

NSM 1402-9603

Air-water chiller

Cooling capacity 302 ÷ 2100 kW

- Microchannel coil
- Night mode
- Operation up to 50 °C outdoor air
- HP floating: ESEER +5% with inverter fans



DESCRIPTION

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

Outdoor units with high-efficiency screw compressors axial fans, microchannel external coils and plant side shell and tube heat exchanger. In the unit with desuperheater, it is also possible to produce free-hot water.

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

VERSIONS

° Standard

A High efficiency

E Silenced high efficiency

L Standard silenced

N Silenced very high efficiency

U Very high efficiency

FEATURES

Operating field

Operation at full load up to 50°C external air temperature. Unit can produce chilled water (up to -10°C of water produced in some versions).

Bi-tri circuit unit

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.

Aluminium microchannel coils

The microchannel condensing aluminum coils ensure high levels of efficiency, reduced quantities of refrigerant and lower unit weight. The treatment "O" available as configurator it ensures high resistance to corrosion even in the most aggressive environments.

Electronic expansion valve

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.

■ Standard for sizes 5202÷6402 and 8403÷9603.

Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations with one or two pumps, high or low head, to obtain a solution that allows you to save money and to facilitate installation.

CONTROL

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.

— **Floating HP control:** available for all models with inverter fans or with DCPX. Allows, with continuous fan modulation, to optimize the operation of the unit in any operating point, ensuring an increase in the energy efficiency at partial load. **ESEER up to +5% with inverter fans**

— **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 for standard versions is mandatory DCPX accessory (standard on all low noise versions) or "J" inverter fan

ACCESSORIES

AER485P1 x n° 2: RS-485 interface for supervision systems with MOD-BUS protocol.

AER485P1 x n° 3: RS-485 interface for supervision systems with MOD-BUS protocol.

AERBACP: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP

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.

MULTICHILLER_EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring constant flow rate to the evaporators.

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

DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.

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

ACCESSORIES COMPATIBILITY

Model	Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
AER485P1 x n° 2 (1)	°A,E,L,N,U	*	*	*	*	*	*	*	*	*	*	*	*	*	*
AERBACP	°A,E,L,N,U	*	*	*	*	*	*	*	*	*	*	*	*	*	*
AERNET	°A,E,L,N,U	*	*	*	*	*	*	*	*	*	*	*	*	*	*
MULTICHILLER_EVO	°A,E,L,N,U	*	*	*	*	*	*	*	*	*	*	*	*	*	*
PRV3	°A,E,L,N,U	*	*	*	*	*	*	*	*	*	*	*	*	*	*

Model	Ver	4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
AER485P1 x n° 2 (1)	°A,E,L,N,U	*	*	*	*	*	*	*						
AER485P1 x n° 3 (1)	°A,L								*	*	*	*	*	*
	E,U								*	*	*	*		
	N								*					
AERBACP	°A,L	*	*	*	*	*	*	*	*	*	*	*	*	*
	E,U	*	*	*	*	*	*	*	*	*	*	*		
	N	*	*	*	*	*	*	*	*					
AERNET	°A,L	*	*	*	*	*	*	*	*	*	*	*	*	*
	E,U	*	*	*	*	*	*	*	*	*	*	*		
	N	*	*	*	*	*	*	*	*					
MULTICHILLER_EVO	°A,L	*	*	*	*	*	*	*	*	*	*	*	*	*
	E,U	*	*	*	*	*	*	*	*	*	*	*		
	N	*	*	*	*	*	*	*	*					
PRV3	°A,L	*	*	*	*	*	*	*	*	*	*	*	*	*
	E,U	*	*	*	*	*	*	*	*	*	*	*		
	N	*	*	*	*	*	*	*	*					

(1) x Indicates the quantity of accessories to match.

Condensation control temperature

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002
Fans: °										
°	DCPX100	DCPX100	DCPX100	DCPX101	DCPX101	DCPX101	DCPX101	DCPX111	DCPX111	DCPX112
A	DCPX101	DCPX101	DCPX101	DCPX101	DCPX102	DCPX102	DCPX102	DCPX103	DCPX103	DCPX103
E,L,N	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard
U	DCPX101	DCPX101	DCPX102	DCPX102	DCPX102	DCPX103	DCPX103	DCPX104	DCPX104	DCPX104
Fans: M										
°	DCPX110	DCPX110	DCPX110	DCPX110	DCPX110	DCPX110	DCPX110	-	-	-
A	DCPX111	DCPX111	DCPX111	DCPX111	DCPX112	DCPX112	DCPX112	DCPX113	DCPX113	DCPX113
E,L,N	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard
U	DCPX111	DCPX111	DCPX112	DCPX112	DCPX113	DCPX113	DCPX114	DCPX114	DCPX114	DCPX114
Ver	3202	3402	3602	3902	4202	4502	4802	5202	5602	6002
Fans: °										
°	DCPX112	DCPX112	DCPX112	DCPX113	DCPX113	DCPX114	DCPX114	DCPX115	DCPX115	DCPX115
A	DCPX103	DCPX104	DCPX104	DCPX105	DCPX105	DCPX106	DCPX106	DCPX116	DCPX117	DCPX118
E,L,N	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard
U	DCPX104	DCPX105	DCPX105	DCPX106	DCPX107	DCPX107	DCPX108	DCPX109	DCPX120	DCPX121
Fans: M										
A	DCPX113	DCPX114	DCPX114	DCPX115	DCPX115	DCPX116	DCPX116	-	-	-
E,N	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard
L	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard	-	-
U	DCPX114	DCPX115	DCPX115	DCPX116	DCPX117	DCPX117	DCPX118	DCPX119	DCPX130	DCPX131

Ver	6402	6503	6703	6903	7203	8403	9603
Fans: °							
°	DCPX116	DCPX135+DCPX113	DCPX135+DCPX113	DCPX125+DCPX114	DCPX114+DCPX136	DCPX114+DCPX136	DCPX114+DCPX136
A	DCPX118	DCPX105+DCPX126	DCPX105+DCPX126	DCPX106+DCPX126	DCPX106+DCPX126	DCPX107+DCPX126	DCPX118+DCPX137
E	As standard	As standard	As standard	As standard	As standard	-	-
L	As standard	As standard	As standard	As standard	As standard	As standard	As standard
N	As standard	As standard	-	-	-	-	-
U	DCPX122	DCPX106+DCPX127	DCPX107+DCPX127	DCPX107+DCPX127	DCPX108+DCPX127	-	-
Fans: M							
A	-	DCPX115+DCPX136	DCPX115+DCPX136	DCPX111	DCPX116+DCPX136	DCPX117+DCPX136	-
E	As standard	As standard	As standard	As standard	As standard	-	-
L	-	As standard	As standard	As standard	As standard	As standard	-
N	As standard	As standard	-	-	-	-	-
U	DCPX132	DCPX116+DCPX137	DCPX117+DCPX137	DCPX117+DCPX137	DCPX118+DCPX137	-	-

Antivibration

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Integrated hydronic kit: 00, DA, DB, DC, DD, DE, DF, DG, DH, DI, DJ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ, TF, TG, TH, TI, TJ														
°	AVX900	AVX900	AVX900	AVX904	AVX904	AVX904	AVX904	AVX904	AVX904	AVX959	AVX959	AVX960	AVX960	AVX911
A,L	AVX901	AVX901	AVX901	AVX904	AVX959	AVX959	AVX959	AVX903	AVX903	AVX903	AVX903	AVX909	AVX909	AVX907
E,U	AVX901	AVX901	AVX959	AVX959	AVX959	AVX903	AVX903	AVX906	AVX906	AVX906	AVX906	AVX907	AVX907	AVX912
N	AVX959	AVX959	AVX903	AVX903	AVX903	AVX906	AVX906	AVX907	AVX907	AVX907	AVX907	AVX912	AVX910	AVX913
Ver	4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603	
Integrated hydronic kit: 00, TF, TG, TH, TI, TJ														
°	AVX911	AVX909	AVX909	AVX907	AVX907	AVX907	AVX912	AVX914	AVX914	AVX915	AVX916	AVX916	AVX916	
A,L	AVX907	AVX912	AVX912	AVX912	AVX910	AVX913	AVX913	AVX924	AVX924	AVX925	AVX925	AVX927	AVX926	
E,U	AVX910	AVX910	AVX913	AVX913	AVX920	AVX917	AVX918	AVX925	AVX927	AVX927	AVX928	-	-	
N	AVX913	AVX917	AVX918	AVX919	AVX921	AVX921	AVX921	AVX926	-	-	-	-	-	
Integrated hydronic kit: DA, DB, DC, DD, DE, PA, PB, PC, PD, PE														
°	AVX911	-	-	-	-	-	-	-	-	-	-	-	-	-
A,L	AVX907	-	-	-	-	-	-	-	-	-	-	-	-	-
E,U	AVX910	-	-	-	-	-	-	-	-	-	-	-	-	-
N	AVX913	-	-	-	-	-	-	-	-	-	-	-	-	-
Integrated hydronic kit: DF, DG, DH, DI, DJ, PF, PG, PH, PI, PJ														
°	AVX911	AVX909	AVX909	AVX907	AVX907	AVX907	AVX912	-	-	-	-	-	-	-
A,L	AVX907	AVX912	AVX912	AVX912	AVX910	AVX913	AVX913	-	-	-	-	-	-	-
E,U	AVX910	AVX910	AVX913	AVX913	AVX920	AVX917	AVX918	-	-	-	-	-	-	-
N	AVX913	AVX917	AVX918	AVX919	AVX921	AVX921	AVX921	-	-	-	-	-	-	-

Power factor correction

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802
°	RIFNSM1402Q	RIFNSM1602Q	RIFNSM1802Q	RIFNSM2002Q	RIFNSM2202Q	RIFNSM2352Q	RIFNSM2502Q	RIFNSM2652Q	RIFNSM2802Q
A,L	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
°	RIFNSM3002Q	RIFNSM3202Q	RIFNSM3402Q	RIFNSM3602Q	RIFNSM3902C	RIFNSM4202C	RIFNSM4502C	RIFNSM4802C	RIFNSM5202C
A,E,L,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,L	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

Grids

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802
°	GP3V	GP3V	GP3V	GP4V	GP4V	GP4V	GP4V	GP4V	GP4V
A,L	GP4V	GP4V	GP4VN	GP4V	GP5V	GP5V	GP5V	GP6V	GP6V
E,U	GP4V	GP4V	GP5V	GP5V	GP5V	GP6V	GP6V	GP7V	GP7V
N	GP5V	GP5V	GP6V	GP6V	GP6V	GP7V	GP7V	GP8V	GP8V

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

Ver	3002	3202	3402	3602	3902	4202	4502	4802	5202
°	GP5V	GP5V	GP5V	GP5V	GP6V	GP6V	GP7V	GP7V	GP8V
A,L	GP6V	GP6V	GP7V	GP7V	GP8V	GP8V	GP9V	GP9V	GP9V
E,U	GP7V	GP7V	GP8V	GP8V	GP9V	GP10V	GP10V	GP11V	GP11V
N	GP8V	GP8V	GP9V	GP10V	GP11V	GP11V	GP6V+GP7V	GP7V+GP7V	GP7V+GP8V

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

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

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Heater exchangers

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802
°,A,L	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
°	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS24	KRS24
A,E,L	KRS23	KRS23	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24
N	KRS23	KRS23	KRS24	KRS24	KRS24	KRS24	KRS24	KRS23+KRS23	KRS23+KRS23
U	KRS23	KRS23	KRS24	KRS24	KRS24	KRS24	KRS23+KRS23	KRS24	KRS24

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

Ver	5602	6002	6402	6503	6703	6903	7203	8403	9603
°	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24
A,L	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	-	-	-	-	-

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

CONFIGURATOR

Field	Description
1,2,3	NSM
4,5,6,7	Size 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
8	Operating field
°	Standard mechanic thermostatic valve (1)
X	Electronic thermostatic expansion valve (2)
Y	Low temperature mechanic thermostatic valve (3)
Z	Low temperature electronic thermostatic valve (3)
9	Model
°	Cooling only
C	Motocondensing unit (4)
10	Heat recovery
°	Without heat recovery
D	With desuperheater (5)
T	With total recovery (6)
11	Version
°	Standard
A	High efficiency
E	Silenced high efficiency
L	Standard silenced
N	Silenced very high efficiency
U	Very high efficiency
12	Coils
°	Aluminium microchannel
I	Copper-aluminium
O	Coated aluminium microchannel
R	Copper pipes-copper fins
S	Copper pipes-Tinned copper fins
V	Copper pipes-Coated aluminium fins
13	Fans
°	Standard
J	Inverter
M	Oversized (7)
14	Power supply
°	400V~3 50Hz with fuses
2	230V~3 50Hz with fuses
4	230V~3 50Hz with magnet circuit breakers
5	500V~3 50Hz with fuses
8	400V~3 50Hz with magnet circuit breakers

Field	Description
9	500V~3 50Hz with magnet circuit breakers
15,16	Integrated hydronic kit
	Without hydronic kit
00	Without hydronic kit
	Kit with n° 1 pump
PA	Pump A
PB	Pump B
PC	Pump C
PD	Pump D
PE	Pump E
PF	Pump F
PG	Pump G
PH	Pump H
PI	Pump I
PJ	Pump J
	Pump n° 1 pump + stand-by pump
DA	Pump A + stand-by pump
DB	Pump B + stand-by pump
DC	Pump C + stand-by pump
DD	Pump D + stand-by pump
DE	Pump E + stand-by pump
DF	Pump F + stand-by pump
DG	Pump G + stand-by pump
DH	Pump H + stand-by pump
DI	Pump I + stand-by pump
DJ	Pump J + stand-by pump
	Kit with 2 pumps
TF	Double pump F
TG	Double pump G (8)
TH	Double pump H (8)
TI	Double pump I (8)
TJ	Double pump J (8)

- (1) Water produced from 4 °C ÷ 15 °C
(2) Water produced from 4 °C ÷ 18 °C
(3) Water produced from 4 °C ÷ - 8 °C
(4) The motor condensing units are not configurable with option D and T, and with the integrated hydronic kit
(5) The temperature of the water in the heat exchanger inlet must never drop below 35°C.
(6) The models 1402° - 1602° - 1802° cannot have total recovery, which is available for all the other sizes and versions. If it is necessary to have total recovery as well as the hydronic kit, feasibility must be evaluated when ordering.
(7) The units from 2652 to 9603 in the version "nom" and from 5202 to 6402 and unit 9603 version "L" and "A" are not available with increased fans "M"
(8) The unit from 5603 to 9603 can only have hydronic kit "TF - TG - TH - TI - TJ"

PERFORMANCE SPECIFICATIONS

NSM - °

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Cooling performance 12 °C / 7 °C (1)															
Cooling capacity	kW	307,5	348,9	397,0	450,3	489,4	524,7	543,8	577,3	613,8	680,5	725,1	770,1	813,8	906,1
Input power	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
Cooling total input current	A	182,0	207,0	229,0	257,0	281,0	306,0	329,0	356,0	381,0	392,0	414,0	447,0	484,0	520,0
EER	W/W	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 system side	l/h	52881	59999	68270	77459	84185	90223	93509	99261	105543	117009	124685	132413	139916	155801
Pressure drop system side	kPa	27	36	38	49	57	26	28	33	35	39	42	47	38	46

(1) Data 14511:2018; System side water heat exchanger 12 °C / 7 °C; External air 35 °C

NSM °

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Cooling performance 12 °C / 7 °C (1)														
Cooling capacity	kW	958,5	1051,2	1099,1	1168,1	1195,0	1237,7	1327,6	1393,8	1439,8	1578,6 (2)	1669,7 (2)	1742,2 (2)	1859,9 (2)
Input power	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
Cooling total input current	A	573,0	597,0	641,0	668,0	712,0	749,0	766,0	806,0	857,0	927,0	966,0	1103,0	1230,0
EER	W/W	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 system side	l/h	164794	180726	188953	200816	205451	212795	228246	239604	247511	271348	287011	299461	319697
Pressure drop system side	kPa	41	48	42	46	48	55	62	44	46	30	33	36	40

- (1) Data 14511:2018; System side water heat exchanger 12 °C / 7 °C; External air 35 °C
(2) Unit not Eurovent certified because it exceeds 1500 kW

NSM - L

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Cooling performance 12 °C/7 °C (1)															
Cooling capacity	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
Input power	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
Cooling total input current	A	173,0	196,0	218,0	254,0	277,0	297,0	319,0	336,0	354,0	391,0	426,0	429,0	473,0	509,0
EER	W/W	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 system side	l/h	52016	59162	67531	73600	84402	88342	92402	100313	103652	114244	121903	132545	142018	156242
Pressure drop system side	kPa	27	36	38	18	24	25	28	33	31	36	23	23	25	32

(1) Data 14511:2018; System side water heat exchanger 12 °C/7 °C; External air 35 °C

NSM - L

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Cooling performance 12 °C/7 °C (1)														
Cooling capacity	kW	949,7	1032,5	1076,9	1122,7	1183,7	1254,5	1295,6	1395,1	1436,6	1605,1 (2)	1649,4 (2)	1758,0 (2)	1946,7 (2)
Input power	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
Cooling total input current	A	567,0	593,0	638,0	693,0	716,0	736,0	776,0	793,0	849,0	914,0	960,0	1067,0	1163,0
EER	W/W	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 system side	l/h	163268	177512	185148	193004	203496	215669	222723	239820	246956	275911	283536	302181	334622
Pressure drop system side	kPa	34	44	46	33	36	42	45	33	34	45	47	34	45

(1) Data 14511:2018; System side water heat exchanger 12 °C/7 °C; External air 35 °C

(2) Unit not Eurovent certified because it exceeds 1500 kW

NSM - A

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Cooling performance 12 °C/7 °C (1)															
Cooling capacity	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
Input power	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
Cooling total input current	A	175,0	198,0	223,0	250,0	278,0	298,0	314,0	340,0	355,0	378,0	399,0	421,0	459,0	502,0
EER	W/W	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 system side	l/h	54280	61954	71417	79331	87600	93687	99196	106766	113293	120259	127516	137633	152015	164211
Pressure drop system side	kPa	30	39	43	21	26	28	32	37	37	40	25	25	29	36

(1) Data 14511:2018; System side water heat exchanger 12 °C/7 °C; External air 35 °C

NSM - (A)

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Cooling performance 12 °C/7 °C (1)														
Cooling capacity	kW	1021,7	1084,5	1160,1	1213,2	1275,8	1352,3	1402,7	1462,2	1531,9 (2)	1682,9 (2)	1753,4 (2)	1908,6 (2)	2106,4 (2)
Input power	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
Cooling total input current	A	547,0	577,0	614,0	647,0	685,0	725,0	758,0	772,0	821,0	897,0	936,0	1017,0	1132,0
EER	W/W	3,11	3,13	3,12	3,12	3,11	3,13	3,11	3,14	3,10	3,15	3,13	3,11	3,13
Water flow rate system side	l/h	175657	186457	199460	208561	219327	232478	241144	251345	263330	289291	301409	328062	362058
Pressure drop system side	kPa	39	49	53	38	42	49	52	36	39	49	53	41	52

(1) Data 14511:2018; System side water heat exchanger 12 °C/7 °C; External air 35 °C

(2) Unit not Eurovent certified because it exceeds 1500 kW

NSM - E

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Cooling performance 12 °C/7 °C (1)															
Cooling capacity	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
Input power	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
Cooling total input current	A	171,0	196,0	214,0	245,0	272,0	288,0	309,0	324,0	347,0	367,0	389,0	411,0	450,0	490,0
EER	W/W	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 system side	l/h	54958	63367	71800	81228	88406	93396	99657	105762	112115	119555	127316	136926	151562	163628
Pressure drop system side	kPa	15	14	18	21	24	26	30	24	26	29	26	25	29	36

(1) Data 14511:2018; System side water heat exchanger 12 °C/7 °C; External air 35 °C

NSM - E

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Cooling performance 12 °C/7 °C (1)														
Cooling capacity	kW	1018,9	1082,1	1159,1	1206,7	1265,2	1322,0	1389,6	1464,9	1528,1 (2)	1670,1 (2)	1752,6 (2)	-	-
Input power	kW	325,9	347,4	370,9	387,8	405,6	422,2	443,7	469,4	489,0	534,5	563,0	-	-
Cooling total input current	A	529,0	560,0	598,0	628,0	656,0	686,0	724,0	764,0	792,0	861,0	898,0	-	-
EER	W/W	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 system side	l/h	175173	186051	199271	207449	217481	227238	238869	251810	262683	287098	301260	-	-
Pressure drop system side	kPa	40	49	36	38	24	24	29	35	40	49	45	-	-

(1) Data 14511:2018; System side water heat exchanger 12 °C/7 °C; External air 35 °C

(2) Unit not Eurovent certified because it exceeds 1500 kW

NSM - U

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Cooling performance 12 °C/7 °C (1)															
Cooling capacity	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
Input power	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
Cooling total input current	A	173,0	197,0	218,0	248,0	275,0	292,0	309,0	330,0	352,0	366,0	387,0	410,0	448,0	490,0
EER	W/W	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 system side	l/h	56933	65026	74302	82821	90716	97089	101524	109164	116096	121764	129073	139455	155146	167724
Pressure drop system side	kPa	17	15	19	21	25	28	31	25	28	30	26	26	30	37

(1) Data 14S11:2018; System side water heat exchanger 12 °C/7 °C; External air 35 °C

NSM - U

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Cooling performance 12 °C/7 °C (1)														
Cooling capacity	kW	1043,4	1104,7	1184,6	1234,0	1301,2	1360,8	1419,5	1505,6 (2)	1579,3 (2)	1693,4 (2)	1772,6 (2)	-	-
Input power	kW	315,2	336,8	357,4	380,5	400,8	418,5	427,8	453,3	472,9	522,1	540,7	-	-
Cooling total input current	A	530,0	562,0	597,0	634,0	671,0	706,0	725,0	762,0	795,0	870,0	896,0	-	-
EER	W/W	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 system side	l/h	179384	189926	203652	212142	223669	233910	244004	258808	271482	291091	304708	-	-
Pressure drop system side	kPa	42	51	38	40	26	26	31	37	42	51	46	-	-

(1) Data 14S11:2018; System side water heat exchanger 12 °C/7 °C; External air 35 °C

(2) Unit not Eurovent certified because it exceeds 1500 kW

NSM - N

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Cooling performance 12 °C/7 °C (1)															
Cooling capacity	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
Input power	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
Cooling total input current	A	165,0	190,0	207,0	237,0	265,0	281,0	297,0	317,0	339,0	358,0	378,0	399,0	429,0	470,0
EER	W/W	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 system side	l/h	56717	64546	74260	81573	88881	94723	99476	106664	113329	120551	127777	138054	151226	164260
Pressure drop system side	kPa	16	15	19	21	24	28	30	25	27	29	26	25	30	37

(1) Data 14S11:2018; System side water heat exchanger 12 °C/7 °C; External air 35 °C

NSM - N

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Cooling performance 12 °C/7 °C (1)														
Cooling capacity	kW	1014,4	1086,1	1169,7	1219,0	1267,1	1317,0	1367,2	1452,6	-	-	-	-	-
Input power	kW	315,6	332,8	352,6	374,6	396,5	410,4	428,2	450,1	-	-	-	-	-
Cooling total input current	A	513,0	540,0	569,0	605,0	643,0	668,0	700,0	731,0	-	-	-	-	-
EER	W/W	3,21	3,26	3,32	3,25	3,20	3,21	3,19	3,23	-	-	-	-	-
Water flow rate system side	l/h	174394	186718	201086	209575	217799	226384	235022	249705	-	-	-	-	-
Pressure drop system side	kPa	40	35	44	44	26	26	30	37	-	-	-	-	-

(1) Data 14S11:2018; System side water heat exchanger 12 °C/7 °C; External air 35 °C

ENERGY INDICES (REG. 2016/2281 EU)

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Cooling capacity with low leaving water temp (UE n° 2016/2281)																
SEER	°	W/W	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	A	W/W	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
	E	W/W	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
	L	W/W	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	4,10
	N	W/W	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
	U	W/W	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
η _{sc}	°	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	A	%	161,00	160,10	161,70	161,40	162,70	162,30	162,80	162,70	162,50	161,90	162,20	162,70	161,60	161,40
	E	%	165,10	164,60	166,00	163,20	161,20	162,50	163,00	165,10	163,70	163,50	162,50	164,20	164,20	164,40
	L	%	157,70	156,90	154,40	161,40	161,30	161,20	161,60	161,60	161,50	161,40	161,40	161,40	161,20	161,00
	N	%	169,60	168,10	171,90	166,00	162,80	164,90	164,10	165,60	163,70	163,70	163,00	165,30	165,40	165,30
	U	%	168,70	168,20	169,60	166,70	164,70	166,20	166,60	168,60	167,20	167,10	166,10	167,80	167,90	168,00
Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203			
Cooling capacity with low leaving water temp (UE n° 2016/2281)																
SEER	°	W/W	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	A	W/W	4,14	4,13	4,13	4,12	4,16	4,15	4,12	4,15	4,15	4,15	4,16	4,13		
	E	W/W	4,19	4,14	4,21	4,12	4,14	4,15	4,23	4,26	4,28	4,28	4,14	4,20		
	L	W/W	4,12	4,11	4,11	4,10	4,12	4,11	4,10	4,12	4,12	4,12	4,12	4,10		
	N	W/W	4,17	4,20	4,20	4,23	4,18	4,20	4,18	4,24	-	-	-	-		
	U	W/W	4,28	4,23	4,30	4,21	4,23	4,24	4,32	4,34	4,36	4,36	4,23	4,29		
η _{sc}	°	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	A	%	162,50	162,30	162,00	161,90	163,20	162,80	161,70	163,00	162,80	163,20	162,10			
	E	%	164,50	162,50	165,20	161,80	162,70	163,10	166,20	167,40	168,20	162,60	164,90			
	L	%	161,60	161,20	161,20	161,10	161,70	161,40	161,10	161,70	161,80	161,90	161,10			
	N	%	163,90	164,90	165,00	166,30	164,30	165,10	164,20	166,70	-	-	-	-		
	U	%	168,00	166,20	168,80	165,20	166,30	166,60	169,80	170,70	171,50	166,20	168,40			

ELECTRIC DATA

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Electric data																
Maximum current (FLA)	°	A	229,0	257,0	284,0	324,0	357,0	379,0	400,0	433,0	458,0	466,0	466,0	514,0	562,0	619,0
	A,L	A	235,0	263,0	291,0	324,0	364,0	385,0	406,0	437,0	462,0	462,0	462,0	516,0	564,0	619,0
	E,U	A	235,0	263,0	297,0	330,0	364,0	391,0	413,0	444,0	468,0	468,0	468,0	523,0	571,0	625,0
	N	A	242,0	270,0	303,0	337,0	370,0	398,0	419,0	450,0	475,0	475,0	475,0	529,0	583,0	644,0
Peak current (LRA)	°	A	251,0	292,0	335,0	380,0	403,0	450,0	467,0	502,0	512,0	521,0	521,0	645,0	685,0	814,0
	A,L	A	257,0	299,0	342,0	380,0	409,0	456,0	473,0	507,0	517,0	517,0	517,0	647,0	687,0	814,0
	E,U	A	257,0	299,0	348,0	386,0	409,0	462,0	480,0	513,0	523,0	523,0	523,0	653,0	693,0	821,0
	N	A	263,0	305,0	354,0	392,0	415,0	469,0	486,0	519,0	529,0	529,0	529,0	660,0	706,0	839,0
Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603	
Electric data																
Maximum current (FLA)	°	A	667,0	714,0	753,0	805,0	848,0	882,0	924,0	949,0	997,0	1084,0	1137,0	1266,0	1368,0	
	A,L	A	667,0	712,0	751,0	813,0	865,0	913,0	947,0	955,0	1003,0	1094,0	1133,0	1268,0	1406,0	
	E,U	A	679,0	718,0	770,0	813,0	862,0	902,0	943,0	968,0	1022,0	1100,0	1145,0	-	-	
	N	A	692,0	743,0	789,0	838,0	887,0	921,0	955,0	987,0	-	-	-	-	-	
Peak current (LRA)	°	A	841,0	914,0	936,0	1100,0	1147,0	1259,0	1264,0	1038,0	1065,0	1160,0	1197,0	1446,0	1552,0	
	A,L	A	841,0	911,0	934,0	1108,0	1164,0	1290,0	1287,0	1044,0	1071,0	1170,0	1193,0	1448,0	1590,0	
	E,U	A	854,0	918,0	953,0	1108,0	1161,0	1279,0	1283,0	1056,0	1090,0	1176,0	1205,0	-	-	
	N	A	866,0	943,0	972,0	1133,0	1186,0	1298,0	1295,0	1076,0	-	-	-	-	-	

GENERAL TECHNICAL DATA

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802
Compressor											
Type	°A,E,L,N,U	type	Screw	Screw	Screw	Screw	Screw	Screw	Screw	Screw	Screw
Number	°A,E,L,N,U	no.	2	2	2	2	2	2	2	2	2
Circuits	°A,E,L,N,U	no.	2	2	2	2	2	2	2	2	2
Refrigerant	°A,E,L,N,U	type	R134a	R134a	R134a	R134a	R134a	R134a	R134a	R134a	R134a
Refrigerant load circuit 1 (1)	°	kg	24,0	24,0	24,0	30,0	30,0	35,0	35,0 (2)	35,0	35,0
	A	kg	26,5	34,0 (2)	28,0	28,0	34,0	35,0	38,5	40,5	45,0
	E	kg	28,0	30,0	41,0 (2)	41,0 (2)	46,0 (2)	43,0	41,0	46,0	45,0
	L	kg	24,0	34,0 (2)	37,0 (2)	28,0	34,0	35,0	38,5	40,0	42,0 (2)
	N	kg	36,0 (2)	38,0 (2)	44,0 (2)	44,0 (2)	49,0 (2)	53,0 (2)	56,0 (2)	60,0 (2)	64,0 (2)
	U	kg	32,0 (2)	34,0 (2)	34,0	35,0	46,0 (2)	49,0 (2)	49,0	46,0 (2)	45,0 (2)
Refrigerant load circuit 2 (1)	°	kg	24,0	25,0	25,0	41,0	33,0	38,0	37,0 (2)	37,5	36,5
	A	kg	28,0	34,0 (2)	29,5	36,0	34,0	49,0	40,5	45,0	47,5
	E	kg	30,0	31,5	41,0 (2)	46,0 (2)	46,0 (2)	45,0	46,0	52,0	53,0
	L	kg	27,0	34,0 (2)	37,0 (2)	36,0	34,0	40,0	40,5	43,0	46,0 (2)
	N	kg	36,0 (2)	38,0 (2)	44,0 (2)	49,0 (2)	49,0 (2)	56,0 (2)	56,0 (2)	64,0 (2)	64,0 (2)
	U	kg	32,0 (2)	34,0 (2)	36,0	41,5	46,0 (2)	53,0 (2)	54,0	52,0 (2)	48,5 (2)
Refrigerant load circuit 3 (1)	°A,E,L,N,U	kg	-	-	-	-	-	-	-	-	-
System side heat exchanger											
Type	°A,E,L,N,U	type	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube
Number	°A,E,L,N,U	no.	1	1	1	1	1	1	1	1	1
Sound data calculated in cooling mode (3)											
Sound power level	°	dB(A)	96,8	97,0	97,2	97,6	97,8	98,0	98,2	98,4	98,4
	A	dB(A)	97,3	97,4	97,8	97,9	98,2	98,3	98,4	98,8	98,9
	E	dB(A)	89,3	89,4	90,2	90,3	90,4	90,8	91,2	91,8	92,0
	L	dB(A)	88,9	89,0	89,1	89,2	90,3	90,5	90,6	90,8	90,9
	N	dB(A)	90,0	90,4	90,9	91,0	91,1	91,4	91,4	92,1	92,2
	U	dB(A)	97,0	97,4	98,0	98,2	98,4	98,8	98,8	99,0	99,1
Sound pressure level (10 m)	°	dB(A)	64,5	64,7	64,9	65,2	65,4	65,6	65,8	66,0	66,0
	A	dB(A)	64,9	65,0	65,4	65,5	65,7	65,8	65,9	66,2	66,3
	E	dB(A)	56,9	57,0	57,7	57,8	57,9	58,2	58,6	59,0	59,2
	L	dB(A)	56,5	56,6	56,7	56,8	57,8	58,0	58,1	58,2	58,3
	N	dB(A)	57,5	57,9	58,3	58,4	58,5	58,6	58,6	59,2	59,3
	U	dB(A)	64,6	65,0	65,5	65,7	65,9	66,2	66,2	66,2	66,3

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

(2) The refrigerant gas charge is approximate, for more information contact the office.

(3) 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			3002	3202	3402	3602	3902	4202	4502	4802	5202
Compressor											
Type	°A,E,L,N,U	type	Screw	Screw	Screw	Screw	Screw	Screw	Screw	Screw	Screw
Number	°A,E,L,N,U	no.	2	2	2	2	2	2	2	2	2
Circuits	°A,E,L,N,U	no.	2	2	2	2	2	2	2	2	2
Refrigerant	°A,E,L,N,U	type	R134a	R134a	R134a	R134a	R134a	R134a	R134a	R134a	R134a
Refrigerant load circuit 1 (1)	°	kg	40,0	46,0	42,5	44,5	51,0	52,0	55,0	55,0 (2)	63,0 (2)
	A	kg	44,0 (2)	47,0	52,0 (2)	55,0	74,0 (2)	62,0	67,0	67,0	70,0
	E	kg	45,0 (2)	57,0	54,0 (2)	74,0 (2)	60,0 (2)	70,0	89,0 (2)	80,0 (2)	100,0 (2)
	L	kg	44,0	47,0	52,0 (2)	54,0	56,0 (2)	62,0	67,0 (2)	67,0	70,0
	N	kg	64,0 (2)	55,0 (2)	72,0 (2)	81,0 (2)	85,0 (2)	92,0 (2)	99,0 (2)	110,0 (2)	114,0 (2)
	U	kg	60,0 (2)	54,5	58,0	58,0	60,0 (2)	70,0	89,0 (2)	80,0	85,0 (2)
Refrigerant load circuit 2 (1)	°	kg	50,0	48,0	46,0	46,0	59,0	59,0	64,0	64,0 (2)	70,0 (2)
	A	kg	52,0 (2)	50,0	55,0 (2)	60,0	81,0 (2)	70,0	78,0	78,0	82,0
	E	kg	53,0 (2)	59,0	59,0 (2)	74,0 (2)	77,0 (2)	85,0	96,0 (2)	90,0 (2)	110,0 (2)
	L	kg	52,0	50,0	55,0 (2)	58,0	72,0 (2)	70,0	79,0 (2)	78,0	82,0
	N	kg	69,0 (2)	57,0 (2)	77,0 (2)	81,0 (2)	92,0 (2)	92,0 (2)	107,0 (2)	110,0 (2)	124,0 (2)
	U	kg	65,0 (2)	59,0	62,0	63,0	77,0 (2)	85,0	96,0 (2)	90,0	103,0 (2)
Refrigerant load circuit 3 (1)	°A,E,L,N,U	kg	-	-	-	-	-	-	-	-	-
System side heat exchanger											
Type	°A,E,L,N,U	type	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube
Number	°A,E,L,N,U	no.	1	1	1	1	1	1	1	1	1
	N	no.	1	1	1	1	1	1	2	2	2
Sound data calculated in cooling mode (3)											
Sound power level	°	dB(A)	99,4	99,5	99,6	99,8	100,7	100,8	101,2	101,3	101,7
	A	dB(A)	99,0	99,1	99,3	99,4	100,1	100,2	100,4	100,8	101,5
	E	dB(A)	92,2	92,3	92,8	93,0	93,2	93,5	93,6	93,7	93,8
	L	dB(A)	91,0	91,1	91,3	91,4	92,4	92,5	93,0	93,1	93,2
	N	dB(A)	92,3	92,4	92,8	93,1	93,3	93,4	94,3	94,4	94,8
	U	dB(A)	99,2	99,3	99,9	100,0	100,4	100,7	101,0	101,3	101,6
Sound pressure level (10 m)	°	dB(A)	66,9	67,0	67,1	67,3	68,1	68,2	68,4	68,5	68,8
	A	dB(A)	66,4	66,5	66,5	66,6	67,2	67,3	67,4	67,8	68,5
	E	dB(A)	59,4	59,5	59,9	60,1	60,2	60,4	60,5	60,5	60,6
	L	dB(A)	58,4	58,5	58,5	58,6	59,5	59,6	60,0	60,1	60,2
	N	dB(A)	59,4	59,5	59,8	60,0	60,1	60,2	60,8	60,8	61,1
	U	dB(A)	66,4	66,5	67,0	67,1	67,4	67,6	67,9	68,1	68,4

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

(2) The refrigerant gas charge is approximate, for more information contact the office.

(3) 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			5602	6002	6402	6503	6703	6903	7203	8403	9603
Compressor											
Type	°A,E,L,N,U	type	Screw	Screw	Screw	Screw	Screw	Screw	Screw	Screw	Screw
Number	°A,L	no.	2	2	2	3	3	3	3	3	3
	E,U	no.	2	2	2	3	3	3	3	-	-
	N	no.	2	2	2	3	-	-	-	-	-
Circuits	°A,L	no.	2	2	2	3	3	3	3	3	3
	E,U	no.	2	2	2	3	3	3	3	-	-
	N	no.	2	2	2	3	-	-	-	-	-
Refrigerant	°A,E,L,N,U	type	R134a	R134a	R134a	R134a	R134a	R134a	R134a	R134a	R134a
Refrigerant load circuit 1 (1)	°	kg	65,0 (2)	62,0	70,0 (2)	67,0 (2)	55,0	78,0 (2)	62,0 (2)	99,0 (2)	112,0 (2)
	A	kg	106,0 (2)	82,0	82,0 (2)	74,0 (2)	81,0 (2)	85,0 (2)	70,0	106,0 (2)	80,0
	E	kg	113,0 (2)	86,0	95,0 (2)	77,0 (2)	89,0 (2)	89,0 (2)	100,0 (2)	-	-
	L	kg	106,0 (2)	82,0	82,0 (2)	74,0 (2)	81,0 (2)	85,0 (2)	70,0 (2)	106,0 (2)	80,0
	N	kg	128,0 (2)	128,0 (2)	138,0 (2)	85,0 (2)	-	-	-	-	-
	U	kg	113,0 (2)	86,0	95,0	77,0 (2)	89,0 (2)	89,0 (2)	100,0 (2)	-	-
Refrigerant load circuit 2 (1)	°	kg	71,0 (2)	73,0	80,0 (2)	74,0 (2)	61,0	85,0 (2)	70,0 (2)	99,0 (2)	112,0 (2)
	A	kg	106,0 (2)	99,0	99,0 (2)	81,0 (2)	81,0 (2)	92,0 (2)	75,0	106,0 (2)	95,0
	E	kg	113,0 (2)	98,0	97,0 (2)	85,0 (2)	89,0 (2)	96,0 (2)	100,0 (2)	-	-
	L	kg	106,0 (2)	99,0	99,0 (2)	81,0 (2)	81,0 (2)	92,0 (2)	75,0 (2)	106,0 (2)	95,0
	N	kg	128,0 (2)	138,0 (2)	138,0 (2)	92,0 (2)	-	-	-	-	-
	U	kg	113,0 (2)	98,0	97,0	85,0 (2)	89,0 (2)	96,0 (2)	100,0 (2)	-	-
Refrigerant load circuit 3 (1)	°	kg	-	-	-	74,0 (2)	65,0	85,0 (2)	80,0 (2)	99,0 (2)	112,0 (2)
	A	kg	-	-	-	81,0 (2)	81,0 (2)	92,0 (2)	75,0	106,0 (2)	85,0
	E,U	kg	-	-	-	85,0 (2)	89,0 (2)	96,0 (2)	100,0 (2)	-	-
	L	kg	-	-	-	81,0 (2)	81,0 (2)	92,0 (2)	75,0 (2)	106,0 (2)	85,0
	N	kg	-	-	-	92,0 (2)	-	-	-	-	-
	U	kg	-	-	-	92,0 (2)	-	-	-	-	-
System side heat exchanger											
Type	°A,E,L,N,U	type	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube
Number	°	no.	1	1	1	1	1	1	1	1	1
	A,L	no.	1	1	1	2	2	2	2	2	2
	E,U	no.	2	2	2	2	2	2	2	-	-
	N	no.	2	2	2	2	-	-	-	-	-
Sound data calculated in cooling mode (3)	°	dB(A)	101,7	101,8	102,1	102,3	102,4	103,0	103,1	103,2	103,3
	A	dB(A)	101,7	101,9	102,0	102,0	102,1	102,3	102,4	103,3	104,4
	E	dB(A)	93,9	94,0	94,2	94,3	94,3	94,4	94,8	-	-
	L	dB(A)	93,7	93,9	94,0	94,2	94,2	94,3	94,3	94,4	95,0
	N	dB(A)	95,0	95,2	95,3	95,4	-	-	-	-	-
	U	dB(A)	102,0	102,1	102,2	102,2	102,3	102,4	102,4	-	-
Sound pressure level (10 m)	°	dB(A)	68,8	68,9	69,1	69,3	69,4	69,9	69,9	70,0	70,1
	A	dB(A)	68,6	68,7	68,8	68,6	68,7	68,7	68,8	69,6	70,5
	E	dB(A)	60,5	60,5	60,6	60,7	60,6	60,7	61,0	-	-
	L	dB(A)	60,6	60,7	60,8	60,8	60,8	60,7	60,7	60,7	61,1
	N	dB(A)	61,2	61,4	61,5	61,5	-	-	-	-	-
	U	dB(A)	68,6	68,6	68,6	68,6	68,6	68,7	68,6	-	-

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

(2) The refrigerant gas charge is approximate, for more information contact the office.

(3) 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).

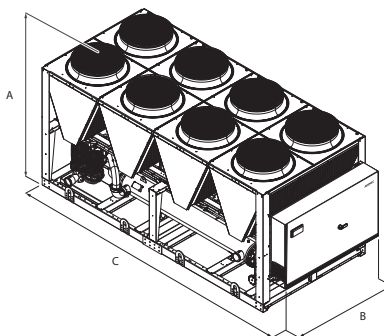
Size			1402	1602	1802	2002	2202	2352	2502	2652	2802
Integrated hydronic kit: 00											
Hydraulic connections											
Connections (in/out)	°A,E,L,N,U	Type	Grooved joints								
Size (in)	°A,L	Ø	5"	5"	6"	6"	6"	6"	6"	6"	6"
	E,N,U	Ø					6"				
Size (out)	°A,L	Ø	5"	5"	6"	6"	6"	6"	6"	6"	6"
	E,N,U	Ø					6"				

Size			3002	3202	3402	3602	3902	4202	4502	4802	5202
Integrated hydronic kit: 00											
Hydraulic connections											
Connections (in/out)	° ,A,E,L,N,U	Type	Grooved joints								
Size (in)	°	Ø	6"	6"	6"	6"	6"	6"	6"	8"	8"
	A,L	Ø	6"	6"	8"	8"	8"	8"	8"	8"	10"
	E,U	Ø	6"	6"	8"	8"	8"	8"	8"	10"	10"
Size (out)	N	Ø	6"	6"	8"	8"	8"	8"	-	-	-
	°	Ø	6"	6"	6"	6"	6"	6"	6"	8"	8"
	A,L	Ø	6"	6"	8"	8"	8"	8"	8"	8"	10"
Size (out)	E,U	Ø	6"	6"	8"	8"	8"	8"	8"	10"	10"
	N	Ø	6"	6"	8"	8"	8"	8"	-	-	-
Module 1											
Size (in)	° ,A,E,L,U	Ø									
	N	Ø	-	-	-	-	-	-	6"	6"	6"
Size (out)	° ,A,E,L,U	Ø									
	N	Ø	-	-	-	-	-	-	6"	6"	6"
Module 2											
Size (in)	° ,A,E,L,U	Ø									
	N	Ø	-	-	-	-	-	-	6"	6"	6"
Size (out)	° ,A,E,L,U	Ø									
	N	Ø	-	-	-	-	-	-	6"	6"	6"
Size			5602	6002	6402	6503	6703	6903	7203	8403	9603
Integrated hydronic kit: 00											
Hydraulic connections											
Connections (in/out)	° ,A,E,L,N,U	Type	Grooved joints								
Size (in)	°	Ø	8"	8"	8"	10"	10"	10"	10"	10"	10"
	A,L	Ø	10"	10"	10"	-	-	-	-	-	-
	E,N,U	Ø									
Size (out)	°	Ø	8"	8"	8"	10"	10"	10"	10"	10"	10"
	A,L	Ø	10"	10"	10"	-	-	-	-	-	-
	E,N,U	Ø									
Module 1											
Size (in)	°	Ø									
	A,L	Ø	-	-	-	8"	8"	8"	8"	10"	10"
	E,U	Ø	6"	6"	6"	8"	8"	8"	10"	-	-
	N	Ø	6"	6"	6"	8"	-	-	-	-	-
Size (out)	°	Ø									
	A,L	Ø	-	-	-	8"	8"	8"	8"	10"	10"
	E,U	Ø	6"	6"	6"	8"	8"	8"	10"	-	-
	N	Ø	6"	6"	6"	8"	-	-	-	-	-
Module 2											
Size (in)	°	Ø									
	A,L	Ø	-	-	-	6"	6"	6"	6"	6"	6"
	E,U	Ø	6"	6"	6"	6"	6"	6"	6"	-	-
	N	Ø	6"	6"	6"	6"	-	-	-	-	-
Size (out)	°	Ø									
	A,L	Ø	-	-	-	6"	6"	6"	6"	6"	6"
	E,U	Ø	6"	6"	6"	6"	6"	6"	6"	-	-
	N	Ø	6"	6"	6"	6"	-	-	-	-	-

FANS DATA

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Fan																
Type	°A,E,L,N,U	type	axials	axials	axials	axials	axials	axials	axials	axials	axials	axials	axials	axials	axials	axials
Fan motor	°A,E,L,N,U	type	On-Off	On-Off	On-Off	On-Off	On-Off	On-Off	On-Off	On-Off	On-Off	On-Off	On-Off	On-Off	On-Off	On-Off
Number	°	no.	6	6	6	8	8	8	8	8	8	10	10	10	10	12
	A,L	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	°	m³/h	96000	96000	96000	128000	128000	128000	128000	144000	144000	180000	180000	180000	180000	216000
	A	m³/h	128000	128000	128000	128000	160000	160000	160000	192000	192000	192000	192000	224000	224000	256000
	E	m³/h	92000	92000	115000	115000	115000	138000	138000	161000	161000	161000	161000	184000	184000	207000
	L	m³/h	92000	92000	92000	92000	115000	115000	115000	138000	138000	138000	138000	161000	161000	184000
	N	m³/h	115000	115000	138000	138000	138000	161000	161000	184000	184000	184000	184000	207000	230000	253000
	U	m³/h	128000	128000	160000	160000	160000	192000	192000	224000	224000	224000	224000	256000	256000	288000
Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603	
Fan																
Type	°A,E,L,N,U	type	axials	axials	axials	axials	axials	axials	axials	axials	axials	axials	axials	axials	axials	axials
Fan motor	°A,E,L,N,U	type	On-Off	On-Off	On-Off	On-Off	On-Off	On-Off	On-Off	On-Off	On-Off	On-Off	On-Off	On-Off	On-Off	On-Off
Number	°	no.	12	14	14	16	16	16	18	18	18	20	22	22	22	22
	A,L	no.	16	18	18	18	20	22	22	24	24	28	28	30	34	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	°	m³/h	216000	252000	252000	288000	288000	288000	324000	324000	324000	360000	396000	396000	396000	396000
	A	m³/h	256000	288000	288000	324000	360000	396000	396000	384000	384000	448000	448000	480000	612000	612000
	E	m³/h	230000	230000	253000	253000	276000	299000	322000	322000	345000	345000	368000	-	-	-
	L	m³/h	184000	207000	207000	234000	260000	286000	286000	276000	276000	322000	322000	345000	442000	442000
	N	m³/h	253000	299000	322000	345000	368000	368000	368000	391000	-	-	-	-	-	-
	U	m³/h	320000	320000	352000	352000	384000	416000	448000	448000	480000	480000	512000	-	-	-

DIMENSIONS



Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Dimensions and weights																
A	°A,E,L,N,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	°A,E,L,N,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	°	mm	3970	3970	3970	5160	5160	5160	5160	5160	5160	6350	6350	6350	6350	7140
	A,L	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
Dimensions and weights															
A	°A,L	mm	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	-	-
	N	mm	2450	2450	2450	2450	2450	2450	2450	2450	-	-	-	-	-
B	°A,L	mm	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	-	-
	N	mm	2200	2200	2200	2200	2200	2200	2200	2200	-	-	-	-	-
C	°	mm	7140	8330	8330	9520	9520	9520	10710	11110	11110	11900	13090	13090	13090
	A,L	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.

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Integrated hydronic kit: 00																
Weights																
Empty weight	°	kg	3660	3702	3831	4670	5040	5053	5077	5273	5396	5922	5977	6410	6901	7477
	A,L	kg	4213	4249	4373	4699	5472	5488	5691	6228	6424	6477	6577	7656	8129	8647
	E,U	kg	4373	4394	4840	5431	5785	6333	6356	6805	6896	6914	6953	8149	8660	9431
	N	kg	4791	4812	5373	5965	6318	6741	6764	7254	7346	7416	7508	8882	9759	10383
Weight functioning	°	kg	3753	3790	3962	4801	5171	5202	5226	5548	5671	6244	6299	6732	7214	7790
	A,L	kg	4306	4337	4505	4848	5621	5637	5966	6503	6747	6799	6871	8173	8645	9152
	E,U	kg	4505	4543	4989	5753	6107	6655	6679	7118	7209	7279	7352	8718	9177	9936
	N	kg	4923	4962	5522	6287	6641	7063	7086	7567	7659	7729	7802	9399	10276	10888

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Integrated hydronic kit: 00															
Weights															
Empty weight	°	kg	7574	7993	8302	8826	8954	9017	9719	11612	11688	12216	12761	13047	13176
	A,L	kg	8710	9428	9481	9902	10433	11018	11060	13354	13417	14572	14625	15743	16934
	E,U	kg	9922	9983	10887	11013	11820	12261	12701	14514	15005	15119	16034	-	-
	N	kg	10456	11646	12355	12989	12721	13666	13709	16119	-	-	-	-	-
Weight functioning	°	kg	7868	8287	8819	9342	9471	9522	10224	12527	12603	13089	13633	13920	14048
	A,L	kg	9215	9922	9974	10795	11327	11898	11940	14121	14184	15328	15381	16950	18126
	E,U	kg	10427	10476	11781	11907	12446	12886	13327	15281	15772	15875	17190	-	-
	N	ka	10961	12171	12880	13564	14249	14292	14726	16937	-	-	-	-	-

Aermec reserves the right to make any modifications deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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