

# NSM

## Air-cooled chiller with free cooling (glycol-free)

Cooling capacity 305,8 ÷ 2028,1 kW



- Microchannel coil
- Night mode
- Operation up to 50 °C outdoor air
- High efficiency also at partial loads



### DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential/commercial complexes or industrial applications.

These are outdoor units with screw compressors, axial fans, micro-channel coils, and shell and tube heat exchangers

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

### VERSIONS

- A** High efficiency
- E** Silenced high efficiency
- N** Silenced very high efficiency
- U** Very high efficiency

### FEATURES

#### Operating field

Operation at full load up to 50 °C external air temperature depending on the size and version. For more information refer to the dedicated documents or the selection program Magellano.

#### Unit with 2/3 cooling circuits

Unit with 2/3 refrigerant circuits designed to provide maximum efficiency at full load, ensuring high efficiency at partial loads also and ensuring continuity in case one of the circuits stops.

#### 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.

#### Aluminium microchannel coils

The whole range uses microchannel condenser coils allowing reduction of refrigerant charge but keeping the same high efficiency.

#### Free-cooling water coils

These units also have a water coil dedicated to free-cooling mode. Free-cooling offers significant energy saving in applications that require cooling all year round.

As soon as the outside air temperature allows, a valve makes the water flow towards the free-cooling battery which is cooled directly by the air. The

compressors are completely shut down, if possible, leading to considerable electrical savings.

#### Free cooling with glycol water

Intermediate plate heat exchanger that creates two circuits:

1. Glycol hydraulic circuit (glycol is added to protect the coil from freezing).
2. Primary hydraulic circuit for glycol-free systems.

#### Electronic expansion valve

**Electronic thermostatic as standard from size 5202 to 6402 and from 8403 to 9603.**

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.

### CONTROL

**Units include 1 control board for each compressor.**

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

- 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.
- **Night mode:** only in the **non-silenced** versions is it possible to set a silenced operating mode, which is useful for example at night for greater acoustic comfort but always guarantees performance even at peak load times.
- Possibility to control two units in a Master-Slave configuration (from size 1402 to 6402)

### ACCESSORIES

**AER485P1:** RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.

**AERBACP:** Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.

**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 control boards). 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.

**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.

**PRV3:** Allows you to control the chiller at a distance.

**AVX:** Spring anti-vibration supports.

## FACTORY FITTED ACCESSORIES

**RIF:** Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

**GP\_:** Anti-intrusion grid kit

**KRS:** Electric heater for the heat exchanger

**AK:** Acoustic kit that lowers the noise level even further, thanks to the special coating on the panelling or on those components that produce the most noise in the unit. Available for the low noise version only.

**KDI:** Double thickness evaporator insulation. Provides stand-still protection down to -20°C. Must be ordered in conjunction with options KRS.

## ACCESSORIES COMPATIBILITY

Model	Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
AER485P1 x no. 2	A,E,N,U	*	*	*	*	*	*	*	*	*	*	*	*	*	*
AERBACP x no. 2	A,E,N,U	*	*	*	*	*	*	*	*	*	*	*	*	*	*
AERNET	A,E,N,U	*	*	*	*	*	*	*	*	*	*	*	*	*	*
MULTICHILLER-EVO	A,E,N,U	*	*	*	*	*	*	*	*	*	*	*	*	*	*
PRV3	A,E,N,U	*	*	*	*	*	*	*	*	*	*	*	*	*	*

Model	Ver	4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
AER485P1 x no. 2	A,E,N,U	*	*	*	*	*	*	*	*	*	*	*	*	*
AER485P1 x no. 3	A								*	*	*	*	*	*
	E,U								*	*	*	*	*	*
	N								*	*	*	*	*	*
AERBACP x no. 2	A,E,N,U	*	*	*	*	*	*	*	*	*	*	*	*	*
AERBACP x no. 3	A								*	*	*	*	*	*
	E,U								*	*	*	*	*	*
	N								*	*	*	*	*	*
AERNET	A	*	*	*	*	*	*	*	*	*	*	*	*	*
	E,U	*	*	*	*	*	*	*	*	*	*	*	*	*
	N	*	*	*	*	*	*	*	*	*	*	*	*	*
MULTICHILLER-EVO	A	*	*	*	*	*	*	*	*	*	*	*	*	*
	E,U	*	*	*	*	*	*	*	*	*	*	*	*	*
	N	*	*	*	*	*	*	*	*	*	*	*	*	*
PRV3	A	*	*	*	*	*	*	*	*	*	*	*	*	*
	E,U	*	*	*	*	*	*	*	*	*	*	*	*	*
	N	*	*	*	*	*	*	*	*	*	*	*	*	*

## Antivibration

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
A	AVX929	AVX929	AVX929	AVX932	AVX933	AVX933	AVX933	AVX934	AVX937	AVX937	AVX937	AVX938	AVX938	AVX942
E, U	AVX929	AVX929	AVX930	AVX933	AVX933	AVX934	AVX934	AVX935	AVX935	AVX935	AVX935	AVX939	AVX939	AVX940
N	AVX930	AVX930	AVX931	AVX931	AVX934	AVX935	AVX935	AVX936	AVX936	AVX936	AVX936	AVX940	AVX941	AVX943

Ver	4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
A	AVX942	AVX944	AVX944	AVX944	AVX945	AVX947	AVX947	AVX953	AVX953	AVX957	AVX954	AVX956	AVX955
E, U	AVX941	AVX945	AVX947	AVX947	AVX950	AVX952	AVX948	AVX954	AVX956	AVX956	AVX958	-	-
N	AVX943	AVX946	AVX948	AVX949	AVX951	AVX951	AVX951	AVX955	-	-	-	-	-

The accessory cannot be fitted on the configurations indicated with -

## Power factor correction

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802
A	RIFNSM1402Q	RIFNSM1602Q	RIFNSM1802Q	RIFNSM2002Q	RIFNSM2202Q	RIFNSM2352Q	RIFNSM2502Q	RIFNSM2652Q	RIFNSM2802C
E	RIFNSM1402Q	RIFNSM1602Q	RIFNSM1802Q	RIFNSM2002Q	RIFNSM2202Q	RIFNSM2352C	RIFNSM2502C	RIFNSM2652Q	RIFNSM2802C
N	RIFNSM1402Q	RIFNSM1602Q	RIFNSM1802C	RIFNSM2002Q	RIFNSM2202C	RIFNSM2352C	RIFNSM2502C	RIFNSM2652Q	RIFNSM2802C
U	RIFNSM1402Q	RIFNSM1602Q	RIFNSM1802Q	RIFNSM2002C	RIFNSM2202Q	RIFNSM2352C	RIFNSM2502C	RIFNSM2652Q	RIFNSM2802C

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

Ver	3002	3202	3402	3602	3902	4202	4502	4802	5202
A, E, U	RIFNSM3002C	RIFNSM3202C	RIFNSM3402C	RIFNSM3602C	RIFNSM3902C	RIFNSM4202C	RIFNSM4502C	RIFNSM4802C	RIFNSM5202C
N	RIFNSM3002C	RIFNSM3202C	RIFNSM3402C	RIFNSM3602C	RIFNSM3902C	RIFNSM4202C	-	-	-

The accessory cannot be fitted on the configurations indicated with -

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

Ver	5602	6002	6402	6503	6703	6903	7203	8403	9603
A	RIFNSM5602C	RIFNSM6002C	RIFNSM6402C	-	-	-	-	-	-

The accessory cannot be fitted on the configurations indicated with -

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

## Anti-intrusion grid

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
A	GP4V	GP4V	GP4V	GP4V	GP5V	GP5V	GP5V	GP6V	GP6V	GP6V	GP6V	GP7V	GP7V	GP8V
E, U	GP4V	GP4V	GP5V	GP5V	GP5V	GP6V	GP6V	GP7V	GP7V	GP7V	GP7V	GP8V	GP8V	GP9V
N	GP5V	GP5V	GP6V	GP6V	GP6V	GP7V	GP7V	GP8V	GP8V	GP8V	GP8V	GP9V	GP10V	GP11V

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

Ver	4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
A	GP8V	GP9V	GP9V	GP9V	GP10V	GP11V	GP11V	GP4V+GP8V	GP4V+GP8V	GP5V+GP9V	GP5V+GP9V	GP5V+GP10V	GP6V+GP11V
E, U	GP10V	GP10V	GP11V	GP11V	GP6V+GP6V	GP6V+GP7V	GP7V+GP7V	GP5V+GP9V	GP5V+GP10V	GP5V+GP10V	GP6V+GP11V	-	-
N	GP11V	GP6V+GP7V	GP7V+GP7V	GP7V+GP8V	GP8V+GP8V	GP8V+GP8V	GP8V+GP8V	GP6V+GP11V	-	-	-	-	-

The accessory cannot be fitted on the configurations indicated with -  
A grey background indicates the accessory must be assembled in the factory

### Heater exchangers

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802
A	KRS22	KRS22	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23
E, N, U	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23

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

Ver	3002	3202	3402	3602	3902	4202	4502	4802	5202
A, E, U	KRS23	KRS23	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24
N	KRS23	KRS23	KRS24	KRS24	KRS24	KRS24	KRS23+KRS23	KRS23+KRS23	KRS23+KRS23

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

Ver	5602	6002	6402	6503	6703	6903	7203	8403	9603
A	KRS24	KRS24	KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24
E, U	KRS23+KRS23	KRS23+KRS23	KRS23+KRS23	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	-	-
N	KRS23+KRS23	KRS23+KRS23	KRS23+KRS23	KRS23+KRS24	-	-	-	-	-

The accessory cannot be fitted on the configurations indicated with -  
A grey background indicates the accessory must be assembled in the factory

### Acoustic kit

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
E, N	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)

(1) Available only in low noise version

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

Ver	4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
E, N	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)

(1) Available only in low noise version

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

### Double thickness evaporator insulation

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
A, E, N, U	KDI (1)	KDI (1)	KDI (1)	KDI (1)	KDI (1)	KDI (1)	KDI (1)	KDI (1)	KDI (1)	KDI (1)	KDI (1)	KDI (1)	KDI (1)	KDI (1)

(1) Contact us.

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

Ver	4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
A, E, N, U	KDI (1)	KDI (1)	KDI (1)	KDI (1)	KDI (1)	KDI (1)	KDI (1)	KDI (1)	KDI (1)	KDI (1)	KDI (1)	KDI (1)	KDI (1)

(1) Contact us.

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

## CONFIGURATOR

Field	Description
1,2,3	<b>NSM</b>
4,5,6,7	<b>Size</b> 1402, 1602, 1802, 2002, 2202, 2352, 2502, 2652, 2802, 3002, 3202, 3402, 3602, 3902, 4202, 4502, 4802, 5202, 5602, 6002, 6402, 6503, 6703, 6903, 7203, 8403, 9603
	<b>Operating field</b>
X	Electronic thermostatic expansion valve (1)
Y	Low temperature mechanic thermostatic valve (2)
Z	Low temperature electronic thermostatic valve (2)
°	Standard mechanic thermostatic valve (3)
9	<b>Model</b>
B	Free-cooling glycol free
G	Free-cooling glycol free plus (4)
10	<b>Heat recovery</b>
D	Desuperheater
°	Without heat recovery
11	<b>Version</b>
A	High efficiency
E	Silenced high efficiency
N	Silenced very high efficiency
U	Very high efficiency

Field	Description
12	<b>Coils / free-cooling coils</b>
0	Painted aluminium microchannel / Copper painted aluminium
R	Copper-copper/Copper-copper
S	Copper-Tinned copper / Copper -Tinned copper
V	Copper-painted aluminium / Copper-painted aluminium
°	Alluminium microchannel / Copper - aluminium
13	<b>Fans</b>
J	Inverter
°	Standard
14	<b>Power supply</b>
2	230V ~ 3 50Hz with fuses (5)
4	230V ~ 3 50Hz with magnet circuit breakers (5)
8	400V ~ 3 50Hz with magnet circuit breakers
°	400V ~ 3 50Hz with fuses
15,16	<b>Integrated hydronic kit</b>
00	Without hydronic kit

(1) Water produced up to +4 °C

(2) Water produced from +4 °C ÷ -6 °C

(3) Water produced up to +4 °C.

(4) The Free cooling Plus "G" models are only compatible with "" and "0" coils.

(5) Available only for size from 1402 to 2202

## PERFORMANCE SPECIFICATIONS

### NSM - A

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
<b>Model: B</b>															
<b>Cooling performance chiller operation (1)</b>															
Cooling capacity	kW	306,5	350,2	396,8	450,5	505,3	522,5	556,5	600,8	649,8	678,4	726,3	813,3	872,8	954,1
Input power	kW	102,8	117,6	136,7	158,3	168,9	180,5	194,5	203,0	220,4	235,0	252,8	269,7	295,6	317,9
Cooling total input current	A	182,0	206,0	231,0	268,0	291,0	311,0	335,0	351,0	378,0	400,0	427,0	451,0	487,0	530,0
EER	W/W	2,98	2,98	2,90	2,85	2,99	2,90	2,86	2,96	2,95	2,89	2,87	3,02	2,95	3,00
Water flow rate system side	l/h	52653	60163	68174	77407	86812	89765	95621	103224	111642	116561	124785	139737	149957	163932
Pressure drop system side	kPa	73	94	100	72	90	96	108	107	117	100	94	81	93	112
<b>Cooling performances with free-cooling glycol-free (2)</b>															
Cooling capacity	kW	201,2	207,2	212,6	221,0	271,8	273,9	277,4	334,0	337,2	352,7	355,8	414,1	417,7	460,7
Input power	kW	18,5	18,5	18,5	18,5	24,6	24,6	24,6	32,7	32,7	32,9	32,9	38,1	38,1	42,0
Free cooling total input current	A	33,0	32,0	31,0	31,0	42,0	42,0	42,0	57,0	56,0	56,0	56,0	64,0	63,0	70,0
EER	W/W	10,87	11,19	11,48	11,92	11,06	11,14	11,28	10,20	10,30	10,71	10,81	10,86	10,95	10,97

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%

(2) System side water heat exchanger 12 °C / °C; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
<b>Model: G</b>															
<b>Cooling performance chiller operation (1)</b>															
Cooling capacity	kW	305,8	349,3	395,0	447,3	502,1	519,1	552,6	597,2	645,4	674,3	721,9	807,8	865,0	946,8
Input power	kW	103,7	118,8	138,1	160,2	170,8	182,6	197,0	205,3	223,1	238,4	257,1	273,3	299,3	321,8
Cooling total input current	A	184,0	208,0	233,0	271,0	294,0	315,0	339,0	355,0	382,0	405,0	433,0	456,0	492,0	536,0
EER	W/W	2,95	2,94	2,86	2,79	2,94	2,84	2,81	2,91	2,89	2,83	2,81	2,96	2,89	2,94
Water flow rate system side	l/h	52546	60019	67864	76853	86266	89180	94948	102598	110891	115859	124023	138789	148609	162675
Pressure drop system side	kPa	48	64	74	62	78	84	95	70	74	81	74	86	98	68
<b>Cooling performances with free-cooling glycol-free (2)</b>															
Cooling capacity	kW	213,5	220,0	226,6	237,8	288,8	291,7	294,5	353,1	360,2	374,3	378,1	439,1	443,5	495,5
Input power	kW	18,3	18,3	18,3	18,3	24,2	24,2	24,2	32,1	32,1	32,3	32,3	37,4	37,4	41,3
Free cooling total input current	A	32,0	32,0	31,0	31,0	42,0	42,0	42,0	55,0	55,0	55,0	54,0	62,0	61,0	69,0
EER	W/W	11,68	12,03	12,39	12,99	11,92	12,04	12,16	11,00	11,22	11,59	11,71	11,74	11,86	12,00

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%

(2) System side water heat exchanger 12 °C / °C; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

### NSM - A

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603	
<b>Model: B</b>															
<b>Cooling performance chiller operation (1)</b>															
Cooling capacity	kW	996,8	1082,3	1128,3	1167,3	1222,8	1304,9	1346,7	1459,2	1501,9	1659,0	1705,0	1838,1	2028,1	
Input power	kW	346,1	365,7	391,9	422,5	438,9	452,7	472,4	492,1	520,2	557,2	583,3	659,0	704,1	
Cooling total input current	A	581,0	614,0	655,0	704,0	733,0	761,0	796,0	821,0	872,0	945,0	986,0	1100,0	1198,0	
EER	W/W	2,88	2,96	2,88	2,76	2,79	2,88	2,85	2,97	2,89	2,98	2,92	2,79	2,88	
Water flow rate system side	l/h	171269	185947	193855	200561	210092	224201	231379	250713	258050	285029	292937	315803	348457	
Pressure drop system side	kPa	122	132	143	116	109	125	133	112	127	132	143	108	135	
<b>Cooling performances with free-cooling glycol-free (2)</b>															
Cooling capacity	kW	464,4	522,4	524,0	526,5	571,2	612,5	614,9	684,4	688,1	798,8	801,4	867,6	965,2	
Input power	kW	42,0	46,2	46,2	46,2	50,1	53,8	53,9	60,5	60,5	70,7	70,8	78,9	86,8	
Free cooling total input current	A	71,0	77,0	77,0	77,0	84,0	91,0	91,0	101,0	101,0	120,0	120,0	132,0	148,0	
EER	W/W	11,06	11,32	11,35	11,41	11,41	11,38	11,41	11,31	11,37	11,29	11,32	10,99	11,12	

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%

(2) System side water heat exchanger 12 °C / °C; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603	
<b>Model: G</b>															
<b>Cooling performance chiller operation (1)</b>															
Cooling capacity	kW	988,7	1074,2	1119,1	1156,4	1212,7	1295,2	1336,2	1447,7	1489,6	1646,9	1691,9	1822,8	2013,1	
Input power	kW	350,6	370,3	397,1	428,3	444,3	458,0	478,2	498,2	527,1	564,0	590,8	667,1	712,4	
Cooling total input current	A	588,0	621,0	663,0	713,0	741,0	769,0	805,0	830,0	882,0	956,0	998,0	1112,0	1211,0	
EER	W/W	2,82	2,90	2,82	2,70	2,73	2,83	2,79	2,91	2,83	2,92	2,86	2,73	2,83	
Water flow rate system side	l/h	169873	184553	192278	198678	208362	222522	229577	248739	255937	282961	290686	313186	345875	
Pressure drop system side	kPa	74	91	98	86	95	109	116	84	84	110	110	101	116	
<b>Cooling performances with free-cooling glycol-free (2)</b>															
Cooling capacity	kW	500,3	559,0	564,4	569,9	610,4	656,1	662,5	737,9	742,7	856,4	861,8	926,6	1037,6	
Input power	kW	41,3	45,5	45,5	45,5	49,3	53,1	53,1	59,6	59,6	69,7	69,7	77,6	85,4	
Free cooling total input current	A	69,0	76,0	76,0	76,0	82,0	89,0	89,0	99,0	100,0	118,0	118,0	129,0	145,0	
EER	W/W	12,12	12,30	12,42	12,54	12,38	12,36	12,48	12,38	12,46	12,29	12,37	11,95	12,15	

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%

(2) System side water heat exchanger 12 °C / °C; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

**NSM - E**

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
<b>Model: B</b>															
<b>Cooling performance chiller operation (1)</b>															
Cooling capacity	kW	319,8	365,8	417,7	473,0	509,1	549,8	568,8	618,6	646,3	675,1	715,5	796,7	851,7	929,6
Input power	kW	105,5	123,3	137,5	159,4	178,3	183,3	195,5	205,2	220,4	235,9	253,5	270,8	297,1	320,1
Cooling total input current	A	177,0	206,0	223,0	261,0	295,0	305,0	326,0	342,0	365,0	389,0	415,0	438,0	474,0	517,0
EER	W/W	3,03	2,97	3,04	2,97	2,85	3,00	2,91	3,01	2,93	2,86	2,82	2,94	2,87	2,90
Water flow rate system side	l/h	54946	62848	71763	81260	87462	94455	97732	106280	111042	115993	122937	136886	146332	159723
Pressure drop system side	kPa	62	76	84	78	90	88	94	100	109	91	94	80	92	110
<b>Cooling performances with free-cooling glycol-free (2)</b>															
Cooling capacity	kW	186,6	192,0	231,5	241,7	246,1	294,5	297,3	334,0	337,2	351,6	354,9	403,7	407,3	448,1
Input power	kW	15,5	15,5	19,5	19,6	19,6	26,8	26,8	30,6	30,6	31,0	31,0	34,0	34,0	36,8
Free cooling total input current	A	26,0	26,0	32,0	32,0	32,0	44,0	45,0	51,0	51,0	51,0	51,0	55,0	54,0	59,0
EER	W/W	12,01	12,36	11,89	12,34	12,57	11,01	11,11	10,92	11,03	11,35	11,45	11,88	11,98	12,18

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%  
 (2) System side water heat exchanger 12 °C / °C; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
<b>Model: G</b>															
<b>Cooling performance chiller operation (1)</b>															
Cooling capacity	kW	316,7	363,1	414,5	469,5	504,1	545,4	564,0	613,8	640,8	669,8	710,9	790,6	843,5	921,3
Input power	kW	106,6	124,7	138,6	161,1	181,0	185,4	197,8	207,6	223,1	239,2	257,8	274,6	301,1	324,4
Cooling total input current	A	179,0	208,0	225,0	263,0	298,0	308,0	329,0	345,0	369,0	393,0	421,0	443,0	480,0	523,0
EER	W/W	2,97	2,91	2,99	2,91	2,79	2,94	2,85	2,96	2,87	2,80	2,76	2,88	2,80	2,84
Water flow rate system side	l/h	54406	62391	71215	80666	86616	93710	96910	105465	110105	115087	122135	135840	144915	158291
Pressure drop system side	kPa	36	42	54	66	76	54	58	59	65	71	73	47	54	66
<b>Cooling performances with free-cooling glycol-free (2)</b>															
Cooling capacity	kW	197,2	203,1	242,3	255,6	258,0	307,4	310,5	349,3	352,8	266,5	373,6	421,8	425,7	470,1
Input power	kW	15,2	15,2	19,1	19,2	19,2	26,1	26,1	29,9	29,9	30,3	30,3	33,3	33,3	36,1
Free cooling total input current	A	26,0	25,0	31,0	31,0	32,0	43,0	44,0	50,0	50,0	50,0	49,0	54,0	53,0	58,0
EER	W/W	12,94	13,32	12,67	13,29	13,42	11,76	11,88	11,68	11,79	12,11	12,35	12,68	12,80	13,02

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%  
 (2) System side water heat exchanger 12 °C / °C; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

**NSM - E**

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603	
<b>Model: B</b>															
<b>Cooling performance chiller operation (1)</b>															
Cooling capacity	kW	995,2	1051,6	1137,0	1159,2	1217,3	1279,4	1341,6	1434,0	1499,6	1598,6	1684,0	-	-	
Input power	kW	339,9	370,0	389,4	418,0	436,6	448,9	461,2	491,1	510,9	568,9	588,3	-	-	
Cooling total input current	A	555,0	601,0	632,0	678,0	708,0	732,0	755,0	804,0	832,0	924,0	945,0	-	-	
EER	W/W	2,93	2,84	2,92	2,77	2,79	2,85	2,91	2,92	2,93	2,81	2,86	-	-	
Water flow rate system side	l/h	170980	180685	195353	199172	209139	219823	230507	246385	257643	274665	289333	-	-	
Pressure drop system side	kPa	125	128	130	135	84	115	112	110	121	121	130	-	-	
<b>Cooling performances with free-cooling glycol-free (2)</b>															
Cooling capacity	kW	495,6	509,3	549,8	551,2	600,1	640,5	682,5	692,0	739,5	761,7	802,2	-	-	
Input power	kW	44,0	44,2	46,9	47,0	53,5	57,3	61,5	56,4	63,5	65,6	68,4	-	-	
Free cooling total input current	A	72,0	72,0	76,0	76,0	87,0	93,0	100,0	92,0	104,0	107,0	110,0	-	-	
EER	W/W	11,27	11,54	11,72	11,73	11,22	11,17	11,14	12,27	11,64	11,60	11,72	-	-	

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%  
 (2) System side water heat exchanger 12 °C / °C; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603	
<b>Model: G</b>															
<b>Cooling performance chiller operation (1)</b>															
Cooling capacity	kW	987,5	1041,9	1127,1	1148,0	1206,7	1269,3	1332,0	1421,7	1487,9	1583,2	1668,4	-	-	
Input power	kW	344,2	375,3	394,8	424,0	442,2	454,4	466,6	497,6	517,4	577,4	596,9	-	-	
Cooling total input current	A	561,0	609,0	640,0	687,0	717,0	740,0	763,0	814,0	842,0	937,0	957,0	-	-	
EER	W/W	2,87	2,78	2,86	2,71	2,73	2,79	2,85	2,86	2,88	2,74	2,80	-	-	
Water flow rate system side	l/h	169667	179011	193651	197235	207320	218083	228846	244269	255645	272005	286645	-	-	
Pressure drop system side	kPa	76	87	83	86	58	70	70	86	86	100	100	-	-	
<b>Cooling performances with free-cooling glycol-free (2)</b>															
Cooling capacity	kW	523,4	531,6	576,1	581,5	627,1	669,8	712,5	728,1	781,4	795,8	840,2	-	-	
Input power	kW	43,0	43,1	46,0	46,0	52,3	56,1	59,8	55,3	62,2	64,2	67,0	-	-	
Free cooling total input current	A	70,0	70,0	74,0	74,0	85,0	91,0	98,0	91,0	101,0	104,0	107,0	-	-	
EER	W/W	12,17	12,32	12,53	12,65	11,99	11,95	11,91	13,16	12,55	12,40	12,54	-	-	

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%  
 (2) System side water heat exchanger 12 °C / °C; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

**NSM - U**

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
<b>Model: B</b>															
<b>Cooling performance chiller operation (1)</b>															
Cooling capacity	kW	328,1	378,5	429,3	491,9	531,3	568,6	589,0	638,0	667,8	695,1	735,8	824,8	891,0	967,9
Input power	kW	105,3	121,3	136,2	155,8	172,9	180,0	191,0	202,4	216,1	228,4	242,4	263,0	288,2	311,5
Cooling total input current	A	186,0	212,0	232,0	266,0	297,0	313,0	332,0	353,0	374,0	392,0	413,0	443,0	477,0	523,0
EER	W/W	3,12	3,12	3,15	3,16	3,07	3,16	3,08	3,15	3,09	3,04	3,04	3,14	3,09	3,11
Water flow rate system side	l/h	56372	65027	73755	84508	91287	97691	101204	109611	114731	119419	126414	141715	153088	166304
Pressure drop system side	kPa	66	81	88	83	96	93	99	106	88	95	87	85	99	117
<b>Cooling performances with free-cooling glycol-free (2)</b>															
Cooling capacity	kW	207,3	213,5	254,5	275,3	278,0	330,7	333,2	373,6	391,6	395,4	406,8	452,9	456,9	499,3
Input power	kW	19,5	19,5	24,5	26,5	26,5	32,7	32,8	37,6	38,0	38,0	38,1	42,0	42,0	45,8
Free cooling total input current	A	34,0	34,0	42,0	45,0	46,0	57,0	57,0	65,0	66,0	65,0	65,0	71,0	70,0	77,0
EER	W/W	10,62	10,94	10,40	10,40	10,49	10,10	10,17	9,94	10,31	10,41	10,67	10,79	10,88	10,90

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%  
 (2) System side water heat exchanger 12 °C / °C; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
<b>Model: G</b>															
<b>Cooling performance chiller operation (1)</b>															
Cooling capacity	kW	326,9	376,7	427,6	488,8	527,6	565,4	585,6	634,6	664,0	691,7	732,5	820,3	884,7	961,8
Input power	kW	106,3	122,5	137,6	157,4	174,8	181,8	193,0	204,4	218,3	231,1	245,7	266,0	291,3	314,8
Cooling total input current	A	187,0	213,0	234,0	269,0	300,0	316,0	335,0	356,0	377,0	396,0	418,0	447,0	482,0	528,0
EER	W/W	3,08	3,07	3,11	3,10	3,02	3,11	3,03	3,10	3,04	2,99	2,98	3,08	3,04	3,06
Water flow rate system side	l/h	56168	64715	73458	83974	90643	97138	100613	109029	114089	118834	125850	140933	152003	165249
Pressure drop system side	kPa	39	45	58	72	84	59	63	64	70	76	78	51	59	72
<b>Cooling performances with free-cooling glycol-free (2)</b>															
Cooling capacity	kW	219,8	228,8	272,7	291,1	297,0	349,6	353,1	394,9	414,0	418,2	430,6	479,9	489,3	530,2
Input power	kW	19,2	19,2	24,1	26,0	26,0	32,1	32,1	36,9	37,3	37,3	37,4	41,3	41,3	45,1
Free cooling total input current	A	34,0	33,0	41,0	44,0	45,0	56,0	56,0	64,0	64,0	64,0	64,0	69,0	68,0	75,0
EER	W/W	11,43	11,90	11,30	11,20	11,42	10,89	11,00	10,71	11,11	11,22	11,51	11,63	11,86	11,77

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%  
 (2) System side water heat exchanger 12 °C / °C; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

**NSM - U**

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
<b>Model: B</b>														
<b>Cooling performance chiller operation (1)</b>														
Cooling capacity	kW	1031,1	1095,0	1181,2	1208,8	1265,8	1326,2	1386,6	1491,1	1554,3	1666,6	1752,7	-	-
Input power	kW	332,0	358,4	379,0	405,3	426,4	440,0	453,5	478,4	498,9	549,8	570,4	-	-
Cooling total input current	A	564,0	605,0	639,0	682,0	718,0	746,0	774,0	812,0	846,0	926,0	954,0	-	-
EER	W/W	3,11	3,06	3,12	2,98	2,97	3,01	3,06	3,12	3,12	3,03	3,07	-	-
Water flow rate system side	l/h	177155	188137	202935	207692	217477	227858	238239	256194	267046	286336	301135	-	-
Pressure drop system side	kPa	119	137	138	145	104	124	113	117	119	137	138	-	-
<b>Cooling performances with free-cooling glycol-free (2)</b>														
Cooling capacity	kW	565,8	570,9	615,3	617,2	681,2	721,6	762,0	777,2	843,7	865,6	910,0	-	-
Input power	kW	54,1	54,1	57,9	58,0	67,5	71,3	75,2	72,3	80,6	83,9	87,7	-	-
Free cooling total input current	A	92,0	91,0	98,0	97,0	114,0	121,0	128,0	123,0	137,0	141,0	147,0	-	-
EER	W/W	10,46	10,55	10,62	10,65	10,10	10,12	10,14	10,75	10,47	10,32	10,38	-	-

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%  
 (2) System side water heat exchanger 12 °C / °C; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
<b>Model: G</b>														
<b>Cooling performance chiller operation (1)</b>														
Cooling capacity	kW	1025,3	1088,1	1174,0	1200,9	1257,9	1318,5	1379,2	1482,0	1545,4	1655,7	1741,6	-	-
Input power	kW	335,5	362,4	383,1	409,7	430,7	444,3	457,9	483,4	504,1	556,1	576,8	-	-
Cooling total input current	A	569,0	611,0	645,0	688,0	725,0	752,0	780,0	819,0	854,0	936,0	963,0	-	-
EER	W/W	3,06	3,00	3,06	2,93	2,92	2,97	3,01	3,07	3,07	2,98	3,02	-	-
Water flow rate system side	l/h	176150	186945	201699	206322	216119	226541	236963	254617	265517	284475	299229	-	-
Pressure drop system side	kPa	81	94	90	94	63	70	75	85	92	103	113	-	-
<b>Cooling performances with free-cooling glycol-free (2)</b>														
Cooling capacity	kW	600,3	606,3	654,1	660,5	720,3	764,2	808,1	827,1	897,3	920,4	968,2	-	-
Input power	kW	53,1	53,1	57,0	57,0	66,1	69,9	73,8	71,0	79,1	82,2	86,0	-	-
Free cooling total input current	A	90,0	90,0	96,0	96,0	111,0	118,0	126,0	120,0	134,0	138,0	144,0	-	-
EER	W/W	11,30	11,41	11,48	11,60	10,90	10,93	10,95	11,64	11,34	11,20	11,25	-	-

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%  
 (2) System side water heat exchanger 12 °C / °C; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

**NSM - N**

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
<b>Model: B</b>															
<b>Cooling performance chiller operation (1)</b>															
Cooling capacity	kW	326,0	376,5	424,5	486,3	525,3	559,6	579,7	626,1	655,1	682,6	723,4	811,7	888,8	960,7
Input power	kW	103,6	119,3	134,4	153,8	170,9	178,3	189,4	200,8	214,8	227,9	242,9	263,8	283,0	307,1
Cooling total input current	A	175,0	200,0	218,0	253,0	283,0	297,0	317,0	335,0	357,0	376,0	399,0	427,0	452,0	497,0
EER	W/W	3,15	3,16	3,16	3,16	3,07	3,14	3,06	3,12	3,05	3,00	2,98	3,08	3,14	3,13
Water flow rate system side	l/h	56017	64687	72926	83554	90260	96150	99597	107568	112546	117285	124287	139460	152704	165051
Pressure drop system side	kPa	54	65	67	83	96	92	98	79	86	93	86	84	100	106
<b>Cooling performances with free-cooling glycol-free (2)</b>															
Cooling capacity	kW	220,8	232,6	273,9	282,2	286,3	327,6	330,8	378,1	381,7	385,4	396,5	442,9	482,6	528,7
Input power	kW	18,3	19,6	26,5	26,5	27,4	30,6	30,6	33,8	33,8	33,8	34,0	40,8	43,6	46,5
Free cooling total input current	A	31,0	33,0	43,0	44,0	45,0	51,0	51,0	56,0	56,0	56,0	56,0	66,0	70,0	75,0
EER	W/W	12,04	11,88	10,32	10,63	10,44	10,71	10,82	11,17	11,28	11,39	11,66	10,86	11,07	11,37

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%  
 (2) System side water heat exchanger 12 °C / °C; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
<b>Model: G</b>															
<b>Cooling performance chiller operation (1)</b>															
Cooling capacity	kW	325,1	375,2	422,9	483,6	522,0	556,8	576,7	623,1	651,8	679,6	720,3	807,0	882,8	955,1
Input power	kW	104,5	120,4	135,6	155,5	172,9	180,2	191,5	202,9	217,2	230,8	246,4	267,1	286,2	310,3
Cooling total input current	A	176,0	201,0	220,0	255,0	286,0	300,0	320,0	338,0	360,0	381,0	404,0	431,0	457,0	501,0
EER	W/W	3,11	3,12	3,12	3,11	3,02	3,09	3,01	3,07	3,00	2,94	2,92	3,02	3,09	3,08
Water flow rate system side	l/h	55859	64457	72661	83082	89692	95662	99076	107055	111979	116764	123748	138653	151682	164102
Pressure drop system side	kPa	39	46	36	44	51	58	62	40	43	47	46	50	60	72
<b>Cooling performances with free-cooling glycol-free (2)</b>															
Cooling capacity	kW	230,8	243,4	284,6	294,0	301,4	342,3	345,8	395,2	403,2	407,2	414,7	463,0	509,0	554,0
Input power	kW	18,0	19,2	25,6	25,9	26,7	29,9	29,9	33,1	33,1	33,1	33,3	39,8	42,6	45,6
Free cooling total input current	A	30,0	32,0	42,0	43,0	44,0	50,0	50,0	55,0	55,0	55,0	55,0	64,0	68,0	74,0
EER	W/W	12,79	12,66	10,98	11,34	11,27	11,44	11,56	11,93	12,17	12,29	12,46	11,62	11,94	12,15

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%  
 (2) System side water heat exchanger 12 °C / °C; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

**NSM - N**

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603	
<b>Model: B</b>															
<b>Cooling performance chiller operation (1)</b>															
Cooling capacity	kW	1004,9	1098,6	1161,7	1218,0	1274,5	1318,1	1361,7	1478,4	-	-	-	-	-	
Input power	kW	332,9	349,5	369,2	392,7	416,2	433,5	450,9	472,0	-	-	-	-	-	
Cooling total input current	A	544,0	570,0	600,0	639,0	677,0	708,0	740,0	771,0	-	-	-	-	-	
EER	W/W	3,02	3,14	3,15	3,10	3,06	3,04	3,02	3,13	-	-	-	-	-	
Water flow rate system side	l/h	172652	188754	199587	209274	218966	226456	233947	254013	-	-	-	-	-	
Pressure drop system side	kPa	116	112	104	109	72	78	81	105	-	-	-	-	-	
<b>Cooling performances with free-cooling glycol-free (2)</b>															
Cooling capacity	kW	533,7	625,3	661,6	712,1	756,1	767,1	770,8	815,0	-	-	-	-	-	
Input power	kW	46,5	57,3	61,2	64,4	67,7	67,7	67,7	73,9	-	-	-	-	-	
Free cooling total input current	A	76,0	93,0	99,0	105,0	110,0	111,0	111,0	121,0	-	-	-	-	-	
EER	W/W	11,47	10,91	10,82	11,05	11,17	11,34	11,39	11,03	-	-	-	-	-	

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%  
 (2) System side water heat exchanger 12 °C / °C; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603	
<b>Model: G</b>															
<b>Cooling performance chiller operation (1)</b>															
Cooling capacity	kW	998,8	1092,7	1155,6	1211,7	1267,7	1310,9	1354,2	1470,0	-	-	-	-	-	
Input power	kW	336,7	353,2	373,0	396,5	420,0	437,6	455,3	476,9	-	-	-	-	-	
Cooling total input current	A	550,0	575,0	606,0	644,0	682,0	714,0	746,0	778,0	-	-	-	-	-	
EER	W/W	2,97	3,09	3,10	3,06	3,02	3,00	2,97	3,08	-	-	-	-	-	
Water flow rate system side	l/h	171604	187733	198553	208183	217806	225235	232663	252555	-	-	-	-	-	
Pressure drop system side	kPa	79	67	76	76	41	44	47	72	-	-	-	-	-	
<b>Cooling performances with free-cooling glycol-free (2)</b>															
Cooling capacity	kW	559,3	653,2	691,6	748,6	798,5	804,6	806,4	852,3	-	-	-	-	-	
Input power	kW	45,6	56,1	59,8	63,1	66,3	66,2	66,3	72,3	-	-	-	-	-	
Free cooling total input current	A	74,0	91,0	97,0	102,0	108,0	108,0	109,0	118,0	-	-	-	-	-	
EER	W/W	12,27	11,65	11,56	11,87	12,05	12,15	12,17	11,79	-	-	-	-	-	

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%  
 (2) System side water heat exchanger 12 °C / °C; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

## ENERGY INDICES (REG. 2016/2281 EU)

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
<b>Model: B</b>																
<b>SEPR - (EN14825: 2018) High temperature with standard fans (1)</b>																
SEPR	A	W/W	6,16	5,97	5,71	5,54	5,80	5,60	5,52	5,67	5,57	5,55	5,52	5,72	5,57	5,66
	E	W/W	6,18	5,87	6,03	5,79	5,54	5,86	5,65	5,80	5,67	5,56	5,51	5,72	5,57	5,64
	N	W/W	6,43	6,20	6,09	5,96	5,71	5,94	5,78	6,01	5,85	5,70	5,61	5,76	5,86	5,88
	U	W/W	6,20	6,02	6,11	6,09	5,85	6,00	5,84	5,96	5,92	5,78	5,71	5,96	5,82	5,86
<b>SEPR - (EN14825: 2018) High temperature with inverter fans (1)</b>																
SEPR	A	W/W	6,16	5,97	5,71	5,54	5,80	5,60	5,52	5,67	5,57	5,55	5,52	5,72	5,57	5,66
	E	W/W	6,18	5,87	6,03	5,79	5,54	5,86	5,65	5,80	5,67	5,56	5,51	5,72	5,57	5,64
	N	W/W	6,43	6,20	6,09	5,96	5,71	5,94	5,78	6,01	5,85	5,70	5,61	5,76	5,86	5,88
	U	W/W	6,20	6,02	6,11	6,09	5,85	6,00	5,84	5,96	5,92	5,78	5,71	5,96	5,82	5,86

(1) Calculation performed with FIXED water flow rate.

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
<b>Model: G</b>																
<b>SEPR - (EN14825: 2018) High temperature with standard fans (1)</b>																
SEPR	A	W/W	6,24	6,04	5,75	5,52	5,79	5,58	5,51	5,71	5,62	5,53	5,51	5,64	5,54	5,71
	E	W/W	6,21	5,91	6,07	5,76	5,51	5,87	5,66	5,84	5,71	5,53	5,51	5,71	5,56	5,66
	N	W/W	6,46	6,23	6,14	6,02	5,77	5,99	5,82	6,08	5,93	5,77	5,64	5,78	5,91	5,91
	U	W/W	6,27	6,11	6,19	6,07	5,83	6,05	5,89	6,04	5,93	5,78	5,68	6,01	5,88	5,92
<b>SEPR - (EN14825: 2018) High temperature with inverter fans (1)</b>																
SEPR	A	W/W	6,24	6,04	5,75	5,52	5,79	5,58	5,51	5,71	5,62	5,53	5,51	5,64	5,54	5,71
	E	W/W	6,21	5,91	6,07	5,76	5,51	5,87	5,66	5,84	5,71	5,53	5,51	5,71	5,56	5,66
	N	W/W	6,46	6,23	6,14	6,02	5,77	5,99	5,82	6,08	5,93	5,77	5,64	5,78	5,91	5,91
	U	W/W	6,27	6,11	6,19	6,07	5,83	6,05	5,89	6,04	5,93	5,78	5,68	6,01	5,88	5,92

(1) Calculation performed with FIXED water flow rate.

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603	
<b>Model: B</b>																
<b>SEPR - (EN14825: 2018) High temperature with standard fans (1)</b>																
SEPR	A	W/W	5,52	5,60	5,53	5,53	5,52	5,52	5,51	5,73	5,60	5,77	5,64	5,52	5,58	
	E	W/W	5,61	5,52	5,59	5,54	5,52	5,51	5,60	5,83	5,85	5,55	5,61	-	-	
	N	W/W	5,69	5,85	5,82	5,93	5,94	5,87	5,81	6,05	-	-	-	-	-	
	U	W/W	5,86	5,72	5,81	5,66	5,62	5,63	5,77	6,04	6,05	5,78	5,85	-	-	
<b>SEPR - (EN14825: 2018) High temperature with inverter fans (1)</b>																
SEPR	A	W/W	5,52	5,60	5,53	5,53	5,52	5,52	5,51	5,73	5,60	5,77	5,64	5,52	5,58	
	E	W/W	5,61	5,52	5,59	5,54	5,52	5,51	5,60	5,83	5,85	5,55	5,61	-	-	
	N	W/W	5,69	5,85	5,82	5,93	5,94	5,87	5,81	6,05	-	-	-	-	-	
	U	W/W	5,86	5,72	5,81	5,66	5,62	5,63	5,77	6,04	6,05	5,78	5,85	-	-	

(1) Calculation performed with FIXED water flow rate.

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603	
<b>Model: G</b>																
<b>SEPR - (EN14825: 2018) High temperature with standard fans (1)</b>																
SEPR	A	W/W	5,57	5,64	5,57	5,53	5,51	5,50	5,51	5,75	5,64	5,77	5,66	5,51	5,58	
	E	W/W	5,65	5,52	5,61	5,55	5,49	5,53	5,62	5,81	5,87	5,51	5,58	-	-	
	N	W/W	5,72	5,90	5,84	5,97	5,99	5,91	5,84	6,08	-	-	-	-	-	
	U	W/W	5,91	5,76	5,87	5,73	5,67	5,71	5,82	6,09	6,09	5,81	5,87	-	-	
<b>SEPR - (EN14825: 2018) High temperature with inverter fans (1)</b>																
SEPR	A	W/W	5,57	5,64	5,57	5,53	5,51	5,50	5,51	5,75	5,64	5,77	5,66	5,51	5,58	
	E	W/W	5,65	5,52	5,61	5,55	5,49	5,53	5,62	5,81	5,87	5,51	5,58	-	-	
	N	W/W	5,72	5,90	5,84	5,97	5,99	5,91	5,84	6,08	-	-	-	-	-	
	U	W/W	5,91	5,76	5,87	5,73	5,67	5,71	5,82	6,09	6,09	5,81	5,87	-	-	

(1) Calculation performed with FIXED water flow rate.

## ELECTRIC DATA

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
<b>Electric data</b>																
Maximum current (FLA)	A	A	243,9	271,9	299,1	332,5	374,4	395,7	417,0	450,2	474,9	474,9	474,9	531,4	579,4	635,9
	E,U	A	243,9	271,9	307,6	341,0	374,4	404,2	425,5	458,7	483,4	483,4	483,4	539,9	587,9	644,4
	N	A	252,4	280,4	316,1	349,5	382,9	412,7	434,0	467,2	491,9	491,9	491,9	548,4	604,9	667,2
Peak current (LRA)	A	A	265,5	307,3	350,2	388,2	419,8	466,8	484,0	519,5	529,4	529,4	529,4	661,9	701,8	831,3
	E,U	A	265,5	307,3	358,7	396,7	419,8	475,3	492,5	528,0	537,9	537,9	537,9	670,4	710,3	839,8
	N	A	274,0	315,8	367,2	405,2	428,3	483,8	501,0	536,5	546,4	546,4	546,4	678,9	727,3	862,6

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
<b>Electric data</b>															
Maximum current (FLA)	A	A	683,9	731,4	770,4	813,4	864,9	913,2	947,2	980,7	1028,7	1123,7	1162,7	1300,2	1419,2
	E,U	A	700,9	739,9	793,2	836,2	887,7	930,2	972,7	997,7	1054,2	1132,2	1179,7	-	-
	N	A	715,2	771,2	818,7	870,2	921,7	955,7	989,7	1023,2	-	-	-	-	-
Peak current (LRA)	A	A	858,2	930,7	953,4	1108,4	1163,9	1290,2	1287,2	1069,4	1096,3	1200,0	1222,7	1480,2	1603,2
	E,U	A	875,2	939,2	976,2	1131,2	1186,7	1307,2	1312,7	1086,4	1121,8	1208,5	1239,7	-	-
	N	A	889,5	970,5	1001,7	1165,2	1220,7	1332,7	1329,7	1111,9	-	-	-	-	-

## GENERAL TECHNICAL DATA

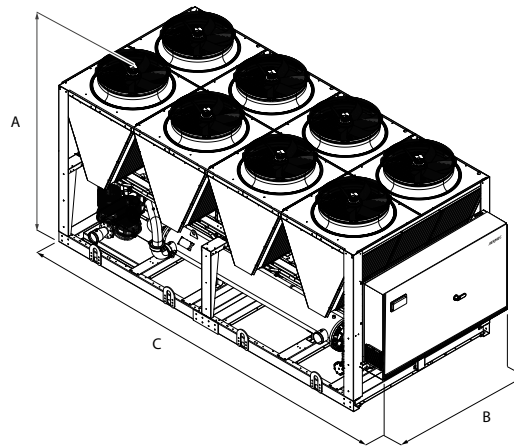
Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
<b>Compressor</b>																
Type	A,E,N,U	type														Bi-vite
Compressor regulation	A,E,N,U	Type														On-Off
Number	A,E,N,U	no.	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Circuits	A,E,N,U	no.	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	A,E,N,U	type														R134a
<b>System side heat exchanger</b>																
Type	A,E,N,U	type														Shell and tube
Number	A,E,N,U	no.	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	A,E,N,U	Type														Grooved joints
<b>Fan</b>																
Type	A,E,N,U	type														Axial
Number	A	no.	8	8	8	8	10	10	10	12	12	12	12	14	14	16
	E,U	no.	8	8	10	10	10	12	12	14	14	14	14	16	16	18
	N	no.	10	10	12	12	12	14	14	16	16	16	16	18	20	22
Air flow rate	A	m <sup>3</sup> /h	116000	116000	116000	116000	145000	145000	145000	174000	174000	174000	174000	203000	203000	232000
	E	m <sup>3</sup> /h	89600	89600	112000	112000	112000	134400	134400	156800	156800	156800	156800	179200	179200	201600
	N	m <sup>3</sup> /h	112000	112000	134400	134400	134400	156800	156800	179200	179200	179200	179200	201600	224000	246400
	U	m <sup>3</sup> /h	116000	116000	145000	145000	145000	174000	174000	203000	203000	203000	203000	232000	232000	261000
<b>Sound data calculated in cooling mode (1)</b>																
Sound power level	A	dB(A)	98,0	98,0	98,0	98,0	99,0	99,0	99,0	99,7	99,7	99,7	99,7	100,4	100,4	101,1
	E	dB(A)	91,0	91,0	91,7	91,9	92,1	92,6	92,5	93,0	93,0	93,0	93,0	93,7	93,9	94,6
	N	dB(A)	91,7	91,7	92,3	92,5	92,6	93,1	93,0	93,5	93,5	93,5	93,5	94,1	94,6	95,2
	U	dB(A)	98,0	98,0	98,9	99,0	99,0	99,7	99,7	100,4	100,4	100,4	100,4	100,9	101,0	101,5
Sound pressure level (10 m)	A	dB(A)	65,6	65,6	65,6	65,6	66,4	66,4	66,4	67,1	67,1	67,1	67,1	67,6	67,7	68,2
	E	dB(A)	58,6	58,6	59,2	59,4	59,5	59,9	59,9	60,3	60,3	60,3	60,3	60,8	61,0	61,6
	N	dB(A)	59,2	59,2	59,7	59,9	60,0	60,3	60,3	60,6	60,6	60,6	60,6	61,1	61,5	62,0
	U	dB(A)	65,6	65,6	66,4	66,4	66,4	67,1	67,1	67,6	67,6	67,6	67,6	68,1	68,1	68,5

(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).

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
<b>Compressor</b>															
Type	A,E,N,U	type											Bi-vite		
Compressor regulation	A,E,N,U	Type											On-Off		
Number	A	no.	2	2	2	2	2	2	2	3	3	3	3	3	3
	E,U	no.	2	2	2	2	2	2	2	3	3	3	3	-	-
	N	no.	2	2	2	2	2	2	2	3	-	-	-	-	-
Circuits	A	no.	2	2	2	2	2	2	2	3	3	3	3	3	3
	E,U	no.	2	2	2	2	2	2	2	3	3	3	3	-	-
	N	no.	2	2	2	2	2	2	2	3	-	-	-	-	-
Refrigerant	A,E,N,U	type											R134a		
<b>System side heat exchanger</b>															
Type	A,E,N,U	type											Shell and tube		
Number	A	no.	1	1	1	1	1	1	1	2	2	2	2	2	2
	E,U	no.	1	1	1	1	2	2	2	2	2	2	2	-	-
	N	no.	1	2	2	2	2	2	2	2	-	-	-	-	-
Connections (in/out)	A,E,N,U	Type											Grooved joints		
<b>Fan</b>															
Type	A,E,N,U	type											Axial		
Number	A	no.	16	18	18	18	20	22	22	24	24	28	28	30	34
	E,U	no.	20	20	22	22	24	26	28	28	30	30	32	-	-
	N	no.	22	26	28	30	32	32	32	34	-	-	-	-	-
Air flow rate	A	m <sup>3</sup> /h	232000	261000	261000	261000	290000	319000	319000	348000	348000	406000	406000	435000	493000
	E	m <sup>3</sup> /h	224000	224000	246400	246400	268800	291200	313600	313600	336000	336000	358400	-	-
	N	m <sup>3</sup> /h	246400	291200	313600	336000	358400	358400	358400	380800	-	-	-	-	-
	U	m <sup>3</sup> /h	290000	290000	319000	319000	348000	377000	406000	406000	435000	435000	464000	-	-
<b>Sound data calculated in cooling mode (1)</b>															
Sound power level	A	dB(A)	101,1	101,6	101,6	101,6	102,1	102,5	102,5	102,7	102,8	103,4	103,4	103,7	104,2
	E	dB(A)	95,2	95,2	95,4	95,6	96,0	96,2	96,4	96,0	96,5	96,4	96,6	-	-
	N	dB(A)	95,5	96,0	96,2	96,6	96,9	96,9	96,9	96,7	-	-	-	-	-
	U	dB(A)	102,0	102,0	102,4	102,4	102,8	103,1	103,4	103,4	103,7	103,7	103,9	-	-
Sound pressure level (10 m)	A	dB(A)	68,2	68,6	68,6	68,6	69,0	69,2	69,2	69,4	69,4	69,8	69,8	70,0	70,4
	E	dB(A)	62,1	62,0	62,2	62,3	62,7	62,8	62,9	62,5	62,8	62,8	62,8	-	-
	N	dB(A)	62,3	62,5	62,6	62,9	63,1	63,1	63,1	62,8	-	-	-	-	-
	U	dB(A)	68,9	68,9	69,1	69,2	69,5	69,7	69,9	69,8	70,0	70,0	70,2	-	-

(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



Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
<b>Dimensions and weights</b>																
A	A,E,N,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	A,E,N,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	A	mm	5160	5160	5160	5160	6350	6350	6350	7140	7140	7140	7140	8330	8330	9520
	E,U	mm	5160	5160	6350	6350	6350	7140	7140	8330	8330	8330	8330	9520	9520	10710
	N	mm	6350	6350	7140	7140	7140	8330	8330	9520	9520	9520	9520	10710	11900	13090
Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603	
<b>Dimensions and weights</b>																
A	A	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
	E,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	-	-
	N	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	-	-	-	-	-
B	A	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
	E,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	-	-
	N	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	-	-	-	-	-
C	A	mm	9520	10710	10710	10710	11900	13090	13090	14280	14280	16660	16660	17850	20230	-
	E,U	mm	11900	11900	13090	13090	14280	15470	16660	16660	17850	17850	19040	-	-	-
	N	mm	13090	15470	16660	17850	19040	19040	19040	20230	-	-	-	-	-	-

For transport reasons, the units with the depth of more than 13090 mm are shipped separately. For more information, please refer to the technical manual and / or installation.

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.

**Aermec S.p.A.**  
Via Roma, 996 - 37040 Bevilacqua (VR) - Italia  
Tel. 0442633111 - Telefax 044293577  
www.aermec.com