	W/W	4,28	4,28	4,27	4,24	4,27	4,27	4,27	4,23
η _{sc}	A	%	166,60	166,80	166,80	165,70	166,80	165,90	165,90	166,00
	E	%	168,20	168,00	167,90	166,60	167,70	167,90	168,00	166,30
Fans: J										
Cooling capacity with low leaving water temp (UE n° 2016/2281)										
SEER	A	W/W	4,58	4,59	4,58	4,56	4,58	4,56	4,56	4,56
	E	W/W	4,62	4,62	4,62	4,58	4,61	4,62	4,62	4,57
η _{sc}	A	%	180,20	180,40	180,40	179,20	180,40	179,40	179,40	179,60
	E	%	181,90	181,70	181,60	180,20	181,30	181,60	181,70	179,80

(1) The units from size 1805 to 3606 have an electronic expansion valve as standard.

ELECTRIC DATA

Size			0804 (1)	0904 (1)	1004 (1)	1104 (1)	1204 (1)	1414 (1)	1604 (1)	1805 (1)	2006 (1)
Electric data											
Maximum current (FLA)	A	A	163,0	188,0	205,0	233,0	261,0	303,0	337,0	386,0	427,0
	E	A	170,0	196,0	213,0	241,0	269,0	311,0	352,0	401,0	442,0
Peak current (LRA)	A	A	368,0	431,0	449,0	485,0	513,0	636,0	670,0	638,0	679,0
	E	A	376,0	439,0	456,0	493,0	521,0	644,0	685,0	653,0	694,0
Fans: J											
Electric data											
Maximum current (FLA)	A	A	468,0	502,0	550,0	590,0	637,0	677,0	725,0	764,0	
	E	A	484,0	518,0	565,0	605,0	653,0	693,0	746,0	786,0	
Peak current (LRA)	A	A	801,0	835,0	883,0	923,0	906,0	946,0	994,0	1034,0	
	E	A	817,0	851,0	898,0	938,0	922,0	962,0	1015,0	1055,0	

(1) The units from size 1805 to 3606 have an electronic expansion valve as standard.

GENERAL TECHNICAL DATA

Size			0804 (1)	0904 (1)	1004 (1)	1104 (1)	1204 (1)	1414 (1)	1604 (1)	1805 (1)	2006 (1)
Compressor											
Type	A,E	type					Scroll				
Number	A,E	no.	4	4	4	4	4	4	4	5	6
Circuits	A,E	no.	2	2	2	2	2	2	2	2	2
Refrigerant	A,E	type					R410A				
Potential global heating	A,E	GWP					2088kgCO ₂ eq				
Refrigerant charge	A	kg	41,1	61,0	61,4	62,7	62,8	83,6	83,6	106,1	107,6
	E	kg	61,0	80,8	81,2	82,9	83,0	103,9	124,1	147,2	149,3
2-pipe system - System side heat exchanger (hot/cold)											
Type	A,E	type					Braze plate				
Number	A,E	no.	1	1	1	1	1	1	1	1	1
Connections (in/out)	A,E	Type					G.s.				
Size (in)	A,E	∅	3"	3"	3"	3"	3"	4"	4"	4"	4"
Size (out)	A,E	∅	3"	3"	3"	3"	3"	4"	4"	4"	4"
2-pipe system - Recovery side heat exchanger (domestic hot water)											
Type	A,E	type					Braze plate				
Number	A,E	no.	2	2	2	2	2	2	2	2	2
Manifold connection (in/out)	A,E	Type					G.s.				
Manifold diameter (in)	A,E	∅	3"	3"	3"	3"	3"	4"	4"	4"	4"
Manifold diameter (out)	A,E	∅	3"	3"	3"	3"	3"	4"	4"	4"	4"
4-pipe system - System side heat exchanger (cold side)											
Type	A,E	type					Braze plate				
Number	A,E	no.	1	1	1	1	1	1	1	1	1
Connections (in/out)	A,E	Type					G.s.				
Size (in)	A,E	∅	3"	3"	3"	3"	3"	4"	4"	4"	4"
Size (out)	A,E	∅	3"	3"	3"	3"	3"	4"	4"	4"	4"
4-pipe system - Recovery side heat exchanger (hot side)											
Type	A,E	type					Braze plate				
Number	A,E	no.	2	2	2	2	2	2	2	2	2
Manifold connection (in/out)	A,E	Type					G.s.				
Manifold diameter (in)	A,E	∅	3"	3"	3"	3"	3"	4"	4"	4"	4"
Manifold diameter (out)	A,E	∅	3"	3"	3"	3"	3"	4"	4"	4"	4"
Fan											
Type	A,E	type					Axial				
Fan motor	A,E	type					On-Off				
Number	A	no.	4	6	6	6	6	8	8	10	10
	E	no.	6	8	8	8	8	10	12	14	14
Air flow rate	A	m ³ /h	80000	120000	120000	120000	120000	160000	160000	200000	200000
	E	m ³ /h	80000	110000	110000	110000	110000	130000	160000	180000	180000
Sound data calculated in cooling mode (2)											
Sound power level	A	dB(A)	89,5	91,6	91,6	91,6	91,6	93,1	93,1	94,2	94,2
	E	dB(A)	84,6	86,1	86,1	86,1	86,1	87,2	88,2	89,4	89,9

(1) The units from size 1805 to 3606 have an electronic expansion valve as standard.

(2) 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).

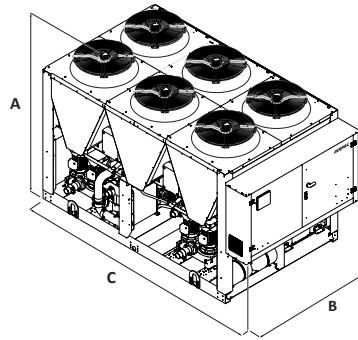
Size			2206 (1)	2406 (1)	2606 (1)	2806 (1)	3006 (1)	3206 (1)	3406 (1)	3606 (1)
Compressor										
Type	A,E	type	Scroll							
Number	A,E	no.	6	6	6	6	6	6	6	6
Circuits	A,E	no.	2	2	2	2	2	2	2	2
Refrigerant	A,E	type	R410A							
Potential global heating	A,E	GWP	2088kgCO ₂ eq							
Refrigerant charge	A	kg	129,2	129,2	156,9	161,5	184,8	184,8	207,7	207,7
	E	kg	170,9	170,9	199,9	205,8	229,0	229,0	252,0	252,0
2-pipe system - System side heat exchanger (hot/cold)										
Type	A,E	type	Braze plate							
Number	A,E	no.	1	1	1	1	1	1	1	1
Connections (in/out)	A,E	Type	G.s.							
Size (in)	A,E	Ø	4"	5"	5"	5"	5"	5"	5"	5"
Size (out)	A,E	Ø	4"	5"	5"	5"	5"	5"	5"	5"
2-pipe system - Recovery side heat exchanger (domestic hot water)										
Type	A,E	type	Braze plate							
Number	A,E	no.	2	2	2	2	2	2	2	2
Manifold connection (in/out)	A,E	Type	G.s.							
Manifold diameter (in)	A,E	Ø	4"	5"	5"	5"	5"	5"	5"	5"
Manifold diameter (out)	A,E	Ø	4"	5"	5"	5"	5"	5"	5"	5"
4-pipe system - System side heat exchanger (cold side)										
Type	A,E	type	Braze plate							
Number	A,E	no.	1	1	1	1	1	1	1	1
Connections (in/out)	A,E	Type	G.s.							
Size (in)	A,E	Ø	4"	5"	5"	5"	5"	5"	5"	5"
Size (out)	A,E	Ø	4"	5"	5"	5"	5"	5"	5"	5"
4-pipe system - Recovery side heat exchanger (hot side)										
Type	A,E	type	Braze plate							
Number	A,E	no.	2	2	2	2	2	2	2	2
Manifold connection (in/out)	A,E	Type	G.s.							
Manifold diameter (in)	A,E	Ø	4"	5"	5"	5"	5"	5"	5"	5"
Manifold diameter (out)	A,E	Ø	4"	5"	5"	5"	5"	5"	5"	5"
Fan										
Type	A,E	type	Axial							
Fan motor	A,E	type	On-Off							
Number	A	no.	12	12	14	14	16	16	18	18
	E	no.	16	16	18	18	20	20	22	22
Air flow rate	A	m ³ /h	240000	240000	280000	280000	320000	320000	350000	350000
	E	m ³ /h	210000	210000	230000	230000	260000	260000	280000	280000
Sound data calculated in cooling mode (2)										
Sound power level	A	dB(A)	95,1	95,1	95,9	95,9	96,6	96,6	97,2	97,2
	E	dB(A)	91,1	91,6	92,2	92,2	92,7	92,7	93,2	93,2

(1) The units from size 1805 to 3606 have an electronic expansion valve as standard.

(2) 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).

G.s. = Grooved joints

DIMENSIONS



Size			0804 (1)	0904 (1)	1004 (1)	1104 (1)	1204 (1)	1414 (1)	1604 (1)	1805 (1)	2006 (1)
Dimensions and weights											
A	A,E	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	A,E	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	A	mm	2780	3970	3970	3970	3970	4760	4760	6350	6350
	E	mm	3970	4760	4760	4760	4760	5950	7140	8330	8330
Empty weight	A	kg	2560	3060	3180	3370	3640	4300	4470	5310	5720
	E	kg	2980	3620	3740	3930	4200	4770	5350	6250	6680

(1) The units from size 1805 to 3606 have an electronic expansion valve as standard.

Size			2206 (1)	2406 (1)	2606 (1)	2806 (1)	3006 (1)	3206 (1)	3406 (1)	3606 (1)
Dimensions and weights										
A	A,E	mm	2450	2450	2450	2450	2450	2450	2450	2450
B	A,E	mm	2200	2200	2200	2200	2200	2200	2200	2200
C	A	mm	7140	7140	8330	8330	9520	9520	10710	10710
	E	mm	9520	9520	10710	10710	11900	11900	13090	13090
Empty weight	A	kg	6370	6630	7280	7410	8200	8270	8890	8960
	E	kg	7350	7610	8200	8330	9030	9100	9730	9800

(1) The units from size 1805 to 3606 have an electronic expansion valve as standard.

■ *The weights are for standard units with plate heat exchangers and no hydronic kit.*

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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