

Chiller reversible on the water side and Evaporating unit
Water/Water Scroll compressors
Cooling capacity 111 kW - 510 kW
Heating capacity 119 kW - 570 kW

R410A



Aermec adheres to the EUROVENT Certification Programme: LCP
The products concerned appear in the EUROVENT Certified Products Guide.



- **HIGH EFFICIENCY**
- **INSTALLATION VERSATILITY ALSO FOR GEOTHERMAL APPLICATIONS**
- **REVERSIBLE ON THE WATER IN HEAT PUMP**
- **OPTION OF 1 OR 2 PUMPS ON BOTH EVAPORATOR AND CONDENSER SIDE**

Features

NXW is the range of water cooled that operate with refrigerant R410A. They are internal units with hermetic scroll compressors that respond perfectly to the market requirements: small dimensions, ease of installation, low noise.

Maximum energy efficiency

For years Aermec has been attentive to the energy efficiency issue, and has now designed the NXW units with the aim of ensuring high efficiency levels with both full and partial loads.

Models available

NXW[®]: water side reversible heat pump

NXW E: Motoevaporating unit

All models are available in low noise version

Integrated hydronic module on system side/on geothermal side

The built-in hydronic module includes the main water circuit components; it is available in various configurations with one or two pumps with high or low head both on the system side and the geothermal side.

Advanced controls

The NXW controller provides several functions:

- Two chiller units in parallel (run/standby)
- Programmed pump rotation
- Inverter condenser pump control to manage the condensing pressure
- Programmable time-clock
- Automatic water set point compensation
- Data logging

Construction details:

- Structure and base in hot dip galvanised sheet steel with epoxy paint finish (RAL 9002)
- High efficiency plate heat exchangers
- Compressors with high performance and low electrical input
- High and low pressure transducers as standard
- Conforms with Safety Directives (CE) and the standards regarding electromagnetic compatibility
The safety of the unit is provided by the door interlocked isolator and active protection of the main components
- Externally mounted user interface with display of all operating parameters in 4 languages
- User-friendly remote mounted control panel with alarm notification.

Accessories

- **AER485P1**: RS-485 interface for supervision systems with MODBUS protocol.
- **AERWEB300**: Accessory AERWEB allows remote control of a chiller through a common PC and an ethernet connection over a common browser; 4 versions available:
AERWEB300-6: Web server to monitor and remote control max. 6 units in RS485 network;
AERWEB300-18: Web server to monitor and remote control max. 18 units in RS485 network;
AERWEB300-6G: Web server to monitor and remote control max. 6 units in RS485 network with

integrated GPRS modem;

AERWEB300-18G: Web server to monitor and remote control max. 18 units in RS485 network with integrated GPRS modem;

- **MULTICHILLER NXW**: Control system to switch the individual chillers on and off, and command them, in a system in which several units are installed in parallel, always ensuring a constant delivery to the exchanger.
- **PGD1**: In addition to the unit mounted controller on the NXW unit a remote mounted PGD1 panel can be supplied providing the

same functions (keyboard controls and display).

- **RIF**: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current. **Factory fitted only.**
- **AVX**: spring anti-vibration mounts.
- **DRE**: Soft starter (current reduction of about 30% for single circuit units, 26% for two circuit units, 22% for three circuit units). Only for 400V/3/50Hz. **Factory fitted only.**

Accessory Compatibility

NXW	VERS.	0500	0550	0600	0650	0700	0750	0800	0900	1000	1250	1400	1500	1650
AER485P1	All	.	.	.	.	.	.	.	.	.	.	.	.	.
AERWEB300	All	.	.	.	.	.	.	.	.	.	.	.	.	.
MULTICHILLER NXW	All	.	.	.	.	.	.	.	.	.	.	.	.	.
PGD1	All	.	.	.	.	.	.	.	.	.	.	.	.	.
AVX														
Water side reversible heat pump "no"	°	319	319	301	301	301	303	310	314	316	316	315	330	330
With n°1 pumps	°	320	320	320	320	320	312	651	665	653	654	654	334	337
With n°2 pumps	°	320	320	309	309	309	312	651	665	653	654	654	337	335
With n°3 pumps	°	320	320	309	309	309	312	651	665	653	654	654	340	335
With n°4 pumps	°	309	309	310	310	310	312	651	665	653	654	654	335	339
Water side reversible heat pump "L"		309	309	310	303	303	310	314	314	315	315	317	331	331
With n°1 pumps	L	321	321	311	311	651	651	652	653	654	659	659	335	338
With n°2 pumps	L	311	311	31	311	651	651	652	653	654	659	659	338	339
With n°3 pumps	L	311	311	312	312	651	651	652	653	654	659	659	339	341
With n°4 pumps	L	312	312	312	310	651	651	652	653	654	659	659	339	341
Evaporating unit "E"		319	319	301	301	301	303	310	314	316	316	315	332	332
With n°1 pumps		320	320	320	320	320	312	651	665	653	654	654	332	334
With n°2 pumps		320	320	309	309	309	312	651	665	653	654	654	332	334
With n°3 pumps		320	320	309	309	309	312	651	665	653	654	654	334	340
With n°4 pumps		309	309	310	310	310	312	651	665	653	654	654	340	340
Evaporating unit low nois versions "LE"		309	309	310	303	303	310	314	314	315	315	317	330	330
With n°1 pumps		321	321	311	311	651	651	652	653	654	659	659	336	336
With n°2 pumps		311	311	31	311	651	651	652	653	654	659	659	336	335
With n°3 pumps		311	311	312	312	651	651	652	653	654	659	659	335	339
With n°4 pumps		312	312	312	310	651	651	652	653	654	659	659	339	339
Model with total heat recovery "T"		303	303	310	310	310	314	652	315	322	322	322	331	333
Model with total heat recovery low nois versions "LT"		312	312	651	651	652	652	652	323	324	324	324	333	333
RIF	All	98	98	95	95	95	95	95	96	97	97	97	97	97
DRE	All	501	551	601	651	701	751	801	901	1001	1251	1401	1500	1650

* Contact us.

Unit Configurator

By suitably combining the numerous options available it is possible to configure each model in such a way as to meet even the most demanding of system requirements.

Code:

NXW

Size:

0500, 0550, 0600, 0650, 0700, 0750, 0800, 0900, 1000, 1250, 1400, 1500, 1650

Field of use:

- ° - Thermostatic expansion valve with leaving water above +4 °C
- Y - Thermostatic expansion valve for low leaving liquid down to -10 °C (1)
- X - Electronic thermostatic valve, max. temp. of water produced: +4°C
(for lower temperatures please contact us)

Model:

- ° - water side reversible heat pump

Version:

- ° - Standard
- L - Low Noise

Evaporator:

- ° - Standard
- E - Evaporating unit (shipped with holding charge only)

Heat recovery:

- ° - Without heat recovery
- D - With desuperheaters (partial heat recovery)
- T - With total heat recovery

Power supply:

- ° - 400V 3~ 50Hz with circuit breakers
- 4 - 220V 3~ 50Hz with circuit breakers(3)
- 5 - 500V 3 50Hz with circuit breakers(4)

Evaporator side pumps (5)

- ° - without pumps
- M - low head pump
- N - low head pump and standby pump
- O - high head pump
- P - high head pump and standby pump
- Condenser side pumps (5)
- ° - without pumps
- U - low head pump
- V - low head pump and standby pump
- W - high head pump
- Z - high head pump and standby pump
- J - low head inverter pump
- K - high head inverter pump

- (1) Options Y it's not available whit options "T"
- (2) Options T t's not available whit evaporating unit "E"; and with hydronic kit
- (3) 220V/3/50Hz only available for sizes 0500-0700
- (4) 500V/3/50Hz only available for sizes 0800-1400
- (5) Pump (P) not available for sizes 1500 and 1650
Pumps (V and Z) not available for size 1650

Technical Data

NXW - °/L			500	550	600	650	700	750	800	900	1000	1250	1400	1500	1650
V/ph/Hz			400V/3/50Hz												
12°C / 7°C	Cooling capacity	(1) kW	111,6	120,5	148,4	166,3	188,2	222,0	256,9	290,7	325,0	353,9	383,8	453,0	510,2
	Total input power	(1) kW	23,1	24,9	30,7	34,4	38,9	45,6	53,0	60,3	65,5	72,7	78,7	92,6	104,0
	EER	(1)	4,83	4,83	4,84	4,84	4,83	4,87	4,84	4,82	4,89	4,87	4,88	4,89	4,91
	ESEER	(1)	6,01	6,02	6,01	6,04	6,02	6,05	6,03	6,02	6,06	6,05	6,06	6,32	6,35
	Cooling Energy Class Eurovent	(1)	B	B	B	B	B	B	B	B	B	B	B	B	B
	Water flow rate system side	(1) l/h	19234	20780	25589	28680	32458	38297	44308	50147	55986	60967	66119	78029	87900
	Pressure drop	(1) kPa	30	35	32	40	43	47	49	55	35	36	36	36	40
	Water flow rate geothermal side	(1) l/h	23050	24889	30660	34337	38871	45796	52977	60083	67075	73052	79202	93388	105118
	Pressure drop	(1) kPa	25	29	29	38	38	46	61	39	29	34	37	45	47
40°C / 45°C	Heating capacity	(2) kW	122,7	132,4	163,6	183,1	207,3	244,2	282,4	320,5	357,8	389,7	422,5	498,0	560,5
	Total input power	(2) kW	26,3	28,3	34,3	38,3	43,4	50,8	58,7	67,3	75,1	81,8	88,6	104,0	116,5
	COP	(2)	4,66	4,68	4,76	4,78	4,77	4,81	4,81	4,76	4,77	4,76	4,77	4,79	4,81
	Water flow rate system side	(2) l/h	16980	18344	22760	25509	28870	34063	39409	44603	49796	54226	58809	69402	78181
	Pressure drop	(2) kPa	23	27	25	32	34	37	39	43	28	28	28	28	32
	Water flow rate geothermal side	(2) l/h	21052	22728	28067	31427	35580	41902	48471	55002	61401	66875	72500	85466	96181
	Pressure drop	(2) kPa	36	42	39	48	52	57	59	67	42	44	44	43	48

NXW - E/LE			500	550	600	650	700	750	800	900	1000	1250	1400	1500	1650
12°C / 7°C	Cooling capacity	(3) kW	105,0	113,0	139,0	156,0	177,0	209,0	241,0	273,0	305,0	332,0	360,0	425,5	478,3
	Total input power	(3) kW	24,9	26,8	33,0	36,9	41,7	48,8	56,5	64,7	72,3	78,8	85,3	100,6	112,8
	EER	(3)	4,22	4,22	4,21	4,23	4,24	4,28	4,27	4,22	4,22	4,21	4,22	4,23	4,24
	Water flow rate system side	(3) l/h	18031	19480	23988	26918	30381	35935	41488	46976	52463	57187	61909	73084	82141
	Pressure drop	(3) kPa	25	27	33	37	42	49	57	65	72	79	85	31	36

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- (1) Water system side (in/out) 12°C/7°C; Water geothermal (in/out) 30°C/35°C
(2) Water system side (in/out) 40°C/45°C; Water geothermal (in/out) 10°C/5°C
(3) Water system side (in/out) 12°C/7°C; Condensing temperature 45°C

			500	550	600	650	700	750	800	900	1000	1250	1400	1500	1650
Electrical data															
Total input currente (cooling)	°	(4) A	48,3	50,6	58,4	63,0	86,0	94,0	102,0	120,0	138,0	140,0	143,0	159,6	177,5
Total input currente (heating)		(4) A	53,3	56,2	66,0	72,0	94,0	105,0	115,0	135,0	154,0	160,0	165,0	182,6	204,9
Total input currente (cooling)	E	(4) A	54,1	56,7	65,4	70,6	96,3	105,3	114,2	134,4	154,6	156,8	160,2	175,2	195,4
Maximum current (FLA)		(4) A	75	80	96	107	122	146	169	193	217	231	248	267,2	296,2
Starting current (LRA)		(4) A	240	245	227	238	289	319	341	398	422	490	504	601,4	630,4
Scroll Compressor															
Compressors / Circuit	n°/n°	3/2	3/2	4/2	4/2	4/2	4/2	4/2	4/2	4/2	4/2	4/2	4/2	4/2	4/2
Refrigerant	Type		R410A												
Heat exchanger system side															
Exchanger	Type/n°		Plate/1												
hydraulic connections (In/Out)	(4) Type/Ø	2"½	2"½	2"½	2"½	2"½	2"½	2"½	2"½	2"½	3"	3"	3"	3"	3"
Heat exchanger source side															
Exchanger	Type/n°		Plate/1												
hydraulic connections (In/Out)	(4) Type/Ø	2"½	2"½	2"½	2"½	2"½	2"½	2"½	2"½	3"	3"	3"	3"	3"	3"
Connection of Evaporating unit E															
Gas line (C1+C2)	Ø	28/22	28/22	28/28	28/28	28/28	28/28	28/28	35/28	35/35	35/42	42/42	*	*	*
Liquid line (C1+C2)	Ø	28/22	28/22	28/28	28/28	28/28	28/28	28/28	35/28	35/35	35/35	35/35	*	*	*
Sound data (cooling)															
Sound power level	°	dB(A)	78	79	79	80	82	86	88	88	88	90	90	93	95
Sound pressure level		dB(A)	46	47	47	48	50	54	56	56	56	58	58	60	61
Sound power level	L	dB(A)	72	73	73	74	76	80	82	82	82	84	84	86	87
Sound pressure level		dB(A)	40	41	41	42	44	48	50	50	50	52	52	53	54

(4) Unit standar configuration without hydronic kit

(C1+C2) Frigorific circuit;

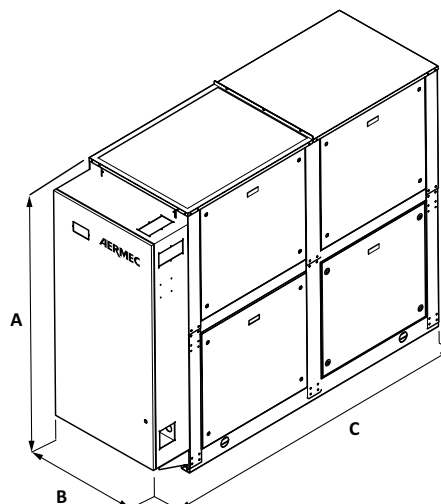
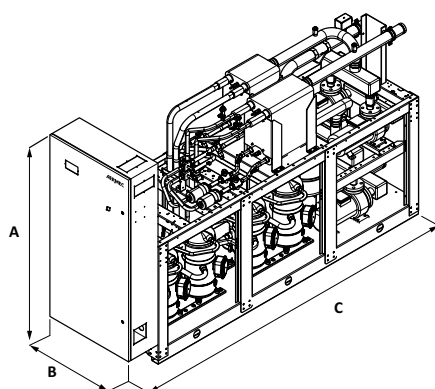
* Contact us

Sound power Aermec determines sound power values on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification.

Sound pressure Sound pressure in free field, at 10 m distance from the external surface of the unit (in accordance with UNI EN ISO 3744).

Note: For more information, refer to the selection program or the technical documentation available on the website www.aermec.com

Dimensions (mm)



			500	550	600	650	700	750	800	900	1000	1250	1400	1500	1650
NXW ° / E															
Height	A	mm	1835	1835	1835	1835	1835	1775	1775	1820	1820	1820	1820	1820	1820
Width	B	mm	800	800	800	800	800	800	800	800	800	800	800	800	800
Length	C	mm	1795	1795	1795	1795	1795	2420	2420	2420	2420	2420	2420	2420	2420
Weight - °		kg	578	582	682	690	727	882	989	1180	1417	1461	1539	1613	1721
Weight - E		kg	525	530	610	619	638	796	904	1044	1260	1304	1358	1598	1679
NXW ° / E WITH PUMP															
Height	A	mm	1775	1775	1775	1775	1775	1775	1775	1820	1820	1820	1820	1820	1820
Width	B	mm	800	800	800	800	800	800	800	800	800	800	800	800	800
Length	C	mm	3020	3020	3020	3020	3020	3480	3480	3480	3480	3480	3480	3480	3630
Weight		kg	The weight is variable depending on the chosen hydronic kit												
NXW L / LE															
Height	A	mm	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Width	B	mm	800	800	800	800	800	800	800	800	800	800	800	800	800
Length	C	mm	2090	2090	2090	2090	2090	2420	2420	2420	2420	2420	2420	2420	2420
Weight - L		kg	750	755	854	863	900	1054	1187	1378	1615	1659	1737	1811	1919
Weight - LE		kg	697	702	781	791	810	968	1104	1244	1460	1504	1558	1656	1717
NXW L / LE WITH PUMP															
Height	A	mm	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1820
Width	B	mm	800	800	800	800	800	800	800	800	800	800	800	800	800
Length	C	mm	3020	3020	3020	3020	3020	3480	3480	3480	3480	3480	3480	3480	3630
Weight		kg	The weight is variable depending on the chosen hydronic kit												