

NSM 1402/9603 cooling only

Air/Water chillers for outdoor installation
Screw compressors, shell and tube heat exchangers and axial fans
Cooling capacity 302,4÷2106,4 kW

HFC
Refrigerant
R134a



Aermec participate in the EUROVENT program: LCP the products are present on the site www.eurovent-certification.com



- HIGH EFFICIENCY ALSO AT PARTIAL LOADS
- MICROCHANNEL COIL
- HP FLOATING: ESEER +5% WITH INVERTER FANS
- NIGHT MODE

Characteristics

Outdoor chillers for the production of chilled water with high-efficiency screw compressors, with cooling capacity adjustment via continuous modulation. Axial fans, microchannel external coils, plant side shell and tube heat exchanger. In the units (with desuperheater or total recovery) there is also the possibility of producing hot water for free. The base, the structure and the panels are made of steel treated with rustproof polyester paint.

Versions

NSM_° Standard
NSM_L Standard low noise
NSM_A High efficiency
NSM_E High efficiency low noise
NSM_U Very high efficiency
NSM_N Very high efficiency low noise

Range of operation: Work up to 50°C of outdoor air temperature at full load, depending on size and version. For further details refer to the selection software/technical documentation.

- 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.

- The full range uses aluminium microchannel coils, ensuring very high levels of efficiency. This allows using less refrigerant compared to traditional copper coils.
- Electronic thermostatic as standard from size 5202÷6402 and 8403÷9603, optional for all other sizes.
- **Standard inverter fans for sizes and versions (°) from 2002 to 9603, optional for other sizes and versions.**
- Standard differential pressure switch
- Possibility of integrated hydronic kit that encloses the main hydraulic components; it is available in different configurations with one or two pumps, with different static pressures available
- Microprocessor adjustment, with keyboard and LCD display, for easy consultation and intervention on the unit via a menu available in several languages. Adjustment includes complete management of the alarms and their log.
- The presence of a programmable timer allows setting time bands of operation and a possible second set-point
- The temperature control takes place with the integral proportional logic, based on the water output temperature.

- **Floating HP:** is supplied as standard on all models. This modulates the fan speed according to the unit load and offers an improved ESEER (beyond the declared values) when applied with variable speed fans (ie. units with DCPX option or inverter fans). **ESEER improvements of up to 5% are obtained with inverter equipped models.**
- **Night Mode:** it is possible to set a silenced operation profile. Perfect for night operation, since it guarantees greater acoustic comfort in the evenings, and a high efficiency in the time of greater load.

“Night Mode is standard on all low noise versions. For all other versions either the DCPX accessory or “J” inverter fan must be specified to allow Night Mode to operate.”

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.
 - **PRV3:** Remote control of the chiller operating functions.
 - **MULTICHILLER_EVO:** Control system for multiple parallel installed constant flow chillers providing individual chiller on/off and control capability.
 - **DCPX:** Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.
Standard in to low noise version or with desuperheater.
 - **AVX:** Spring anti-vibration mounts.
 - **KRSDES/KRSREC:** Electrical resistor for desuperheater or total recovery
 - **RIFNSM:** Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current
 - **GP:** Anti-intrusion grids
 - **AK: ACOUSTIC KIT.** (only version L/E/N)
This accessory allows further sound reduction. Must be requested at time of order and is available factory fitted only.
- Accessories factory fitted only**
- **KRS:** Evaporator trace heating

Compatibility of accessories

Mod. NSM	vers.	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902	4202	4502
AER485P1		-(x2)	-(x2)	-(x2)	-(x2)	-(x2)	-(x2)	-(x2)	-(x2)	-(x2)	-(x2)	-(x2)	-(x2)	-(x2)	-(x2)	-(x2)	-(x2)
AERNET		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
PRV3		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
MULTICHILLER_EVO		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
DCPX	(1)	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
AVX	°	900	900	900	904	904	904	904	904	904	959	959	960	960	911	911	909
	L	901	901	901	904	959	959	959	903	903	903	903	909	909	907	907	912
	A	901	901	901	904	959	959	959	903	903	903	903	909	909	907	907	912
	E	901	901	959	959	959	959	903	903	906	906	906	907	907	912	910	910
	U	901	901	959	959	959	903	903	906	906	906	906	907	907	912	910	910
N	959	959	903	903	903	906	906	907	907	907	907	912	910	913	913	917	
Accessories factory fitted only																	
KRS	(1)	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
KRS_DES	(1)(2)	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
KRS_REC	(1)(2)	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
RIFNSM	(1)	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902	4202	4502
GP	(1)	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
AK	(3)	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

		4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
AER485P1		-(x2)	-(x2)	-(x2)	-(x2)	-(x2)	-(x3)	-(x3)	-(x3)	-(x3)	-(x3)	-(x3)
AERNET		.	.	.	.	.	.	.	.	.	.	.
PRV3		.	.	.	.	.	.	.	.	.	.	.
MULTICHILLER_EVO		.	.	.	.	.	.	.	.	.	.	.
DCPX	(1)	.	.	.	.	.	.	.	.	.	.	.
AVX	°	909	907	907	907	912	914	914	915	916	916	916
	L	912	912	910	913	913	924	924	925	925	927	926
	A	912	912	910	913	913	924	924	925	925	927	926
	E	913	913	920	917	918	925	927	927	928	-	-
	U	913	913	920	917	918	925	927	927	928	-	-
N	918	919	921	921	921	926	-	-	-	-	-	
Accessories factory fitted only												
KRS	(1)	.	.	.	.	.	.	.	.	.	.	.
KRS_DES	(1)(2)	.	.	.	.	.	.	.	.	.	.	.
KRS_REC	(1)(2)	.	.	.	.	.	.	.	.	.	.	.
RIFNSM	(1)	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
GP	(1)	.	.	.	.	.	.	.	.	.	.	.
AK	(3)	.	.	.	.	.	.	.	.	.	.	.

(1) Accessories to be defined for compatibility

(2) The accessory is standard equipped with the electric resistance for the evaporator also

(3) The accessory is only available for the "L/E/N" silenced versions

(x2) Indicates the amount to order

Unit Configurator

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

Field	Description
1,2,3	NSM
4,5,6,7	Sizes 1402-1602-1802-2002-2202-2352-2502-2652-2802-3002-3202 (dual circuit) 3402-3602-3902-4202-4502-4802-5202-5602-6002-6402 (dual circuit) 6503-6703-6903-7203-8403-9603 (triple circuit)
8	Operational limits ° Standard (temperature of water produced up to +4 °C) Y Low temperature (temperature of water produced from +4°C a -8°C) (4) X Electronic thermostatic valve (temperature of water produced up to +4 °C) (5) Z Low temperature electronic thermostatic valve (temperature of water produced from +4°C a -8°C) (4)
9	Model ° Cooling Only C Motor condensing unit (6)
10	Heat recovery ° Without heat recovery D With desuperheater T With total recovery (7)
11	Version ° Standard L Low noise Standard A High efficiency E Low noise high efficiency U Very high efficiency N Low noise very high efficiency
12	Coils ° Aluminium microchannel O Painted aluminium microchannel R Copper - Copper S Copper - Thinned
13	Fans ° Standard M increased (8) J Inverter
14	Power supply ° 400V/3/50Hz with fuses 8 400V/3/50Hz with magnet circuit breakers 2 230V/3/50Hz with fuses (9) 4 230V/3/50Hz with magnet circuit breakers (9) 5 500V/3/50Hz with fuses (10) 9 500V/3/50Hz with magnet circuit breakers (10)
15-16	Integrated hydronic kit 00 Without hydronic kit PA Pumping unit (pump A) PB Pumping unit (pump B) PC Pumping unit (pump C) PD Pumping unit (pump D) PE Pumping unit (pump E) PF Pumping unit (pump F) PG Pumping unit (pump G) PH Pumping unit (pump H) PI Pumping unit (pump I) PJ Pumping unit (pump J) DA Pumping unit (pump A and stand-by pump) DB Pumping unit (pump B and stand-by pump) DC Pumping unit (pump C and stand-by pump) DD Pumping unit (pump D and stand-by pump) DE Pumping unit (pump E and stand-by pump) DF Pumping unit (pump F and stand-by pump) DG Pumping unit (pump G and stand-by pump) DH Pumping unit (pump H and stand-by pump) DI Pumping unit (pump I and stand-by pump) DJ Pumping unit (pump J and stand-by pump)

Operation of pumps in parallel

- TF** Double static pressure pump (pump F)
- TG** Double static pressure pump (pump G)
- TH** Double static pressure pump (pump H)
- TI** Double static pressure pump (pump I)
- TJ** Double static pressure pump (pump J)

(4) The Y/Z option is not compatible with motor condensing units C; with option D and T

(5) sizes from 5202÷6402 and 8403÷9603 come standard with the electronic thermostatic valve

(6) The motor condensing units are not configurable with option D and T, and with the integrated hydronic kit

(7) The models 1402° - 1602° - 1802° with total recovery are not configurable with the integrated hydronic kit

(8) **Increased fans M They are not configurable in size and versions:**

VERSION "00" Up NSM2652 to 9603

VERSIONS "A/L" Up NSN5202 to 6402

VERSIONS "A/L" NSM 9603

(9) 230V/3/50Hz available only for sizes from 1402÷2202

(10) 500V/3/50Hz available only for sizes from 1402÷3202

Technical Data

NSM - °			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
			V/ph/Hz													
			400V/3/50Hz													
12°C / 7°C	Cooling capacity	(1) kW	307,5	348,9	397,0	450,3	489,4	524,7	543,9	577,3	613,8	680,5	725,1	770,1	813,8	906,1
	Total input power	(1) kW	104,8	121,0	139,0	152,8	166,4	180,6	193,9	210,5	226,5	232,7	247,5	272,1	298,3	316,2
	EER	(1)	2,93	2,88	2,86	2,95	2,94	2,91	2,81	2,74	2,71	2,92	2,93	2,83	2,73	2,87
	Water flow rate	(1) l/h	52880	59998	68270	77459	84184	90222	93508	99261	105543	117009	124684	132413	139915	155800
	Total pressure drops	(1) kPa	27	36	38	49	57	26	28	33	35	39	42	47	38	46
Cooling capacity with low leaving water temp																
SEER			3,89	3,90	3,86	4,02	4,02	4,03	4,04	4,00	4,00	3,98	3,99	4,00	4,01	3,99
ηsc			157,9	157,9	158,3	158,5	156,8	157,1	156,3	156,4	157,1	157,5	156,7	161,5	161,4	161,0

NSM - L			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902	
12°C / 7°C	Cooling capacity	(1) kW	302,4	344,0	392,7	428,1	490,9	513,8	537,4	583,4	602,8	664,4	709,1	771,0	826,1	908,8	
	Total input power	(1) kW	102,7	117,2	135,7	155,9	167,8	179,4	192,5	202,9	215,3	238,3	261,2	265,4	296,6	316,1	
	EER	(1)	2,94	2,94	2,89	2,75	2,93	2,86	2,79	2,88	2,80	2,79	2,72	2,91	2,79	2,88	
	Water flow rate	(1) l/h	52015	59162	67531	73599	84401	88341	92401	100313	103651	114243	121902	132544	142017	156242	
	Total pressure drops	(1) kPa	27	36	38	18	24	25	28	33	31	36	23	23	25	32	
Cooling capacity with low leaving water temp																	
SEER			4,02	4,00	3,94	4,11	4,11	4,10	4,12	4,12	4,11	4,11	4,11	4,11	4,11	4,11	4,10
ηsc			157,7	156,9	154,4	161,4	161,3	161,2	161,6	161,6	161,5	161,4	161,4	161,4	161,2	161,0	

NSM - A			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
12°C / 7°C	Cooling capacity	(1) kW	315,6	360,2	415,2	461,4	509,5	544,9	576,9	620,9	658,9	699,4	741,7	800,6	884,3	955,2
	Total input power	(1) kW	99,0	113,7	133,7	148,3	161,8	173,6	183,3	197,5	208,3	223,6	237,4	253,4	281,2	303,8
	EER	(1)	3,19	3,17	3,11	3,11	3,15	3,14	3,15	3,14	3,16	3,13	3,12	3,16	3,15	3,14
	Water flow rate	(1) l/h	54279	61954	71416	79330	87599	93687	99196	106766	113293	120259	127516	137632	152015	164211
	Total pressure drops	(1) kPa	30	39	43	21	26	28	32	37	37	40	25	25	29	36
Cooling capacity with low leaving water temp																
SEER			4,10	4,08	4,12	4,11	4,14	4,14	4,15	4,14	4,14	4,12	4,13	4,14	4,12	4,11
ηsc			161,0	160,1	161,7	161,4	162,7	162,3	162,8	162,7	162,5	161,9	162,2	162,7	161,6	161,4

NSM - E			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
12°C / 7°C	Cooling capacity	(1) kW	319,6	368,5	417,6	472,4	514,2	543,2	579,6	615,2	652,1	695,4	740,6	796,5	881,6	951,8
	Total input power	(1) kW	101,7	117,4	132,3	150,0	165,4	173,7	186,0	194,8	210,1	224,0	238,6	255,4	283,8	305,7
	EER	(1)	3,14	3,14	3,16	3,15	3,11	3,13	3,12	3,16	3,10	3,11	3,10	3,12	3,11	3,11
	Water flow rate	(1) l/h	54958	63366	71800	81227	88406	93395	99656	105761	112114	119555	127316	136926	151562	163627
	Total pressure drops	(1) kPa	15	14	18	21	24	26	30	24	26	29	26	25	29	36
Cooling capacity with low leaving water temp																
SEER			4,20	4,19	4,23	4,16	4,11	4,19	4,15	4,20	4,17	4,16	4,14	4,18	4,18	4,19
ηsc			165,1	164,6	166,0	163,2	161,2	162,5	163,0	165,1	163,7	163,5	162,5	164,2	164,2	164,4

NSM - U			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
12°C / 7°C	Cooling capacity	(1) kW	331,0	378,1	432,1	481,7	527,6	564,7	590,5	635,0	675,3	708,2	750,8	811,2	902,5	975,6
	Total input power	(1) kW	98,6	113,5	128,9	145,7	161,0	169,2	178,4	190,3	204,2	214,1	228,0	245,2	273,3	294,9
	EER	(1)	3,36	3,33	3,35	3,31	3,28	3,34	3,31	3,34	3,31	3,31	3,29	3,31	3,30	3,31
	Water flow rate	(1) l/h	56933	65026	74302	82820	90716	97088	101523	109163	116095	121763	129073	139454	155146	167724
	Total pressure drops	(1) kPa	17	15	19	21	25	28	31	25	28	30	26	26	30	37
Cooling capacity with low leaving water temp																
SEER			4,29	4,28	4,32	4,24	4,19	4,27	4,24	4,29	4,26	4,25	4,23	4,27	4,27	4,28
ηsc			168,7	168,2	169,6	166,7	164,7	166,2	166,6	168,6	167,2	167,1	166,1	167,8	167,9	168,0

NSM - N			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
12°C / 7°C	Cooling capacity	(1) kW	329,8	375,3	431,9	474,4	517,0	550,9	578,6	620,4	659,2	701,2	743,2	803,1	879,6	955,4
	Total input power	(1) kW	98,1	113,1	127,6	144,8	160,4	168,7	178,2	190,1	204,5	217,3	231,1	247,6	270,2	292,6
	EER	(1)	3,36	3,32	3,38	3,28	3,22	3,27	3,25	3,26	3,22	3,23	3,22	3,24	3,26	3,27
	Water flow rate	(1) l/h	56717	64546	74260	81572	88880	94723	99475	106664	113329	120550	127776	138053	151226	164260
	Total pressure drops	(1) kPa	16	15	19	21	24	28	30	25	27	29	26	25	30	37
Cooling capacity with low leaving water temp																
SEER			4,32	4,28	4,37	4,23	4,15	4,20	4,18	4,22	4,17	4,17	4,15	4,21	4,21	4,21
ηsc			169,6	168,1	171,9	166,0	162,8	164,9	164,1	165,6	163,7	163,7	163,0	165,3	165,4	165,3

Date (14511:2018)

(1) Water system side 12°C/7°C, External air 35°C

Technical Data

			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Electrical data																
Total input current (cooling)	(2)	A	182	207	229	257	281	306	329	356	381	392	414	447	484	520
Maximum current (FLA)	°	A	229	257	284	324	357	379	400	433	458	466	466	514	562	619
Starting current (LRA)		A	251	292	335	380	403	450	467	502	512	521	521	645	685	814
Total input current (cooling)	(2)	A	173	196	218	254	277	297	319	336	354	391	426	429	473	509
Maximum current (FLA)	L	A	235	263	291	324	364	385	406	437	462	462	462	516	564	619
Starting current (LRA)		A	257	299	342	380	409	456	473	507	517	517	517	647	687	814
Total input current (cooling)	(2)	A	175	198	223	250	278	298	314	340	355	378	399	421	459	502
Maximum current (FLA)	A	A	235	263	291	324	364	385	406	437	462	462	462	516	564	619
Starting current (LRA)		A	257	299	342	380	409	456	473	507	517	517	517	647	687	814
Total input current (cooling)	(2)	A	171	196	214	245	272	288	309	324	347	367	389	411	450	490
Maximum current (FLA)	E	A	235	263	297	330	364	391	413	444	468	468	468	523	571	625
Starting current (LRA)		A	257	299	348	386	409	462	480	513	523	523	523	653	693	821
Total input current (cooling)	(2)	A	173	197	218	248	275	292	309	330	352	366	387	410	448	490
Maximum current (FLA)	U	A	235	263	297	330	364	391	413	444	468	468	468	523	571	625
Starting current (LRA)		A	257	299	348	386	409	462	480	513	523	523	523	653	693	821
Total input current (cooling)	(2)	A	165	190	207	237	265	281	297	317	339	358	378	399	429	470
Maximum current (FLA)	N	A	242	270	303	337	370	398	419	450	475	475	475	529	583	644
Starting current (LRA)		A	263	305	354	392	415	469	486	519	529	529	529	660	706	839
Two screw Compressors																
Compressor / Circuit		n°	2/2													
Refrigerant		Type	R134a													
Shell & tube system side exchanger																
Exchanger		n°	1													
hydraulic connections (In/Out)		∅	Please refer to technical documentation													
Axial fans																
Fan	°	n°	6	6	6	8	8	8	8	8	8	10	10	10	10	12
Air flow rate		m³/h	96000	96000	96000	128000	128000	128000	128000	144000	144000	180000	180000	180000	180000	216000
Fan	L	n°	8	8	8	8	10	10	10	10	12	12	12	14	14	16
Air flow rate		m³/h	92000	92000	92000	92000	115000	115000	115000	138000	138000	138000	138000	161000	161000	184000
Fan	A	n°	8	8	8	8	10	10	10	12	12	12	12	14	14	16
Air flow rate		m³/h	128000	128000	128000	128000	160000	160000	160000	192000	192000	192000	192000	224000	224000	256000
Fan	E	n°	8	8	10	10	10	10	12	12	14	14	14	16	16	18
Air flow rate		m³/h	92000	92000	115000	115000	115000	138000	138000	161000	161000	161000	161000	184000	184000	207000
Fan	U	n°	8	8	10	10	10	10	12	12	14	14	14	16	16	18
Air flow rate		m³/h	128000	128000	160000	160000	160000	192000	192000	224000	224000	224000	224000	256000	256000	288000
Fan	N	n°	10	10	12	12	12	14	14	16	16	16	16	18	20	22
Air flow rate		m³/h	115000	115000	138000	138000	138000	161000	161000	184000	184000	184000	184000	207000	230000	253000
Sound data																
Sound power level	°	dB(A)	96,8	97,0	97,2	97,6	97,8	98,0	98,2	98,4	98,4	99,4	99,5	99,6	99,8	100,7
	L	dB(A)	88,9	89,0	89,1	89,2	90,3	90,5	90,6	90,8	90,9	91,0	91,1	91,3	91,4	92,4
	A	dB(A)	97,3	97,4	97,8	97,9	98,2	98,3	98,4	98,8	98,9	99,0	99,1	99,3	99,4	100,1
	E	dB(A)	89,3	89,4	90,2	90,3	90,4	90,8	91,2	91,8	92,0	92,2	92,3	92,8	93,0	93,2
	U	dB(A)	97,0	97,4	98,0	98,2	98,4	98,8	98,8	99,0	99,1	99,2	99,3	99,9	100,0	100,4
	N	dB(A)	90,0	90,4	90,9	91,0	91,1	91,4	91,4	92,1	92,2	92,3	92,4	92,8	93,1	93,3
Sound pressure level	°	dB(A)	64,4	64,6	64,8	65,2	65,3	65,5	65,7	65,8	65,8	66,8	66,9	66,8	67,0	67,8
	L	dB(A)	56,5	56,6	56,6	56,7	57,8	57,9	58,0	58,0	58,1	58,2	58,3	58,4	58,5	59,4
	A	dB(A)	64,8	64,9	65,2	65,3	65,6	65,5	65,6	65,9	66,0	66,1	66,2	66,3	66,3	66,9
	E	dB(A)	57,2	57,3	58,1	58,2	58,2	58,6	59,0	59,5	59,7	59,9	60,0	60,4	60,6	60,7
	U	dB(A)	64,9	65,3	65,8	66,0	66,2	66,5	66,5	66,6	66,7	66,8	66,9	67,4	67,5	67,7
	N	dB(A)	57,8	58,2	58,6	58,7	58,8	59,0	59,0	59,6	59,7	59,8	59,9	60,1	60,3	60,4

(2) Unit standard 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.

Technical Data

NSM - °			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
			V/ph/Hz						400V/3/50Hz						
12°C / 7°C	Cooling capacity	(1) kW	958,5	1051,2	1099,1	1168,1	1195,0	1237,7	1327,6	1393,8	1439,8	1578,6	1669,7	1742,2	1859,9
	Total input power	(1) kW	345,9	360,3	388,1	403,4	430,8	453,1	460,3	488,6	517,2	559,8	575,1	659,2	730,6
	EER	(1)	2,77	2,92	2,83	2,90	2,77	2,73	2,88	2,85	2,78	2,82	2,90	2,64	2,55
	Water flow rate	(1) l/h	164794	180725	188952	200816	205450	212794	228245	239603	247510	271347	287010	299461	319696
	Total pressure drops	(1) kPa	41	48	42	46	48	55	62	44	46	30	33	36	40
Cooling capacity with low leaving water temp															
	SEER		4,01	4,00	4,00	4,01	4,00	4,01	4,00	4,06	4,01	4,03	4,02	4,02	4,01
	ηsc		157,2	156,9	157,1	157,3	156,8	157,3	157	159,2	157,2	158,1	157,8	157,9	157,4

NSM - L			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
12°C / 7°C	Cooling capacity	(1) kW	949,7	1032,5	1076,9	1122,7	1183,7	1254,5	1295,6	1395,1	1436,6	1605,1	1649,4	1758,0	1946,7
	Total input power	(1) kW	348,7	365,9	395,0	428,8	442,3	453,2	476,4	491,5	523,6	556,9	586,7	660,2	713,5
	EER	(1)	2,72	2,82	2,73	2,62	2,68	2,77	2,72	2,84	2,74	2,88	2,81	2,66	2,73
	Water flow rate	(1) l/h	163267	177511	185147	193003	203496	215668	222723	239819	246956	275911	283536	302180	334622
	Total pressure drops	(1) kPa	34	44	46	33	36	42	45	33	34	45	47	34	45
Cooling capacity with low leaving water temp															
	SEER		4,12	4,11	4,11	4,10	4,12	4,11	4,10	4,12	4,12	4,12	4,10	4,11	4,11
	ηsc		161,6	161,2	161,2	161,1	161,7	161,4	161,1	161,7	161,8	161,9	161,1	161,3	161,3

NSM - A			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
12°C / 7°C	Cooling capacity	(1) kW	1021,7	1084,5	1160,1	1213,2	1275,8	1352,3	1402,7	1462,2	1531,9	1682,9	1753,4	1908,6	2106,4
	Total input power	(1) kW	328,5	347,0	371,7	389,2	410,5	432,6	451,5	466,3	493,4	534,6	560,2	614,3	673,3
	EER	(1)	3,11	3,13	3,13	3,12	3,11	3,13	3,11	3,14	3,10	3,15	3,13	3,11	3,13
	Water flow rate	(1) l/h	175656	186456	199459	208560	219326	232478	241144	251344	263330	289290	301408	328062	362057
	Total pressure drops	(1) kPa	39	49	53	38	42	49	52	36	39	49	53	41	52
Cooling capacity with low leaving water temp															
	SEER		4,14	4,13	4,13	4,12	4,16	4,15	4,12	4,15	4,15	4,16	4,13	4,12	4,14
	ηsc		162,5	162,3	162,0	161,9	163,2	162,8	161,7	163,0	162,8	163,2	162,1	161,9	162,5

NSM - E			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
12°C / 7°C	Cooling capacity	(1) kW	1018,9	1082,1	1159,1	1206,7	1265,2	1322,0	1389,6	1464,9	1528,1	1670,1	1752,6	-	-
	Total input power	(1) kW	325,9	347,4	370,9	387,8	405,6	422,2	443,7	469,4	489,0	534,5	563,0	-	-
	EER	(1)	3,13	3,11	3,13	3,11	3,12	3,13	3,13	3,12	3,13	3,12	3,11	-	-
	Water flow rate	(1) l/h	175172	186051	199270	207449	217481	227238	238869	251809	262682	287098	301260	-	-
	Total pressure drops	(1) kPa	40	49	36	38	24	24	29	35	40	49	45	-	-
Cooling capacity with low leaving water temp															
	SEER		4,19	4,14	4,21	4,12	4,14	4,15	4,23	4,26	4,28	4,14	4,20	-	-
	ηsc		164,5	162,5	165,2	161,8	162,7	163,1	166,2	167,4	168,2	162,6	164,9	-	-

NSM - U			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
12°C / 7°C	Cooling capacity	(1) kW	1043,4	1104,7	1184,6	1234,0	1301,2	1360,8	1419,5	1505,6	1579,3	1693,4	1772,6	-	-
	Total input power	(1) kW	315,2	336,8	357,4	380,5	400,8	418,5	427,8	453,3	472,9	522,1	540,7	-	-
	EER	(1)	3,31	3,28	3,31	3,24	3,25	3,25	3,32	3,32	3,34	3,24	3,28	-	-
	Water flow rate	(1) l/h	179384	189925	203651	212141	223668	233909	244004	258808	271482	291091	304708	-	-
	Total pressure drops	(1) kPa	42	51	38	40	26	26	31	37	42	51	46	-	-
Cooling capacity with low leaving water temp															
	SEER		4,28	4,23	4,30	4,21	4,23	4,24	4,32	4,34	4,36	4,23	4,29	-	-
	ηsc		168,0	166,2	168,8	165,2	166,3	166,6	169,8	170,7	171,5	166,2	168,4	-	-

NSM - N			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
12°C / 7°C	Cooling capacity	(1) kW	1014,4	1086,1	1169,7	1219,0	1267,1	1317,0	1367,2	1452,6	-	-	-	-	-
	Total input power	(1) kW	315,6	332,8	352,6	374,6	396,5	410,4	428,2	450,1	-	-	-	-	-
	EER	(1)	3,21	3,26	3,32	3,25	3,20	3,21	3,19	3,23	-	-	-	-	-
	Water flow rate	(1) l/h	174393	186717	201086	209574	217799	226384	235021	249705	-	-	-	-	-
	Total pressure drops	(1) kPa	40	35	44	44	26	26	30	37	-	-	-	-	-
Cooling capacity with low leaving water temp															
	SEER		4,17	4,20	4,20	4,23	4,18	4,20	4,18	4,24	-	-	-	-	-
	ηsc		163,9	164,9	165,0	166,3	164,3	165,1	164,2	166,7	-	-	-	-	-

Date (14511:2018)

- Version not available for this size

(1) Water system side 12°C/7°C, External air 35°C

Technical Data

			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603	
Electrical data																
Total input current (cooling)	°	(2)	A	573	597	641	668	712	749	766	806	857	927	966	1103	1230
Maximum current (FLA)	°		A	667	714	753	805	848	882	924	949	997	1084	1137	1266	1368
Starting current (LRA)			A	841	914	936	1100	1147	1259	1264	1038	1065	1160	1197	1446	1552
Total input current (cooling)		(2)	A	567	593	638	693	716	736	776	793	849	914	960	1067	1163
Maximum current (FLA)	L		A	667	712	751	813	865	913	947	955	1003	1094	1133	1268	1406
Starting current (LRA)			A	841	911	934	1108	1164	1290	1287	1044	1071	1170	1193	1448	1590
Total input current (cooling)		(2)	A	547	577	614	647	685	725	758	772	821	897	936	1017	1132
Maximum current (FLA)	A		A	667	712	751	813	865	913	947	955	1003	1094	1133	1268	1406
Starting current (LRA)			A	841	911	934	1108	1164	1290	1287	1044	1071	1170	1193	1448	1590
Total input current (cooling)		(2)	A	529	560	598	628	656	686	724	764	792	861	898	-	-
Maximum current (FLA)	E		A	679	718	770	813	862	902	943	968	1022	1100	1145	-	-
Starting current (LRA)			A	854	918	953	1108	1161	1279	1283	1056	1090	1176	1205	-	-
Total input current (cooling)		(2)	A	530	562	597	634	671	706	725	762	795	870	896	-	-
Maximum current (FLA)	U		A	679	718	770	813	862	902	943	968	1022	1100	1145	-	-
Starting current (LRA)			A	854	918	953	1108	1161	1279	1283	1056	1090	1176	1205	-	-
Total input current (cooling)		(2)	A	513	540	569	605	643	668	700	731	-	-	-	-	-
Maximum current (FLA)	N		A	692	743	789	838	887	921	955	987	-	-	-	-	-
Starting current (LRA)			A	866	943	972	1133	1186	1298	1295	1076	-	-	-	-	-
Two screw Compressors																
Compressor / Circuit	°		n°	2/2	2/2	2/2	2/2	2/2	2/2	2/2	3/3	3/3	3/3	3/3	3/3	3/3
	L		n°	2/2	2/2	2/2	2/2	2/2	2/2	2/2	3/3	3/3	3/3	3/3	3/3	3/3
	A		n°	2/2	2/2	2/2	2/2	2/2	2/2	2/2	3/3	3/3	3/3	3/3	3/3	3/3
	E		n°	2/2	2/2	2/2	2/2	2/2	2/2	2/2	3/3	3/3	3/3	3/3	-	-
	U		n°	2/2	2/2	2/2	2/2	2/2	2/2	2/2	3/3	3/3	3/3	3/3	-	-
	N		n°	2/2	2/2	2/2	2/2	2/2	2/2	2/2	3/3	-	-	-	-	-
Refrigerant	Type		R134a													
Shell & tube system side exchanger																
Exchanger	°		n°	1	1	1	1	1	1	1	1	1	1	1	1	1
	L		n°	1	1	1	1	1	1	1	2	2	2	2	2	2
	A		n°	1	1	1	1	1	1	1	2	2	2	2	2	2
	E		n°	1	1	1	1	2	2	2	2	2	2	2	-	-
	U		n°	1	1	1	1	2	2	2	2	2	2	2	-	-
	N		n°	1	2	2	2	2	2	2	2	-	-	-	-	-
Hydraulic connections (In/Out)	Ø		Please refer to technical documentation													
Axial fans																
Fan	°		n°	12	14	14	16	16	16	18	18	18	20	22	22	22
Air flow rate			m³/h	216000	252000	252000	288000	288000	288000	324000	324000	324000	360000	396000	396000	396000
Fan	L		n°	16	18	18	18	20	22	22	24	24	28	28	30	34
Air flow rate			m³/h	184000	207000	207000	234000	260000	286000	286000	276000	276000	322000	322000	345000	442000
Fan	A		n°	16	18	18	18	20	22	22	24	24	28	28	30	34
Air flow rate			m³/h	256000	288000	288000	324000	360000	396000	396000	384000	384000	448000	448000	480000	612000
Fan	E		n°	20	20	22	22	24	26	28	28	30	30	32	-	-
Air flow rate			m³/h	230000	230000	253000	253000	276000	299000	322000	322000	345000	345000	368000	-	-
Fan	U		n°	20	20	22	22	24	26	28	28	30	30	32	-	-
Air flow rate			m³/h	320000	320000	352000	352000	384000	416000	448000	448000	480000	480000	512000	-	-
Fan	N		n°	22	26	28	30	32	32	34	-	-	-	-	-	-
Air flow rate			m³/h	253000	299000	322000	345000	368000	368000	368000	391000	-	-	-	-	-
Sound data																
Sound power level	°		dB(A)	100,8	101,2	101,3	101,7	101,7	101,8	102,1	102,3	102,4	103,0	103,1	103,2	103,3
	L		dB(A)	92,5	93,0	93,1	93,2	93,7	93,9	94,0	94,2	94,2	94,3	94,3	94,4	95,0
	A		dB(A)	100,2	100,4	100,8	101,5	101,7	101,9	102,0	102,0	102,1	102,3	102,4	103,3	104,4
	E		dB(A)	93,5	93,6	93,7	93,8	93,9	94,0	94,2	94,3	94,3	94,4	94,8	-	-
	U		dB(A)	100,7	101,0	101,3	101,6	102,0	102,1	102,2	102,2	102,3	102,4	102,4	-	-
	N		dB(A)	93,4	94,3	94,4	94,8	95,0	95,2	95,3	95,4	-	-	-	-	-
Sound pressure level	°		dB(A)	67,9	68,2	68,3	68,7	68,6	68,6	68,9	68,9	69,0	69,4	69,5	69,5	69,4
	L		dB(A)	59,4	59,9	59,9	60,0	60,3	60,4	60,4	60,6	60,5	60,6	60,5	62,7	63,3
	A		dB(A)	67,0	66,9	67,2	67,8	67,9	68,1	68,2	68,1	70,4	70,6	70,7	71,6	72,7
	E		dB(A)	61,0	60,9	61,0	61,1	61,1	61,1	61,3	61,3	61,3	61,1	61,5	-	-
	U		dB(A)	67,9	68,2	68,4	68,7	69,0	69,0	68,9	68,9	68,9	69,0	68,9	-	-
	N		dB(A)	60,5	61,2	61,1	61,4	61,5	61,7	61,8	61,8	-	-	-	-	-

- Version not available for this size

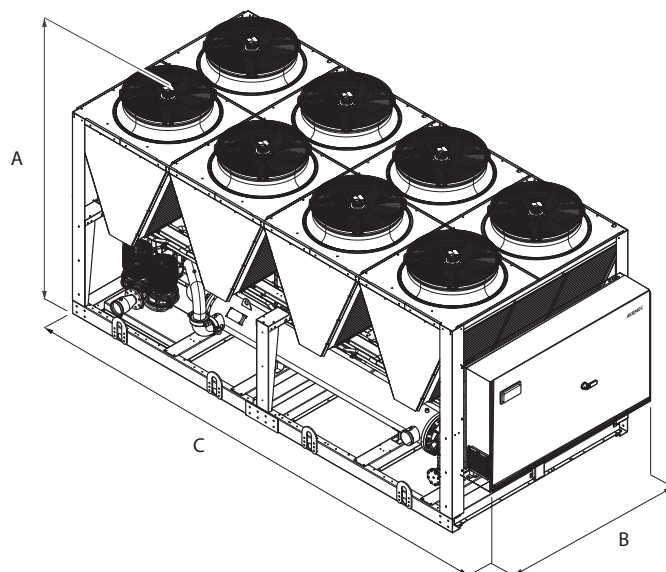
(2) The electrical data of the versions without hydronic module integrated

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.

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

Dimensions (mm)



Mod. NSM	Vers	1402	1602	1802	2002	2202	2352	2502	2652
Height (mm)	A	all	2450	2450	2450	2450	2450	2450	2450
Width (mm)	B	all	2200	2200	2200	2200	2200	2200	2200
		°	3970	3970	3970	5160	5160	5160	5160
Depth (mm)	C	L	5160	5160	5160	5160	6350	6350	7140
		A	5160	5160	5160	5160	6350	6350	7140
		E	5160	5160	6350	6350	6350	7140	8330
		U	5160	5160	6350	6350	6350	7140	8330
		N	6350	6350	7140	7140	7140	8330	8330	9520

Mod. NSM	Vers	2802	3002	3202	3402	3602	3902	4202	4502	
Height (mm)	A	all	2450	2450	2450	2450	2450	2450	2450	
Width (mm)	B	all	2200	2200	2200	2200	2200	2200	2200	
		°	5160	6350	6350	6350	6350	7140	7140	8330
Depth (mm)	C	L	7140	7140	7140	8330	8330	9520	9520	10710
		A	7140	7140	7140	8330	8330	9520	9520	10710
		E	8330	8330	8330	9520	9520	10710	11900	11900
		U	8330	8330	8330	9520	9520	10710	11900	11900
		N	9520	9520	9520	10710	11900	13090	13090	15470

Mod. NSM	Vers	4802	5202	5602	6002	6402	6503	6703	6903	
Height (mm)	A	all	2450	2450	2450	2450	2450	2450	2450	
Width (mm)	B	all	2200	2200	2200	2200	2200	2200	2200	
		°	8330	9520	9520	9520	10710	11110	11110	11900
Depth (mm)	C	L	10710	10710	11900	13090	13090	14280	14280	16660
		A	10710	10710	11900	13090	13090	14280	14280	16660
		E	13090	13090	14280	15470	16660	16660	17850	17850
		U	13090	13090	14280	15470	16660	16660	17850	17850
		N	16660	17850	19040	19040	19040	20230	n.d.	n.d.

Mod. NSM	Vers	7203	8403	9603
Height (mm)	A	all	2450	2450
Width (mm)	B	all	2200	2200
		°	13090	13090
Depth (mm)	C	L	16660	20230
		A	16660	20230
		E	19040	n.d.
		U	19040	n.d.
		N	n.d.	n.d.

For transport reasons, the sizes of 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.