



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



- **HIGH EFFICIENCY**
- **HEAT PUMP WITH REFRIGERANT SIDE REVERSING FOR GEOTHERMAL APPLICATIONS**
- **OPTION OF 1 OR 2 PUMPS ON BOTH EVAPORATOR AND CONDENSER SIDE**
- **PRODUCTION OF HOT WATER UP TO 55 °C**

### Characteristics

**NXW** is the range of water cooled heat pumps 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

**NXWH:** refrigerant side reversible heat pump

#### 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. Must be requested at time of order and is available 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 available for 400V-3-phase power supply. Factory fitted only.

## Accessory Compatibility

<b>NXW</b>	<b>VERS.</b>	<b>0500</b>	<b>0550</b>	<b>0600</b>	<b>0650</b>	<b>0700</b>	<b>0750</b>	<b>0800</b>	<b>0900</b>	<b>1000</b>	<b>1250</b>	<b>1400</b>	<b>1500</b>	<b>1650</b>
<b>AER485P1</b>	All	*	*	*	*	*	*	*	*	*	*	*	*	*
<b>AERWEB300</b>	All	*	*	*	*	*	*	*	*	*	*	*	*	*
<b>MULTICHILLER NXW</b>	All	*	*	*	*	*	*	*	*	*	*	*	*	*
<b>PGD1</b>	All	*	*	*	*	*	*	*	*	*	*	*	*	*
<b>AVX</b>														
<b>Model "H"</b>	°	319	319	301	301	302	310	310	314	316	315	317	330	331
With n°1 pumps	°	320	320	320	309	309	651	651	665	654	654	654	337	336
With n°2 pumps	°	320	320	303	309	311	651	651	665	654	654	654	336	335
With n°3 pumps	°	309	309	303	311	312	651	651	665	654	654	654	335	339
With n°4 pumps	°	309	309	312	312	312	651	651	665	654	654	654	335	339
<b>Model "HL"</b>	L	309	309	310	303	304	314	314	315	317	317	318	331	333
With n°1 pumps	L	311	311	311	311	651	652	665	653	659	659	659	338	338
With n°2 pumps	L	311	311	312	313	651	652	665	653	659	659	659	338	341
With n°3 pumps	L	312	312	312	313	651	652	665	653	659	659	659	339	341
With n°4 pumps	L	312	312	312	313	651	652	665	653	659	659	659	341	341
<b>RIF</b>	All	98	98	95	95	95	95	95	96	97	97	97	*	*
<b>DRE</b>	All	501	551	601	651	701	751	801	901	1001	1251	1401	*	*

## 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
- X - Electronic thermostatic valve, max. temp. of water produced: +4°C  
(for lower temperatures please contact us)

### Model:

H - refrigerant side reversible heat pump

### Version:

- ° - Standard
- L - Low Noise

### Evaporator:

- ° - Standard

### Heat recovery:

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

### Power supply:

- ° - 400V 3~ 50Hz with circuit breakers
- 4 - 220V 3~ 50Hz with circuit breakers\*
- 5 - 500V 3 50Hz with circuit breakers\*\*

### Evaporator side pumps

- ° - 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

- ° - 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

\* only available for sizes 0500-0700

\*\* only available for sizes 0800-1000

## Technical Data

NXW - H/HL			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	105,7	113,7	140,6	159,5	180,5	211,3	242,1	277,3	313,4	341,2	369,1	422,9	476,2
	Total input power	(1)	kW	23,9	25,8	31,2	35,4	40,2	47,1	54,2	62,2	70,4	76,6	82,7	94,7	106,7
	EER	(1)		4,42	4,40	4,50	4,51	4,49	4,48	4,46	4,46	4,45	4,45	4,46	4,46	4,46
	ESEER	(1)		5,73	5,71	5,76	5,85	5,76	5,79	5,64	5,72	5,85	5,77	5,8	5,80	5,80
	Cooling Energy Class Eurovent	(1)		C	C	C	C	C	C	C	C	C	C	C	C	C
	Water flow rate system side	(1)	l/h	18232	19608	24252	27520	31132	36464	41796	47816	54008	58824	63640	72803	81991
	Pressure drop	(1)	kPa	17	20	19	24	24	29	38	24	19	22	24	29	30
	Water flow rate geothermal side	(1)	l/h	22023	23693	29203	33108	37488	43899	50293	57865	65250	71030	76810	88562	99721
	Pressure drop	(1)	kPa	25	29	28	35	35	42	55	36	28	32	34	40	43
40°C / 45°C	Heating capacity	(2)	kW	125,6	136,0	166,1	188,0	210,8	270,1	310,9	325,9	366,2	400,5	434,8	501,7	566,5
	Total input power	(2)	kW	28,0	30,3	36,9	41,8	46,9	55,6	64,6	72,6	80,8	88,7	96,5	111,1	124,8
	COP	(2)		4,49	4,49	4,51	4,50	4,49	4,86	4,81	4,49	4,53	4,52	4,51	4,52	4,54
	Heating Energy Class Eurovent			A	A	A	A	A	A	A	A	A	A	A	A	A
	Water flow rate system side	(2)	l/h	21536	23316	28478	32216	36130	37475	43059	55886	62828	68702	74576	86939	98147
	Pressure drop	(2)	kPa	24	28	26	33	32	31	40	33	26	30	32	38	42
	Water flow rate geothermal side	(2)	l/h	28589	30965	37822	42843	47999	46267	53207	74186	83446	91221	99023	114199	129149
	Pressure drop	(2)	kPa	43	49	46	58	58	46	61	58	46	52	58	66	71
	Performance under average climatic conditions (Average)															
Pdesignh (55°C)	(3)		161	175	213	241	271	320	368	/	/	/	/	/	/	
SCOP	(3)		4,93	4,93	4,95	4,95	4,95	4,90	4,83	/	/	/	/	/	/	
ns	(3)		189	189	190	190	190	188	185	/	/	/	/	/	/	

### Date (14511:2013)

(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/7°C

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

Efficiency Energy Class in according to regulation n°811/2013 Pdesignh ≤ 400kW

			500	550	600	650	700	750	800	900	1000	1250	1400	1500	1650	
Electrical data																
Total input current (cooling)	°	(4)	A	49,0	52,0	60,0	65,0	87,0	95,0	104,0	122,0	140,0	144,0	147,0	164,2	183,4
Total input current (heating)		(4)	A	53,3	56,2	65,1	71,0	92,7	105,0	115,0	133,1	151,9	157,8	162,7	182,5	203,9
Maximum current (FLA)		(4)	A	75	80	75	107	122	146	169	193	217	231	248	267	296
Starting current (LRA)		(4)	A	240	245	240	238	289	319	341	398	422	490	504	601	630
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
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	3"	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	3"	3"	3"	3"	3"	3"
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

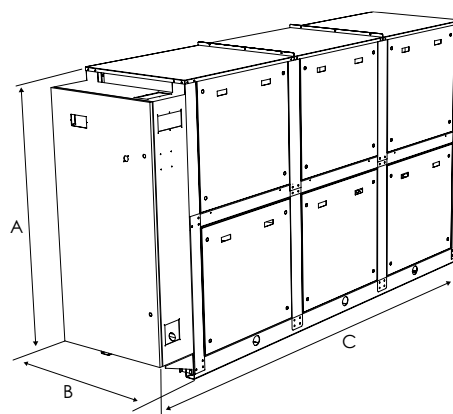
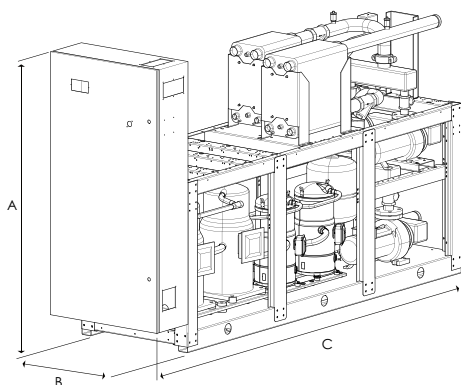
(4) Unit standar configuration without hydronic kit

**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](http://www.aermec.com)

## Dimensions (mm)



			500	550	600	650	700	750	800	900	1000	1250	1400	1500	1650
<b>NXW H</b>															
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	628	633	734	743	791	948	1042	1275	1545	1577	1657	1687	1825
<b>NXW H WITH PUMP</b>															
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												
<b>NXW HL</b>															
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		kg	801	805	907	915	963	1121	1240	1473	1743	1774	1855	1885	2023
<b>NXW HL WITH PUMP</b>															
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												