

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 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 depending on the size and version. For more information refer to the dedicated documentations 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.

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.

Inverter fans

Standard inverter fans for sizes and versions (°) from 2002 to 9603, optional for other sizes and versions. Option for all configurations.

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.

- As standard from size 5202÷6402 and 8403÷9603, optional for all other sizes.

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.

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.

AERSET: It makes it possible to automatically compensate for the operation setting of the unit to which it is connected, based on a 0-10V MODBUS input signal. Mandatory accessory MODU-485BL.

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_V: Anti-intrusion grid kit

KRS: Electric heater for the plate heat exchanger

ACCESSORIES COMPATIBILITY

Accessories

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	*	*	*	*	*	*	*	*	*	*	*	*	*	*
AERNET	°A,E,L,N,U	*	*	*	*	*	*	*	*	*	*	*	*	*	*
AERSET	°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	*	*	*	*	*	*	*						
	°A,L								*	*	*	*	*	*
	E,U								*	*	*	*		
AER485P1 x n° 3 (1)	N								*					
	°A,L	*	*	*	*	*	*	*	*	*	*	*	*	*
	E,U	*	*	*	*	*	*	*	*	*	*	*	*	*
AERNET	N	*	*	*	*	*	*	*	*	*	*	*	*	*
	°A,L	*	*	*	*	*	*	*	*	*	*	*	*	*
	E,U	*	*	*	*	*	*	*	*	*	*	*	*	*
MULTICHILLER_EVO	N	*	*	*	*	*	*	*	*	*	*	*	*	*
	°A,L	*	*	*	*	*	*	*	*	*	*	*	*	*
	E,U	*	*	*	*	*	*	*	*	*	*	*	*	*
PRV3	N	*	*	*	*	*	*	*	*	*	*	*	*	*
	°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

The accessory cannot be fitted on the configurations indicated with -

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

The accessory cannot be fitted on the configurations indicated with -

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	-	-

The accessory cannot be fitted on the configurations indicated with -

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														
°	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														
°	AVX911	-	-	-	-	-	-	-	-	-	-	-	-	
A,L	AVX907	-	-	-	-	-	-	-	-	-	-	-	-	
E,U	AVX910	-	-	-	-	-	-	-	-	-	-	-	-	
N	AVX913	-	-	-	-	-	-	-	-	-	-	-	-	
Integrated hydronic kit: DF, DG, DH, DI, DJ														
°	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	-	-	-	-	-	-	
Integrated hydronic kit: PA, PB, PC, PD, PE														
°	AVX911	-	-	-	-	-	-	-	-	-	-	-	-	
A,L	AVX907	-	-	-	-	-	-	-	-	-	-	-	-	
E,U	AVX910	-	-	-	-	-	-	-	-	-	-	-	-	
N	AVX913	-	-	-	-	-	-	-	-	-	-	-	-	
Integrated hydronic kit: 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	-	-	-	-	-	-	
Integrated hydronic kit: 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	-	-	-	-	-	

The accessory cannot be fitted on the configurations indicated with -

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

Ver	5602	6002	6402	6503	6703	6903	7203	8403	9603
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	-	-	-	-	-

The accessory cannot be fitted on the configurations indicated with -
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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	-	-	-	-	-

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

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

CONFIGURATOR

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

Field	Description
15,16	Integrated 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 (10)
TF	Double pump F
TG	Double pump G
TH	Double pump H
TI	Double pump I
TJ	Double pump J

(1) Electronic thermostatic valve as standard from size 5202 ÷ 6402 and 8403 ÷ 9603.

(2) Water produced from 4 °C ÷ 15 °C

(3) Water produced from 4 °C ÷ 18 °C

(4) Water produced from 4 °C ÷ 18 °C for ° version; -10 °C for the others versions

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

(6) The temperature of the water in the heat exchanger inlet must never drop below 35°C.

(7) 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.

(8) Standard inverter fans for sizes and versions (°) from 2002 to 9603

(9) The units from 2652 to 9603 in the "nom" version, and from 5202 to 6402 and size 9503 in the "L" and "A" version, cannot be configured with the boosted "M" fan.

(10) 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
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	1669,7
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
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
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
Water flow rate system side	l/h	164794	180726	188953	200816	205451	212795	228246	239604	247511	271348	287011
Pressure drop system side	kPa	41	48	42	46	48	55	62	44	46	30	33

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

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	1649,4	1758,0	1946,7
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

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	1682,9	1753,4	1908,6	2106,4
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

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	1670,1	1752,6	-	-
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

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 14511:2018; 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	1579,3	1693,4	1772,6	-	-
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 14511:2018; System side water heat exchanger 12 °C/7 °C; External air 35 °C

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

NSM - N

Size		4202	4502	4802	5202	5602	6002	6402	6503
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 14511:2018; 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
SEER - 12/7 (EN14825:2018) with standard fans (1)																
SEER	°A,E,L,N,U	W/W	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
Seasonal efficiency	°A,E,L,N,U	%	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
SEER - (EN14825:2018) 12/7 with inverter fans (3)																
SEER	°	W/W	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	A	W/W	4,44	4,40	4,55	4,56	4,56	4,56	4,57	4,55	4,56	4,56	4,57	4,57	4,56	4,56
	E	W/W	4,48	4,47	4,57	4,57	4,58	4,58	4,58	4,58	4,58	4,59	4,59	4,59	4,59	4,60
	L	W/W	4,43	4,39	4,53	4,55	4,56	4,56	4,55	4,56	4,56	4,56	4,56	4,56	4,56	4,56
	N	W/W	4,54	4,51	4,60	4,60	4,61	4,59	4,60	4,61	4,60	4,61	4,60	4,60	4,60	4,60
	U	W/W	4,49	4,48	4,57	4,59	4,60	4,59	4,59	4,59	4,59	4,59	4,59	4,59	4,59	4,60
Seasonal efficiency	°	%	- (4)	- (4)	- (4)	- (4)	- (4)	- (4)	- (4)	- (4)	- (4)	- (4)	- (4)	- (4)	- (4)	- (4)
	A	%	174,5%	172,8%	179,0%	179,2%	179,4%	179,4%	179,7%	179,1%	179,5%	179,5%	179,7%	179,6%	179,5%	179,4%
	E	%	176,3%	175,6%	179,6%	179,8%	180,2%	180,0%	180,1%	180,0%	180,2%	180,6%	180,4%	180,4%	180,5%	180,8%
	L	%	174,0%	172,4%	178,3%	179,0%	179,3%	179,2%	179,2%	179,0%	179,4%	179,2%	179,3%	179,3%	179,3%	179,2%
	N	%	178,7%	177,4%	180,8%	180,9%	181,3%	180,7%	180,9%	181,2%	180,9%	181,3%	181,1%	181,1%	181,0%	181,1%
	U	%	176,6%	176,1%	179,8%	180,4%	180,9%	180,5%	180,7%	180,6%	180,7%	180,6%	180,6%	180,4%	180,5%	180,9%
SEPR - (EN14825: 2018) High temperature with standard fans (5)																
SEPR	°	W/W	5,41	5,44	5,37	5,53	5,54	5,51	5,54	5,51	5,53	5,51	5,51	5,52	5,52	5,53
	A	W/W	5,70	5,67	5,57	5,54	5,61	5,60	5,62	5,62	5,65	5,51	5,52	5,53	5,60	5,61
	E	W/W	5,82	5,76	5,80	5,71	5,66	5,79	5,74	5,77	5,73	5,64	5,60	5,63	5,72	5,74
	L	W/W	5,62	5,59	5,48	5,54	5,53	5,52	5,56	5,54	5,60	5,52	5,52	5,52	5,55	5,54
	N	W/W	5,94	5,85	5,98	5,79	5,70	5,78	5,75	5,77	5,70	5,63	5,57	5,65	5,73	5,74
	U	W/W	5,91	5,85	5,89	5,81	5,77	5,88	5,84	5,87	5,83	5,75	5,68	5,74	5,82	5,84
SEPR - (EN14825: 2018) High temperature with inverter fans (5)																
SEPR	°	W/W	5,41	5,44	5,37	5,53	5,54	5,51	5,54	5,51	5,53	5,51	5,51	5,52	5,52	5,53
	A	W/W	5,70	5,67	5,57	5,54	5,61	5,60	5,62	5,62	5,65	5,51	5,52	5,53	5,60	5,61
	E	W/W	5,82	5,76	5,80	5,71	5,66	5,79	5,74	5,77	5,73	5,64	5,60	5,63	5,72	5,74
	L	W/W	5,62	5,59	5,48	5,54	5,53	5,52	5,56	5,54	5,60	5,52	5,52	5,52	5,55	5,54
	N	W/W	5,94	5,85	5,98	5,79	5,70	5,78	5,75	5,77	5,70	5,63	5,57	5,65	5,73	5,74
	U	W/W	5,91	5,85	5,89	5,81	5,77	5,88	5,84	5,87	5,83	5,75	5,68	5,74	5,82	5,84

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.

(2) Non-compliant with 2016/2281 EU regulation for comfort applications 12°C / 7°C

(3) Calculation performed with FIXED/VARIABLE water flow rate and FIXED/VARIABLE outlet temperature.

(4) Not covered by standard (EN14825: 2018 for comfort applications, 12°C / 7°C)

(5) Calculation performed with FIXED water flow rate.

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
SEER - 12/7 (EN14825:2018) with standard fans (1)															
SEER	°A,L	W/W	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	E,U	W/W	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	-	-
	N	W/W	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	-	-	-	-	-
Seasonal efficiency	°A,L	%	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	E,U	%	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	-	-
	N	%	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	-	-	-	-	-
SEER - (EN14825:2018) 12/7 with inverter fans (3)															
SEER	°	W/W	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	A	W/W	4,56	4,56	4,56	4,55	4,57	4,56	4,56	4,56	4,57	4,56	4,56	4,56	4,57
	E	W/W	4,58	4,59	4,59	4,59	4,59	4,59	4,59	4,59	4,60	4,58	4,59	-	-
	L	W/W	4,55	4,56	4,55	4,56	4,56	4,57	4,56	4,57	4,56	4,56	4,56	4,56	4,56
	N	W/W	4,60	4,60	4,60	4,60	4,60	4,61	4,60	4,61	-	-	-	-	-
	U	W/W	4,59	4,59	4,60	4,60	4,60	4,60	4,59	4,60	4,60	4,59	4,59	-	-
Seasonal efficiency	°	%	- (4)	- (4)	- (4)	- (4)	- (4)	- (4)	- (4)	- (4)	- (4)	- (4)	- (4)	- (4)	- (4)
	A	%	179,5%	179,4%	179,4%	179,1%	179,8%	179,4%	179,4%	179,2%	179,6%	179,2%	179,4%	179,5%	179,7%
	E	%	180,3%	180,6%	180,7%	180,6%	180,4%	180,4%	180,6%	180,5%	180,9%	180,2%	180,4%	-	-
	L	%	179,0%	179,2%	179,1%	179,2%	179,4%	179,6%	179,4%	179,6%	179,3%	179,2%	179,5%	179,4%	179,5%
	N	%	180,8%	181,0%	181,1%	181,0%	181,1%	181,2%	180,8%	181,4%	-	-	-	-	-
	U	%	180,4%	180,6%	180,8%	180,9%	180,9%	180,8%	180,6%	180,8%	180,9%	180,6%	180,6%	-	-
SEPR - (EN14825: 2018) High temperature with standard fans (5)															
SEPR	°	W/W	5,51	5,52	5,53	5,52	5,53	5,52	5,52	5,64	5,51	5,54	5,55	5,51	5,54
	A	W/W	5,56	5,60	5,60	5,57	5,60	5,60	5,57	5,66	5,61	5,71	5,69	5,62	5,68
	E	W/W	5,75	5,70	5,75	5,62	5,60	5,60	5,74	5,85	5,90	5,70	5,77	-	-
	L	W/W	5,51	5,53	5,55	5,54	5,56	5,55	5,52	5,64	5,61	5,68	5,66	5,63	5,68
	N	W/W	5,71	5,71	5,73	5,79	5,65	5,67	5,65	5,79	-	-	-	-	-
	U	W/W	5,85	5,81	5,85	5,73	5,71	5,72	5,84	5,93	5,98	5,82	5,87	-	-
SEPR - (EN14825: 2018) High temperature with inverter fans (5)															

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
SEPR	°	W/W	5,51	5,52	5,53	5,52	5,53	5,52	5,52	5,64	5,51	5,54	5,55	5,51	5,54
	A	W/W	5,56	5,60	5,60	5,57	5,60	5,60	5,57	5,66	5,61	5,71	5,69	5,62	5,68
	E	W/W	5,75	5,70	5,75	5,62	5,60	5,60	5,74	5,85	5,90	5,70	5,77	-	-
	L	W/W	5,51	5,53	5,55	5,54	5,56	5,55	5,52	5,64	5,61	5,68	5,66	5,63	5,68
	N	W/W	5,71	5,71	5,73	5,79	5,65	5,67	5,65	5,79	-	-	-	-	-
	U	W/W	5,85	5,81	5,85	5,73	5,71	5,72	5,84	5,93	5,98	5,82	5,87	-	-

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.

(2) Non-compliant with 2016/2281 EU regulation for comfort applications 12°C / 7°C

(3) Calculation performed with FIXED/VARIABLE water flow rate and FIXED/VARIABLE outlet temperature.

(4) Not covered by standard (EN14825: 2018 for comfort applications, 12°C / 7°C)

(5) Calculation performed with FIXED water flow rate.

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				
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				
Refrigerant charge	°	kg	48,0	48,0	48,0	64,0	64,0	64,0	64,0	64,0	64,0
	A,L	kg	64,0	64,0	64,0	64,0	80,0	80,0	80,0	96,0	96,0
	E,U	kg	64,0	64,0	80,0	80,0	80,0	96,0	96,0	112,0	112,0
	N	kg	80,0	80,0	96,0	96,0	96,0	112,0	112,0	128,0	128,0
System side heat exchanger											
Type	°A,E,L,N,U	type					Shell and tube				
Number	°A,E,L,N,U	no.	1	1	1	1	1	1	1	1	1
Hydraulic connections											
Connections (in/out)	°A,E,L,N,U	Type					Grooved joints				
Size (in)	°A,E,L,N,U	Ø	3"	3"	4"	4"	4"	4"	4"	4"	4"
Size (out)	°A,E,L,N,U	Ø	3"	3"	4"	4"	4"	4"	4"	4"	4"
Fan											
Type	°A,E,L,N,U	type					axials				
Fan motor	°A,E,L,N,U	type					On-Off				
Number	°	no.	6	6	6	8	8	8	8	8	8
	A,L	no.	8	8	8	8	10	10	10	12	12
	E,U	no.	8	8	10	10	10	12	12	14	14
	N	no.	10	10	12	12	12	14	14	16	16
Air flow rate	°	m³/h	96000	96000	96000	128000	128000	128000	128000	144000	144000
	A	m³/h	128000	128000	128000	128000	160000	160000	160000	192000	192000
	E	m³/h	92000	92000	115000	115000	115000	138000	138000	161000	161000
	L	m³/h	92000	92000	92000	92000	115000	115000	115000	138000	138000
	N	m³/h	115000	115000	138000	138000	138000	161000	161000	184000	184000
	U	m³/h	128000	128000	160000	160000	160000	192000	192000	224000	224000

Sound data calculated in cooling mode (1)

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802
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
Sound pressure level (10 m)	U	dB(A)	97,0	97,4	98,0	98,2	98,4	98,8	98,8	99,0	99,1
	°	dB(A)	64,4	64,6	64,8	65,2	65,3	65,5	65,7	65,8	65,8
	A	dB(A)	64,8	64,9	65,2	65,3	65,6	65,5	65,6	65,9	66,0
	E	dB(A)	57,2	57,3	58,1	58,2	58,2	58,6	59,0	59,5	59,7
	L	dB(A)	56,5	56,6	56,6	56,7	57,8	57,9	58,0	58,0	58,1
	N	dB(A)	57,8	58,2	58,6	58,7	58,8	59,0	59,0	59,6	59,7
	U	dB(A)	64,9	65,3	65,8	66,0	66,2	66,5	66,5	66,6	66,7

(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			3002	3202	3402	3602	3902	4202	4502	4802	5202
Compressor											
Type	°A,E,L,N,U	type					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				
Refrigerant charge	°	kg	85,0	90,0	85,0	80,0	96,0	96,0	112,0	112,0	128,0
	A,L	kg	101,0	106,0	117,0	112,0	128,0	128,0	144,0	144,0	144,0
	E,U	kg	117,0	122,0	133,0	128,0	144,0	160,0	160,0	176,0	176,0
	N	kg	133,0	138,0	149,0	160,0	176,0	176,0	208,0	224,0	240,0

System side heat exchanger

Type	°A,E,L,N,U	type					Shell and tube				
Number	°A,E,L,U	no.	1	1	1	1	1	1	1	1	1
	N	no.	1	1	1	1	1	1	2	2	2

Hydraulic connections

Connections (in/out)	°A,E,L,N,U	Type					Grooved joints				
Size (in)	°A,E,L,N,U	Ø					5"				
Size (out)	°A,E,L,N,U	Ø					5"				

Fan

Type	°A,E,L,N,U	type					axials				
Fan motor	°A,E,L,N,U	type					On-Off				

Number	°	no.	10	10	10	10	12	12	14	14	16
	A,L	no.	12	12	14	14	16	16	18	18	18
	E,U	no.	14	14	16	16	18	20	20	22	22
	N	no.	16	16	18	20	22	22	26	28	30
Air flow rate	°	m³/h	180000	180000	180000	180000	216000	216000	252000	252000	288000
	A	m³/h	192000	192000	224000	224000	256000	256000	288000	288000	324000
	E	m³/h	161000	161000	184000	184000	207000	230000	230000	253000	253000
	L	m³/h	138000	138000	161000	161000	184000	184000	207000	207000	234000
	N	m³/h	184000	184000	207000	230000	253000	253000	299000	322000	345000
	U	m³/h	224000	224000	256000	256000	288000	320000	320000	352000	352000

Sound data calculated in cooling mode (1)

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
Sound pressure level (10 m)	U	dB(A)	99,2	99,3	99,9	100,0	100,4	100,7	101,0	101,3	101,6
	°	dB(A)	66,8	66,9	66,8	67,0	67,8	67,9	68,2	68,3	68,7
	A	dB(A)	66,1	66,2	66,3	66,3	66,9	67,0	66,9	67,2	67,8
	E	dB(A)	59,9	60,0	60,4	60,6	60,7	61,0	60,9	61,0	61,1
	L	dB(A)	58,2	58,3	58,4	58,5	59,4	59,4	59,9	59,9	60,0
	N	dB(A)	59,8	59,9	60,1	60,3	60,4	60,5	61,2	61,1	61,4
	U	dB(A)	66,8	66,9	67,4	67,5	67,7	67,9	68,2	68,4	68,7

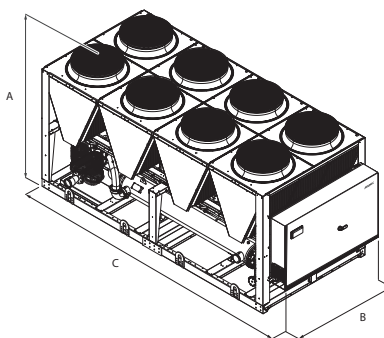
(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

Size			5602	6002	6402	6503	6703	6903	7203	8403	9603
Compressor											
Type	°A,E,L,N,U	type					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				

Size			5602	6002	6402	6503	6703	6903	7203	8403	9603
Refrigerant charge	°	kg	128,0	128,0	144,0	144,0	144,0	160,0	176,0	176,0	176,0
	A,L	kg	160,0	176,0	176,0	192,0	192,0	224,0	224,0	240,0	272,0
	E,U	kg	192,0	208,0	224,0	224,0	240,0	240,0	256,0	-	-
	N	kg	256,0	256,0	256,0	272,0	-	-	-	-	-
System side heat exchanger											
Type	° ,A,E,L,N,U	type	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	-	-	-	-	-
Hydraulic connections											
Connections (in/out)	° ,A,E,L,N,U	Type	Grooved joints								
Size (in)	° ,A,L	Ø	5"	5"	5"	5" + 4"	5" + 4"	5" + 4"	5" + 4"	5" + 4"	5" + 4"
	E,U	Ø	4" + 4"	4" + 4"	4" + 4"	5" + 4"	5" + 4"	5" + 4"	5" + 4"	-	-
	N	Ø	4" + 4"	4" + 4"	4" + 4"	5" + 4"	-	-	-	-	-
	° ,A,L	Ø	5"	5"	5"	5" + 4"	5" + 4"	5" + 4"	5" + 4"	5" + 4"	5" + 4"
Size (out)	E,U	Ø	4" + 4"	4" + 4"	4" + 4"	5" + 4"	5" + 4"	5" + 4"	5" + 4"	-	-
	N	Ø	4" + 4"	4" + 4"	4" + 4"	5" + 4"	-	-	-	-	-
Fan											
Type	° ,A,E,L,N,U	type	axials								
Fan motor	° ,A,E,L,N,U	type	On-Off								
	°	no.	16	16	18	18	18	20	22	22	22
	A,L	no.	20	22	22	24	24	28	28	30	34
	E,U	no.	24	26	28	28	30	30	32	-	-
Air flow rate	N	no.	32	32	32	34	-	-	-	-	-
	°	m³/h	288000	288000	324000	324000	324000	360000	396000	396000	396000
	A	m³/h	360000	396000	396000	384000	384000	448000	448000	480000	612000
	E	m³/h	276000	299000	322000	322000	345000	345000	368000	-	-
	L	m³/h	260000	286000	286000	276000	276000	322000	322000	345000	442000
	N	m³/h	368000	368000	368000	391000	-	-	-	-	-
	U	m³/h	384000	416000	448000	448000	480000	480000	512000	-	-
Sound data calculated in cooling mode (1)											
Sound power level	°	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)	68,6	68,6	68,9	68,9	69,0	69,4	69,5	69,5	69,4
	A	dB(A)	67,9	68,1	68,2	68,1	70,4	70,6	70,7	71,6	72,7
	E	dB(A)	61,1	61,1	61,3	61,3	61,3	61,1	61,5	-	-
	L	dB(A)	60,3	60,4	60,4	60,6	60,5	60,6	60,5	62,7	63,3
	N	dB(A)	61,5	61,7	61,8	61,8	-	-	-	-	-
	U	dB(A)	69,0	69,0	68,9	68,9	68,9	69,0	68,9	-	-

(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



Dimensions and weights °

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
	°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
Weights																
Without hydronic kit	°	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
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	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	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	13090
	A,L	mm	9520	10710	10710	10710	11900	13090	13090	14280	14280	14280	16660	16660	17850	20230
	E,U	mm	11900	11900	13090	13090	14280	15470	16660	16660	17850	17850	17850	19040	-	-
	N	mm	13090	15470	16660	17850	19040	19040	19040	20230	-	-	-	-	-	-
Weights																
Without hydronic kit	°	kg	7574	7993	8302	8826	8954	9017	9719	11612	11688	12216	12761	13047	13176	13176
	A,L	kg	8710	9428	9481	9902	10433	11018	11060	13354	13417	14572	14625	15743	19049	19049
	E,U	kg	9922	9983	10887	11013	11820	12261	12701	14514	15005	15119	16034	-	-	-
	N	kg	10456	11646	12355	12989	12721	13666	13709	16119	-	-	-	-	-	-

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.

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NSMI 1251-6102

Air-water chiller

Cooling capacity 285,6 ÷ 1342,6 kW

- Microchannel coil
- Night mode
- Operation up to 50 °C outdoor air
- Low electrical consumption



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 steel treated with polyester paint RAL 9003.

VERSIONS

- A High efficiency
- E Silenced 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 documentations or the selection program Magellano.

Unit with 1 / 2 cooling circuits

Unit with 1–2 refrigerant circuits.

The single circuit units have the inverter compressor, while the dual-circuit have an asynchronous compressor on/off switch and an inverter, the combination provides both high efficiency at part load and full load.

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.

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.

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.

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.

Low noise version

Silenced versions "E" feature a special compressor jacket which ensures a further noise reduction of approximately 4dB.

CONTROL PCO⁵

Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the adjustment includes complete management of the alarms and their log.

- Possibility to control two units in a Master-Slave configuration
- 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:** 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.

ACCESSORIES

AER485P1: RS-485 interface for supervision systems with MODBUS protocol.

AER485P1 x n° 2: 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.

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.

ACCESSORIES COMPATIBILITY

Accessories

Model	Ver	1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
AER485P1	A,E	*	*	*												
AER485P1 x n° 2 (1)	A,E				*	*	*	*	*	*	*	*	*	*	*	*
AERNET	A,E	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
MULTICHILLER_EVO	A,E	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
PRV3	A,E	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

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

Antivibration

Ver	1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
Integrated hydronic kit: 00															
A	AVX991	AVX992	AVX993	AVX966	AVX970	AVX995	AVX995	AVX995	AVX996	AVX998	AVX997	AVX998	AVX998	AVX998	AVX998
E	AVX991	AVX992	AVX994	AVX966	AVX970	AVX995	AVX995	AVX995	AVX996	AVX998	AVX997	AVX998	AVX998	AVX998	AVX998

Heater exchangers

Ver	1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
A,E	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24

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

Anti-intrusion grid kit

Ver	1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
A,E	GP4V	GP4V	GP5V	GP5V	GP6V	GP7V	GP7V	GP7V	GP8V	GP9V	GP10V	GP11V	GP11V	GP11V	GP11V

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

CONFIGURATOR

Field	Description
1,2,3,4	NSMI
5,6,7,8	Size 1251, 1601, 1801, 2352, 2652, 2802, 3202, 3402, 3802, 4102, 4402, 4802, 5202, 5702, 6102
9	Model ° Cooling only
10	Heat recovery ° Without heat recovery D With desuperheater (1)
11	Version A High efficiency E Silenced high efficiency
12	Coils ° Alluminium microchannel O Painted alluminium microchannel R Copper-copper S Copper-Tinned copper V Copper-painted aluminium
13	Fans ° Standard J Inverter
14	Power supply ° 400V~3 50Hz with fuses
15,16	Integrated hydronic kit Without hydronic kit 00 Without hydronic kit Kit with n° 1 pump (2) PA Pump A

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

AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

GP_V: Anti-intrusion grid kit

KRS: Electric heater for the plate heat exchanger

Field	Description
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
TH	Double pump H
TI	Double pump I
TJ	Double pump J

(1) Minimum water temperature of 35 °C must always be ensured at heat exchanger inlet if working with low temperatures of water produced in the primary circuit.

(2) For all configurations including pump J please contact the factory.

PERFORMANCE SPECIFICATIONS

NSMI - A/E

Size		1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
Cooling performance 12 °C/7 °C (1)																
Cooling capacity	kW	285,6	382,0	464,0	519,1	605,4	659,4	725,2	802,4	842,6	948,0	1008,8	1110,4	1204,3	1253,0	1342,6
Input power	kW	91,3	120,2	149,5	167,1	194,3	212,3	232,7	257,5	269,9	304,8	324,7	356,2	397,4	415,9	454,6
Cooling total input current	A	155,0	200,0	245,0	293,0	337,0	360,0	393,0	431,0	443,0	517,0	547,0	619,0	665,0	728,0	761,0
EER	W/W	3,13	3,18	3,10	3,11	3,12	3,11	3,12	3,12	3,12	3,11	3,11	3,12	3,03	3,01	2,95
Water flow rate system side	l/h	49130	65700	79773	89247	104092	113376	124682	137945	144852	162983	173442	190903	207040	215409	230815
Pressure drop system side	kPa	45	15	21	18	25	28	33	27	30	39	45	38	44	49	55

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

ENERGY INDICES (REG. 2016/2281 EU)

Size		1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
SEER - 12/7 (EN14825:2018) with standard fans (1)																
SEER	A,E	W/W	4,75	4,82	4,78	4,90	4,92	4,90	4,91	4,93	4,93	4,90	4,88	4,90	4,85	4,70
Seasonal efficiency	A,E	%	186,8%	189,7%	188,0%	193,1%	193,9%	193,0%	193,3%	194,2%	194,3%	192,8%	192,2%	192,9%	191,0%	185,1%
SEER - (EN14825:2018) 12/7 with inverter fans (2)																
SEER	A,E	W/W	4,95	5,04	5,00	5,01	5,03	5,01	5,02	5,04	5,04	5,00	4,99	5,00	4,96	4,81
Seasonal efficiency	A,E	%	194,9%	198,4%	196,8%	197,3%	198,1%	197,2%	197,6%	198,5%	198,5%	197,1%	196,4%	197,1%	195,3%	189,2%
SEPR - (EN14825:2018) High temperature with standard fans (3)																
SEPR	A,E	W/W	5,70	5,62	5,59	6,56	6,43	6,42	6,77	6,94	7,21	6,96	7,47	6,88	7,21	6,69
SEPR - (EN14825:2018) High temperature with inverter fans (3)																
SEPR	A,E	W/W	5,70	5,62	5,59	6,56	6,43	6,42	6,77	6,94	7,21	6,96	7,47	6,88	7,21	6,69

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.

(2) Calculation performed with FIXED/VARIABLE water flow rate and FIXED/VARIABLE outlet temperature.

(3) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size		1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
Electric data																
Maximum current (FLA)	A,E	A	251,3	291,3	377,7	442,0	473,0	519,4	519,4	567,4	653,8	708,1	753,5	874,8	917,2	1002,2
Peak current (LRA)	A,E	A	51,3	51,3	57,7	57,7	605,0	651,4	651,4	775,4	861,8	989,1	1059,4	1180,2	1335,2	1420,2

GENERAL TECHNICAL DATA

Size		1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
Compressor																
Type	A,E	type	Screw													
Compressor regulation	A,E	Type	I	I	I	1+I	1+I	1+I	1+I	1+I	1+I	1+I	1+I	1+I	1+I	1+I
Number	A,E	no.	1	1	1	2	2	2	2	2	2	2	2	2	2	2
Circuits	A,E	no.	1	1	1	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	A,E	type	R134a													
Refrigerant charge	A,E	kg	28,0	28,0	30,0	81,0	92,0	110,0	114,0	107,0	131,0	146,0	163,0	183,0	183,0	195,0
System side heat exchanger																
Type	A,E	type	Shell and tube													
Number	A,E	no.	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Hydraulic connections																
Connections (in/out)	A,E	Type	Grooved joints													
Sizes (in/out)	A,E	Ø	5"	6"	6"	6"	6"	6"	6"	8"	8"	8"	8"	10"	10"	10"

Fans

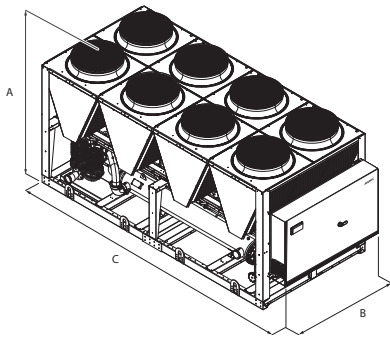
Size		1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
Fans: °																
Fan																
Type	A,E	type	Axial													
Fan motor	A,E	type	Asynchronous with phase cut													
Number	A,E	no.	8	8	10	10	12	14	14	14	16	18	20	22	22	22
Air flow rate	A,E	m³/h	128000	128000	160000	160000	192000	224000	224000	224000	256000	288000	320000	396000	396000	396000

Sound data

Size		1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
Sound data calculated in cooling mode (1)																
Sound power level	A	dB(A)	97,2	98,6	98,6	98,6	98,8	99,9	99,9	100,3	100,3	100,4	101,0	102,9	103,2	102,9
	E	dB(A)	92,9	95,8	95,9	94,7	95,1	96,1	96,1	97,3	97,4	97,7	98,0	99,9	99,9	99,9
Sound pressure level (10 m)	A	dB(A)	64,8	66,2	66,1	66,1	66,2	67,1	67,1	67,5	67,5	67,4	67,9	69,7	69,9	69,9
	E	dB(A)	60,6	63,4	63,4	62,1	62,5	63,3	63,3	64,6	64,5	64,7	64,8	66,7	66,7	66,7

(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			1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
Dimensions and weights																	
A	A,E	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	A,E	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	A,E	mm	4760	4760	5950	6400	7140	8330	8330	8330	9520	10710	11900	13090	13090	13090	13090
Size			1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
Integrated hydronic kit: 00																	
Dimensions and weights																	
Empty weight	A	kg	3752	4162	4578	6039	6447	6896	6987	7635	8103	8872	9324	10798	10888	10918	10991
	E	kg	4054	4464	4880	6642	7050	7499	7590	8239	8706	9475	9928	11637	11727	11757	11830
Weight functioning	A	kg	3832	4416	4832	6360	6768	7206	7275	8165	8632	9389	9841	11730	11819	11835	11908
	E	kg	4134	4718	5134	6964	7371	7809	7878	8768	9236	9993	10445	12568	12658	12674	12747

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NSH

Reversible air/water heat pump

Cooling capacity 251 ÷ 731 kW
Heating capacity 281 ÷ 786 kW

- High efficiency also at partial loads
- Electronic expansion valve



DESCRIPTION

Reversible outdoor heat pumps for the production of chilled/heated water designed to satisfy the needs of residential and commercial buildings, or for industrial applications. The base the structure and the panels are made of steel treated with polyester paint RAL 9003.

VERSIONS

- A** High efficiency
- E** Silenced high efficiency

FEATURES

Operating field

Working at full load up to -10 °C outside air temperature in winter, and up to 48°C in summer. Hot water production up to 55°C (for more details refer to the technical documentation).

Bi-tri circuit unit

The units are mono or dual-circuit, to ensure maximum efficiency both at full load and at partial load.

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.

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.

ACCESSORIES

AER485P1: RS-485 interface for supervision systems with MODBUS protocol.

AER485P1 x n° 2: 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.

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.

KRS: Electric heater for the plate 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.

ACCESSORIES COMPATIBILITY

Accessories

Model	Ver	1251	1401	1402	1601	1602	1801	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
AER485P1	A,E	*	*		*		*											
AER485P1 x n° 2 (1)	A,E			*		*		*	*	*	*	*	*	*	*	*	*	*
AERNET	A,E	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
MULTICHILLER_EVO	A,E	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
PRV3	A,E	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

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

Condensation control temperature

Ver	1251	1401	1402	1601	1602	1801	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
A,E	DCPX69	DCPX69	DCPX68	DCPX69	DCPX68	DCPX69	DCPX68	DCPX73	DCPX73	DCPX73	DCPX73	DCPX73	DCPX73	DCPX73	DCPX73	DCPX73	DCPX73

Anti-intrusion grid

Ver	1251	1401	1402	1601	1602	1801	1802	2002	2202
A,E	GP300M	GP300M	GP300B	GP300M	GP300B	GP400M	GP400B	GP500B	GP500B
Ver	2352	2502	2652	2802	3002	3202	3402	3602	
A,E	GP500B	GP500B	GP500B	GP500B	GP300M+300M	GP300M+300M	GP300M+400M	GP400M+400M	

Antivibration

Ver	1251	1401	1402	1601	1602	1801	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Integrated hydronic kit: 00																	
A,E	AVX536	AVX536	AVX537	AVX536	AVX538	AVX540	AVX541	AVX543	AVX543	AVX545	AVX549	AVX551	AVX551	AVX554	AVX556	AVX557	AVX559
Integrated hydronic kit: PA																	
A,E	AVX536	AVX536	AVX537	AVX536	AVX538	AVX540	AVX541	AVX543	AVX543	AVX545	AVX550	AVX551	AVX551	AVX553	AVX553	AVX557	AVX559
Integrated hydronic kit: PC, PE, PG, PJ																	
A,E	AVX536	AVX536	AVX538	AVX536	AVX538	AVX540	AVX541	AVX543	AVX543	AVX545	AVX550	AVX551	AVX551	AVX553	AVX555	AVX557	AVX559

Heater exchangers

Ver	1251	1401	1402	1601	1602	1801	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
A,E	KRS11	KRS11	KRS19	KRS11	KRS19	KRS11	KRS19	KRS19	KRS19	KRS19	KRS19	KRS19	KRS19	KRS14	KRS14	KRS14	KRS14

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

Power factor correction

Ver	1251	1401	1402	1601	1602	1801	1802	2002	2202
A,E	RIFNSH1251	RIFNSH1401	RIFNSH1402	RIFNSH1601	RIFNSH1602	RIFNSH1801	RIFNSH1802	RIFNSH2002	RIFNSH2202
A grey background indicates the accessory must be assembled in the factory									
Ver	2352	2502	2652	2802	3002	3202	3402	3602	
A,E	RIFNSH2352	RIFNSH2502	RIFNSH2652	RIFNSH2802	RIFNSH3002	RIFNSH3202	RIFNSH3402	RIFNSH3602	

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

CONFIGURATOR

Field	Description
1,2,3	NSH
4,5,6,7	Size 1251, 1401, 1402, 1601, 1602, 1801, 1802, 2002, 2202, 2352, 2502, 2652, 2802, 3002, 3202, 3402, 3602
8	Operating yield
X	Electronic thermostatic expansion valve
9	Model
H	Heat pump
10	Heat recovery
°	Without heat recovery
D	With desuperheater
11	Version
A	High efficiency
E	Silenced high efficiency
12	Coils
°	Copper-aluminium
R	Copper-copper
S	Copper-Tinned copper
V	Copper-painted aluminium
13	Fans

Field	Description
°	Standard
J	Inverter
14	Power supply
°	400V~3 50Hz with fuses
2	230V~3 50Hz with fuses (1)
4	230V~3 50Hz with magnet circuit breakers (1)
5	500V~3 50Hz with fuses (2)
8	400V~3 50Hz with magnet circuit breakers
9	500V~3 50Hz with magnet circuit breakers (2)
15,16	Integrated hydronic kit
	Without hydronic kit
00	Without hydronic kit
	Kit with n° 1 pump
PA	Pump A
PC	Pump C
PE	Pump E
PG	Pump G
PJ	Pump J (3)

(1) Not available for size from 1251 to 1801 and from 2352 to 3602

(2) Not available for size 1801-3402-3602

(3) For all configurations including pump J please contact the factory.

PERFORMANCE SPECIFICATIONS

NS - HA

Size		1251	1401	1402	1601	1602	1801	1802	2002	2202
Cooling performance 12 °C / 7 °C (1)										
Cooling capacity	kW	262,7	281,7	257,7	309,7	315,6	365,6	365,6	384,6	414,5
Input power	kW	86,9	95,0	94,9	107,8	108,3	128,3	125,3	132,5	138,8
Cooling total input current	A	149,0	164,0	168,0	185,0	186,0	215,0	216,0	227,0	233,0
EER	W/W	3,02	2,96	2,72	2,87	2,91	2,85	2,92	2,90	2,99
Water flow rate system side	l/h	45186	48451	44327	53262	54292	62883	62883	66147	71302
Pressure drop system side	kPa	38	41	36	27	50	43	43	47	53
Heating performance 40 °C / 45 °C (2)										
Heating capacity	kW	281,4	297,4	281,4	332,3	342,5	393,5	395,5	412,5	450,6
Input power	kW	88,2	94,2	93,2	104,0	106,8	126,7	123,7	133,9	141,3
Heating total input current	A	150,0	163,0	165,0	180,0	182,0	212,0	213,0	229,0	236,0
COP	W/W	3,19	3,16	3,02	3,20	3,21	3,11	3,20	3,08	3,19
Water flow rate system side	l/h	48838	51618	48838	57701	59439	68303	68651	71605	78210
Pressure drop system side	kPa	47	49	47	33	64	54	54	58	67

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

(2) Data 14511:2018; System side water heat exchanger 40 °C/ 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

Size		2352	2502	2652	2802	3002	3202	3402	3602
Cooling performance 12 °C / 7 °C (1)									
Cooling capacity	kW	454,6	499,5	524,5	547,5	591,5	619,6	675,5	731,4
Input power	kW	158,4	173,5	186,7	195,9	202,6	215,4	235,9	256,4
Cooling total input current	A	268,0	295,0	318,0	335,0	349,0	370,0	400,0	430,0
EER	W/W	2,87	2,88	2,81	2,80	2,92	2,88	2,86	2,85
Water flow rate system side	l/h	78174	85906	90201	94153	101712	106523	116144	125766
Pressure drop system side	kPa	37	38	40	43	34	27	35	43
Heating performance 40 °C / 45 °C (2)									
Heating capacity	kW	502,5	541,5	563,6	585,6	629,5	664,5	725,6	786,7
Input power	kW	157,9	171,0	177,1	185,4	198,0	207,8	230,4	253,1
Heating total input current	A	267,0	292,0	303,0	318,0	342,0	359,0	391,0	423,0
COP	W/W	3,18	3,17	3,18	3,16	3,18	3,20	3,15	3,11
Water flow rate system side	l/h	87247	94025	97849	101673	109320	115403	126004	136606
Pressure drop system side	kPa	49	47	49	53	41	33	43	54

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

(2) Data 14511:2018; System side water heat exchanger 40 °C/ 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

NS - HE

Size		1251	1401	1402	1601	1602	1801	1802	2002	2202
Cooling performance 12 °C / 7 °C (1)										
Cooling capacity	kW	250,7	266,7	242,7	292,7	301,6	343,6	349,6	366,6	394,5
Input power	kW	91,8	101,9	100,8	115,7	116,2	136,1	132,2	140,3	146,5
Cooling total input current	A	161,0	178,0	181,0	202,0	202,0	234,0	233,0	246,0	254,0
EER	W/W	2,73	2,62	2,41	2,53	2,60	2,52	2,65	2,61	2,69
Water flow rate system side	l/h	43125	45874	41750	50341	51887	59103	60134	63055	67865
Pressure drop system side	kPa	32	37	33	24	46	38	39	43	48
Heating performance 40 °C / 45 °C (2)										
Heating capacity	kW	281,4	297,4	281,4	332,3	342,5	393,5	395,5	412,5	450,6
Input power	kW	88,2	94,2	93,2	104,0	106,8	126,7	123,7	133,9	141,3
Heating total input current	A	150,0	163,0	165,0	180,0	182,0	212,0	213,0	229,0	236,0
COP	W/W	3,19	3,16	3,02	3,20	3,21	3,11	3,20	3,08	3,19
Water flow rate system side	l/h	48838	51618	48838	57701	59439	68303	68651	71605	78210
Pressure drop system side	kPa	47	49	47	33	64	54	54	58	67

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

(2) Data 14511:2018; System side water heat exchanger 40 °C/ 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

Size		2352	2502	2652	2802	3002	3202	3402	3602
Cooling performance 12 °C / 7 °C (1)									
Cooling capacity	kW	435,6	487,6	506,5	517,5	559,6	585,6	636,5	687,5
Input power	kW	169,3	192,4	202,5	210,6	217,4	231,2	251,6	272,0
Cooling total input current	A	293,0	333,0	349,0	365,0	380,0	403,0	436,0	468,0
EER	W/W	2,57	2,53	2,50	2,46	2,57	2,53	2,53	2,53
Water flow rate system side	l/h	74910	83844	87108	88998	96214	100681	109444	118206
Pressure drop system side	kPa	34	35	37	39	30	24	31	38
Heating performance 40 °C / 45 °C (2)									
Heating capacity	kW	502,5	541,5	563,6	585,6	629,5	664,5	725,6	786,7
Input power	kW	157,9	171,0	177,1	185,4	198,0	207,8	230,4	253,1
Heating total input current	A	267,0	292,0	303,0	318,0	342,0	359,0	391,0	423,0
COP	W/W	3,18	3,17	3,18	3,16	3,18	3,20	3,15	3,11
Water flow rate system side	l/h	87247	94025	97849	101673	109320	115403	126004	136606
Pressure drop system side	kPa	49	47	49	53	41	33	43	54

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

(2) Data 14511:2018; System side water heat exchanger 40 °C/ 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

ENERGY DATA

Size		1251	1401	1402	1601	1602	1801	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
UE 813/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ° 400 kW (1)																		
Pdesignh	A,E kW	185	195	185	218	225	259	260	271	297	330	356	370	385	325	342	374	400
SCOP	A,E	3,33	3,28	3,23	3,33	3,33	3,23	3,33	3,20	3,30	3,30	3,30	3,33	3,30	3,35	3,40	3,33	3,28
ηsh	A,E %	130.0%	128.0%	126.0%	130.0%	130.0%	126.0%	130.0%	125.0%	129.0%	129.0%	129.0%	130.0%	129.0%	131.0%	133.0%	130.0%	128.0%
SEER - 12/7 (EN14825:2018) with standard fans (2)																		
SEER	A	W/W	3,88	3,81	3,46	3,76	3,68	3,71	3,73	3,70	3,80	3,72	3,74	3,66	3,64	3,81	3,76	3,73
	E	W/W	3,41	3,28	3,00	3,19	3,23	3,19	3,32	3,28	3,37	3,28	3,23	3,18	3,12	3,30	3,25	3,23
Seasonal efficiency	A	%	152.1%	149.4%	135.2%	147.4%	144.2%	145.2%	146.0%	145.0%	149.0%	145.7%	146.6%	143.5%	142.5%	149.5%	147.5%	146.1%
	E	%	133.4%	128.1%	116.8%	124.4%	126.2%	124.7%	129.7%	128.2%	131.8%	128.1%	126.3%	124.3%	121.7%	129.1%	126.9%	126.2%

(1) Efficiencies for low temperature applications (35 °C)

(2) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.

ELECTRIC DATA

Size		1251	1401	1402	1601	1602	1801	1802	2002	2202
Electric data										
Maximum current (FLA)	A,E	A	209,0	242,0	276,0	258,0	276,0	316,0	325,0	352,0
Peak current (LRA)	A,E	A	327,0	387,0	251,0	431,0	251,0	472,0	305,0	313,0
Electric data										
Maximum current (FLA)	A,E	A	390,0	410,0	443,0	476,0	500,0	516,0	574,0	631,0
Peak current (LRA)	A,E	A	365,0	436,0	461,0	521,0	534,0	578,0	612,0	653,0

GENERAL TECHNICAL DATA

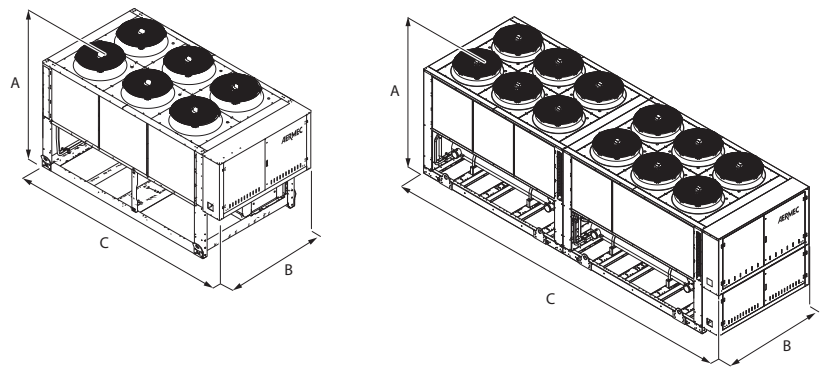
Size			1251	1401	1402	1601	1602	1801	1802	2002	2202
Compressor											
Type	A,E	type					Screw				
Number	A,E	no.	1	1	2	1	2	1	2	2	2
Circuits	A,E	no.	1	1	2	1	2	1	2	2	2
Refrigerant	A,E	type					R134a				
System side heat exchanger											
Type	A,E	type					Shell and tube				
Number	A,E	no.	1	1	2	1	2	1	2	2	1
System side hydraulic connections											
Connections (in/out)	A,E	Type					Grooved joints				
Sizes (in/out)	A,E	Ø					6"				
Fan											
Type	A,E	type					Axial				
Fan motor	A	type					Asynchronous				
	E	type					Asynchronous with phase cut				
Number	A,E	no.	6	6	6	6	6	8	8	10	10
Air flow rate	A	m³/h	117600	117600	117600	112200	112200	156000	153200	196000	196000
	E	m³/h	82320	117600	82320	78540	78540	109200	107240	137200	137200
Sound data calculated in cooling mode (1)											
Sound power level	A	dB(A)	94,0	94,0	94,0	95,0	95,0	96,0	96,0	97,0	97,0
	E	dB(A)	89,0	89,0	89,0	90,0	90,0	91,0	91,0	92,0	92,0
Sound pressure level (10 m)	A	dB(A)	62,0	62,0	62,0	63,0	63,0	64,0	64,0	64,0	64,0
	E	dB(A)	57,0	57,0	57,0	58,0	58,0	59,0	59,0	59,0	59,0

(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			2352	2502	2652	2802	3002	3202	3402	3602
Compressor										
Type	A,E	type					Screw			
Number	A,E	no.	2	2	2	2	2	2	2	2
Circuits	A,E	no.	2	2	2	2	2	2	2	2
Refrigerant	A,E	type					R134a			
System side heat exchanger										
Type	A,E	type					Shell and tube			
Number	A,E	no.	1	1	1	1	2	2	2	2
System side hydraulic connections										
Connections (in/out)	A,E	Type					Grooved joints			
Sizes (in/out)	A,E	Ø					6"			
Fan										
Type	A,E	type					Axial			
Fan motor	A	type					Asynchronous			
	E	type					Asynchronous with phase cut			
Number	A,E	no.	10	10	10	10	12	12	14	16
Air flow rate	A	m³/h	196000	196000	191500	187000	229800	224400	268200	312000
	E	m³/h	137200	137200	134050	130900	196140	157080	187740	218400
Sound data calculated in cooling mode (1)										
Sound power level	A	dB(A)	97,0	97,0	97,0	97,0	97,0	98,0	99,0	99,0
	E	dB(A)	92,0	92,0	92,0	92,0	92,0	93,0	94,0	94,0
Sound pressure level (10 m)	A	dB(A)	64,0	65,0	65,0	65,0	64,0	65,0	66,0	66,0
	E	dB(A)	59,0	60,0	60,0	60,0	59,0	60,0	61,0	61,0

(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



Dimensions and weights °

Size			1251	1401	1402	1601	1602	1801	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Dimensions and weights																			
A	A,E	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	A,E	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	A,E	mm	3780	3780	3780	3780	3780	4770	4770	5750	5750	5750	5750	5750	5750	7160	7160	8150	8150
Weights																			
Without hydronic kit	A,E	kg	3245	3280	3570	3435	3835	4115	4005	4385	4570	4940	5265	5470	5610	6540	6745	7425	8105

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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NSG

Air-water chiller

Cooling capacity 228 ÷ 1580 kW

- Microchannel coil
- High efficiency also at partial loads
- Night mode



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 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

HFO R1234ze refrigerant gas

HFO R1234ze is a mixture featuring:

da ODP = 0 e GWP (Global Warming Potential) = 7, R134a GWP = 1430;

with thermodynamic properties that guarantee and sometimes improve efficiencies achieved with HFC refrigerants.

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.

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.
 - **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.

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.

AERSET: It makes it possible to automatically compensate for the operation setting of the unit to which it is connected, based on a 0-10V MODBUS input signal. Mandatory accessory MODU-485BL.

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_V: Anti-intrusion grid kit

KRS: Electric heater for the plate heat exchanger

ACCESSORIES COMPATIBILITY

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	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
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	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
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			
U	DCPX122	DCPX106+DCPX127	DCPX107+DCPX127	DCPX107+DCPX127	DCPX108+DCPX127	-	-			

The accessory cannot be fitted on the configurations indicated with -

Antivibration

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Integrated hydronic kit: 00														
°	AVX962	AVX962	AVX962	AVX963	AVX963	AVX963	AVX963	AVX968	AVX968	AVX966	AVX966	AVX966	AVX966	AVX965
A,L	AVX963	AVX963	AVX963	AVX963	AVX964	AVX964	AVX966	AVX965	AVX965	AVX970	AVX965	AVX967	AVX967	AVX969
E,U	AVX963	AVX963	AVX964	AVX966	AVX966	AVX965	AVX965	AVX967	AVX967	AVX967	AVX967	AVX969	AVX969	AVX971
N	AVX964	AVX964	AVX987	AVX965	AVX965	AVX967	AVX967	AVX969	AVX969	AVX969	AVX969	AVX971	AVX961	AVX972
Ver	4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603	
Integrated hydronic kit: 00														
°	AVX965	AVX967	AVX967	AVX969	AVX969	AVX969	AVX971	AVX978	AVX978	AVX983	AVX984	AVX984	AVX984	AVX984
A,L	AVX969	AVX971	AVX971	AVX971	AVX961	AVX972	AVX972	AVX979	AVX979	AVX980	AVX980	AVX986	AVX981	
E,U	AVX961	AVX961	AVX972	AVX972	AVX976	AVX973	AVX974	AVX980	AVX982	AVX982	AVX985	-	-	
N	AVX972	AVX973	AVX974	AVX975	AVX977	AVX977	AVX977	AVX981	-	-	-	-	-	

The accessory cannot be fitted on the configurations indicated with -

Heater exchangers

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002
°	KRS22	KRS22	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23
A,L	KRS22	KRS22	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23
E,U	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23

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

Ver	3202	3402	3602	3902	4202	4502	4802	5202	5602	6002
°	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS24	KRS24	KRS24	KRS24
A,L	KRS23	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24
E,U	KRS23	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24	KRS23+KRS23	KRS23+KRS23
N	KRS23	KRS24	KRS24	KRS24	KRS24	KRS24	KRS23+KRS23	KRS23+KRS23	KRS23+KRS23	KRS23+KRS23

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

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

Power factor correction

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
°	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)

(1) Contact the factory

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,L	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)
E,U	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	-	-
N	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	-	-	-	-	-

(1) Contact the factory

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
°	GP3V	GP3V	GP3V	GP4V	GP4V	GP4V	GP4V	GP4V	GP4V	GP5V	GP5V	GP5V	GP5V	GP6V
A	GP4V	GP4V	GP4V	GP5V	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
L	GP4V	GP4V	GP4V	GP4V	GP5V	GP5V	GP5V	GP6V	GP6V	GP6V	GP6V	GP7V	GP7V	GP8V
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
°	GP6V	GP7V	GP7V	GP8V	GP8V	GP8V	GP9V	GP9V	GP9V	GP10V	GP11V	GP11V	GP11V
A,L	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

CONFIGURATOR

Field	Description
1,2,3	NSG
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 yield
X	Electronic thermostatic expansion valve (1)
9	Model
°	Cooling only
10	Heat recovery
°	Without heat recovery
D	With desuperheater (2)
T	With total recovery (3)
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
O	Painted aluminium microchannel
R	Copper-copper
S	Copper-Tinned copper
V	Copper-painted aluminium
13	Fans
°	Standard
J	Inverter
14	Power supply
°	400V~3 50Hz with fuses
2	230V~3 50Hz with fuses (4)
4	230V~3 50Hz with magnet circuit breakers (4)
5	500V~3 50Hz with fuses (5)
8	400V~3 50Hz with magnet circuit breakers
9	500V~3 50Hz with magnet circuit breakers (5)
15,16	Integrated 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 (6)
	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 (6)
	Kit with 2 pumps
TF	Double pump F (7)
TG	Double pump G (7)
TH	Double pump H (7)
TI	Double pump I (7)
TJ	Double pump J (7)

(1) Water produced from 4 °C ÷ 15 °C

(2) The temperature of the water in the heat exchanger inlet must never drop below 35°C.

(3) The units from 1402° - 1602° - 1802° with total recovery are not configurable with the integrated hydronic kit. For all other sizes and versions it is to be evaluated at the order stage.

(4) Only for sizes from 1402 to 2202

(5) Only for sizes from 1402 to 3202

(6) For all configurations including pump J please contact the factory.

(7) The unit from 5603 to 9603 can only have hydronic kit "TF - TG - TH- TI - TJ"

PERFORMANCE SPECIFICATIONS

NSG - °

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	228,6	261,3	297,8	334,1	358,6	389,8	402,8	443,7	462,6	506,3	531,6	566,5	623,6	676,0
Input power	kW	74,3	85,8	100,4	108,3	119,9	129,9	138,2	151,6	162,6	167,0	175,7	193,9	214,9	228,2
Cooling total input current	A	138,0	156,0	174,0	192,0	214,0	233,0	248,0	271,0	289,0	297,0	309,0	332,0	359,0	390,0
EER	W/W	3,08	3,05	2,97	3,08	2,99	3,00	2,91	2,93	2,85	3,03	3,02	2,92	2,90	2,96
Water flow rate system side	l/h	39316	44954	51218	57461	61665	67027	69255	76286	79541	87045	91392	97398	107202	116226
Pressure drop system side	kPa	14	18	16	21	24	20	22	18	19	17	19	21	24	29

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

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Cooling performance 12 °C/7 °C (1)														
Cooling capacity	kW	739,5	792,4	835,2	874,9	897,0	942,5	989,1	1060,2	1095,1	1215,2	1268,8	1333,1	1410,0
Input power	kW	251,7	263,0	281,6	288,8	302,5	320,8	329,9	355,3	375,5	407,7	419,3	461,7	512,0
Cooling total input current	A	434,0	454,0	482,0	500,0	524,0	558,0	581,0	609,0	649,0	701,0	728,0	805,0	900,0
EER	W/W	2,94	3,01	2,97	3,03	2,97	2,94	3,00	2,98	2,92	2,98	3,03	2,89	2,75
Water flow rate system side	l/h	127152	136250	143578	150403	154212	162036	170045	182263	188254	208871	218093	229141	242359
Pressure drop system side	kPa	33	38	28	31	33	38	42	29	31	20	22	25	28

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

NSG - 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	227,7	261,7	298,7	335,0	373,6	386,8	415,2	446,3	476,8	498,0	546,8	602,0	645,3	707,0
Input power	kW	72,7	84,0	98,1	112,6	120,1	128,4	138,3	144,3	155,8	165,4	179,1	193,2	212,5	231,2
Cooling total input current	A	131,0	148,0	165,0	192,0	208,0	224,0	242,0	252,0	270,0	284,0	303,0	318,0	342,0	375,0
EER	W/W	3,13	3,12	3,04	2,97	3,11	3,01	3,00	3,09	3,06	3,01	3,05	3,12	3,04	3,06
Water flow rate system side	l/h	39167	45014	51371	57614	64237	66506	71390	76738	81966	85616	94000	103492	110929	121547
Pressure drop system side	kPa	15	18	17	15	19	20	16	19	16	17	19	15	18	22

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

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Cooling performance 12 °C/7 °C(1)														
Cooling capacity	kW	743,5	806,3	841,6	893,3	933,8	982,7	1023,0	1083,7	1120,2	1222,9	1269,4	1383,5	1517,2
Input power	kW	252,4	266,7	283,5	297,7	306,0	315,5	334,5	357,8	379,1	402,0	421,5	465,5	504,7
Cooling total input current	A	416,0	437,0	465,0	490,0	507,0	533,0	563,0	583,0	623,0	670,0	699,0	763,0	848,0
EER	W/W	2,95	3,02	2,97	3,00	3,05	3,12	3,06	3,03	2,96	3,04	3,01	2,97	3,01
Water flow rate system side	l/h	127821	138615	144692	153568	160522	168943	175872	186277	192550	210223	218211	237808	260789
Pressure drop system side	kPa	24	31	33	24	26	31	33	22	24	31	33	26	32

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

NSG - 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	233,0	267,3	306,8	346,4	383,4	397,6	429,0	458,6	491,7	511,7	561,1	619,9	669,1	731,1
Input power	kW	73,5	83,8	96,7	109,8	118,4	126,0	134,9	142,3	152,7	160,7	171,9	187,9	206,4	224,9
Cooling total input current	A	139,0	155,0	170,0	195,0	214,0	229,0	246,0	260,0	276,0	287,0	303,0	322,0	344,0	380,0
EER	W/W	3,17	3,19	3,17	3,15	3,24	3,16	3,18	3,22	3,22	3,18	3,26	3,30	3,24	3,25
Water flow rate system side	l/h	40072	45975	52777	59582	65922	68370	73757	78851	84535	87974	96463	106561	115027	125681
Pressure drop system side	kPa	15	19	18	16	20	22	17	20	16	18	20	16	19	24

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

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Cooling performance 12 °C/7 °C(1)														
Cooling capacity	kW	770,4	833,7	872,2	923,2	961,9	1011,0	1053,8	1121,6	1160,9	1263,4	1313,4	1432,8	1580,6
Input power	kW	243,7	258,6	273,6	291,5	301,9	312,6	330,2	347,1	365,9	390,3	408,0	451,1	495,6
Cooling total input current	A	417,0	440,0	466,0	502,0	524,0	554,0	583,0	588,0	625,0	676,0	701,0	769,0	866,0
EER	W/W	3,16	3,22	3,19	3,17	3,19	3,23	3,19	3,23	3,17	3,24	3,22	3,18	3,19
Water flow rate system side	l/h	132447	143336	149960	158709	165357	173799	181161	192795	199561	217184	225782	246285	271702
Pressure drop system side	kPa	26	33	36	26	28	33	35	24	26	33	36	27	35

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

NSG - 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	243,5	281,0	317,4	359,0	387,6	413,2	428,5	471,9	494,2	514,3	550,0	608,1	654,7	714,4
Input power	kW	73,6	86,3	96,5	111,1	122,0	126,7	133,3	144,0	153,3	160,2	172,1	188,9	204,8	222,5
Cooling total input current	A	133,0	152,0	163,0	189,0	211,0	222,0	237,0	251,0	267,0	279,0	293,0	310,0	334,0	368,0
EER	W/W	3,31	3,26	3,29	3,23	3,18	3,26	3,21	3,28	3,22	3,21	3,20	3,22	3,20	3,21
Water flow rate system side	l/h	41877	48309	54578	61723	66638	71045	73675	81134	84968	88414	94560	104538	112548	122817
Pressure drop system side	kPa	12	11	14	9	11	12	13	15	16	18	19	16	18	23

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

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Cooling performance 12 °C/7 °C (1)														
Cooling capacity	kW	764,3	813,2	877,0	900,7	944,8	1000,3	1028,9	1101,9	1151,7	1242,8	1300,9	-	-
Input power	kW	236,0	255,6	273,4	283,8	292,9	310,2	318,7	343,0	357,9	392,1	407,8	-	-
Cooling total input current	A	399,0	428,0	450,0	475,0	495,0	519,0	544,0	572,0	599,0	656,0	673,0	-	-
EER	W/W	3,24	3,18	3,21	3,17	3,23	3,22	3,23	3,21	3,22	3,17	3,19	-	-
Water flow rate system side	l/h	131397	139814	150755	154839	162399	171941	176857	189402	197982	213642	223617	-	-
Pressure drop system side	kPa	26	32	24	25	16	16	19	23	26	32	24	-	-

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

NSG - 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	249,3	288,6	324,9	369,0	399,5	423,8	440,0	483,4	507,1	526,0	564,2	623,1	674,9	735,2
Input power	kW	74,1	85,8	96,9	110,1	120,0	126,0	132,1	143,6	152,2	157,5	167,5	185,9	201,2	218,7
Cooling total input current	A	141,0	158,0	172,0	196,0	217,0	231,0	246,0	263,0	277,0	287,0	298,0	319,0	342,0	377,0
EER	W/W	3,36	3,36	3,35	3,35	3,33	3,36	3,33	3,37	3,33	3,34	3,37	3,35	3,35	3,36
Water flow rate system side	l/h	42866	49623	55869	63446	68694	72874	75659	83113	87181	90438	96990	107116	116011	126384
Pressure drop system side	kPa	13	11	14	10	11	13	14	16	17	18	20	17	20	24

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

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Cooling performance 12 °C/7 °C (1)														
Cooling capacity	kW	784,5	837,2	901,8	927,6	971,1	1026,7	1054,7	1133,1	1182,5	1280,2	1339,0	-	-
Input power	kW	232,3	250,1	268,3	277,9	288,3	306,2	315,5	337,3	352,2	383,1	399,1	-	-
Cooling total input current	A	411,0	437,0	461,0	486,0	509,0	536,0	564,0	586,0	617,0	668,0	689,0	-	-
EER	W/W	3,38	3,35	3,36	3,34	3,37	3,35	3,34	3,36	3,36	3,34	3,36	-	-
Water flow rate system side	l/h	134866	143931	155027	159459	166915	176480	181297	194780	203262	220062	230162	-	-
Pressure drop system side	kPa	28	34	25	27	17	17	20	24	28	34	25	-	-

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

NSG - 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	245,2	283,6	318,2	364,5	394,3	417,2	432,9	475,2	498,1	517,4	552,6	613,0	669,6	727,4
Input power	kW	73,4	84,4	95,3	107,6	118,7	124,5	130,7	141,2	149,3	156,7	165,7	182,9	200,4	216,0
Cooling total input current	A	132,0	149,0	162,0	185,0	207,0	219,0	234,0	249,0	264,0	274,0	287,0	306,0	324,0	359,0
EER	W/W	3,34	3,36	3,34	3,39	3,32	3,35	3,31	3,37	3,34	3,30	3,34	3,35	3,34	3,37
Water flow rate system side	l/h	42156	48766	54716	62663	67797	71743	74443	81707	85643	88946	95006	105378	115107	125049
Pressure drop system side	kPa	13	11	15	9	11	13	14	15	17	18	20	16	20	24

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

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Cooling performance 12 °C/7 °C (1)														
Cooling capacity	kW	766,9	834,2	880,8	925,4	961,2	1003,2	1036,3	1120,4	-	-	-	-	-
Input power	kW	230,1	248,2	261,5	275,0	286,5	296,1	311,6	333,3	-	-	-	-	-
Cooling total input current	A	395,0	413,0	435,0	458,0	480,0	509,0	537,0	557,0	-	-	-	-	-
EER	W/W	3,33	3,36	3,37	3,36	3,35	3,39	3,33	3,36	-	-	-	-	-
Water flow rate system side	l/h	131846	143411	151421	159089	165211	172435	178132	192584	-	-	-	-	-
Pressure drop system side	kPa	27	23	29	29	17	17	20	24	-	-	-	-	-

(1) Data 14511:2018; 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
SEER - 12/7 (EN14825:2018) with standard fans (1)																
SEER	°A,E,L,N,U	W/W	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
Seasonal efficiency	°A,E,L,N,U	%	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
SEER - (EN14825:2018) 12/7 with inverter fans (3)																
SEER	°	W/W	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	A	W/W	4,43	4,40	4,48	4,54	4,51	4,54	4,56	4,56	4,56	4,56	4,57	4,57	4,56	4,57
	E	W/W	4,46	4,47	4,55	4,55	4,55	4,58	4,57	4,59	4,57	4,58	4,58	4,58	4,59	4,57
	L	W/W	4,41	4,38	4,47	4,51	4,50	4,54	4,56	4,56	4,56	4,56	4,56	4,56	4,56	4,56
	N	W/W	4,51	4,48	4,57	4,55	4,56	4,60	4,60	4,61	4,60	4,60	4,61	4,61	4,60	4,60
	U	W/W	4,48	4,47	4,56	4,57	4,56	4,58	4,57	4,59	4,58	4,59	4,59	4,59	4,60	4,58
Seasonal efficiency	°	%	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	A	%	174,1%	172,9%	176,2%	178,4%	177,4%	178,5%	179,4%	179,3%	179,3%	179,4%	179,6%	179,6%	179,5%	179,6%
	E	%	175,5%	175,8%	178,8%	179,1%	179,1%	180,2%	179,8%	180,4%	179,7%	180,3%	180,2%	180,1%	180,7%	179,8%
	L	%	173,3%	172,2%	175,8%	177,3%	176,9%	178,6%	179,2%	179,2%	179,2%	179,5%	179,5%	179,4%	179,4%	179,5%
	N	%	177,4%	176,2%	179,6%	179,0%	179,5%	180,8%	180,8%	181,4%	180,9%	181,0%	181,2%	181,4%	181,1%	180,9%
	U	%	176,3%	175,9%	179,3%	179,6%	179,3%	180,3%	179,9%	180,6%	180,1%	180,7%	180,5%	180,5%	181,0%	180,0%
SEPR - (EN14825: 2018) High temperature with standard fans (4)																
SEPR	°	W/W	5,32	5,40	5,30	5,46	5,46	5,50	5,52	5,51	5,51	5,51	5,54	5,53	5,51	5,52
	A	W/W	5,53	5,59	5,47	5,51	5,59	5,56	5,55	5,56	5,57	5,51	5,53	5,59	5,57	5,58
	E	W/W	5,69	5,72	5,77	5,64	5,58	5,71	5,65	5,72	5,67	5,65	5,67	5,64	5,66	5,68
	L	W/W	5,46	5,56	5,43	5,53	5,54	5,52	5,52	5,52	5,55	5,55	5,75	5,61	5,52	5,52
	N	W/W	5,75	5,77	5,89	5,69	5,58	5,66	5,62	5,68	5,61	5,59	5,63	5,64	5,64	5,65
	U	W/W	5,73	5,78	5,81	5,70	5,65	5,76	5,71	5,77	5,72	5,70	5,72	5,70	5,72	5,74
SEPR - (EN14825: 2018) High temperature with inverter fans (4)																
SEPR	°	W/W	5,32	5,40	5,30	5,46	5,46	5,50	5,52	5,51	5,51	5,51	5,54	5,53	5,51	5,52
	A	W/W	5,53	5,59	5,47	5,51	5,59	5,56	5,55	5,56	5,57	5,51	5,53	5,59	5,57	5,58
	E	W/W	5,69	5,72	5,77	5,64	5,58	5,71	5,65	5,72	5,67	5,65	5,67	5,64	5,66	5,68
	L	W/W	5,46	5,56	5,43	5,53	5,54	5,52	5,52	5,52	5,55	5,55	5,75	5,61	5,52	5,52
	N	W/W	5,75	5,77	5,89	5,69	5,58	5,66	5,62	5,68	5,61	5,59	5,63	5,64	5,64	5,65
	U	W/W	5,73	5,78	5,81	5,70	5,65	5,76	5,71	5,77	5,72	5,70	5,72	5,70	5,72	5,74

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.

(2) Not covered by standard (EN14825: 2018 for comfort applications, 12°C / 7°C)

(3) Calculation performed with FIXED/VARIABLE water flow rate and FIXED/VARIABLE outlet temperature.

(4) Calculation performed with FIXED water flow rate.

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
SEER - 12/7 (EN14825:2018) with standard fans (1)															
SEER	°A,E,L,N,U	W/W	-(2)	-(2)	-(2)	-(2)	-(2)	-(2)	-(2)	-(2)	-(2)	-(2)	-(2)	-(2)	-(2)
Seasonal efficiency	°A,E,L,N,U	%	-(2)	-(2)	-(2)	-(2)	-(2)	-(2)	-(2)	-(2)	-(2)	-(2)	-(2)	-(2)	-(2)
SEER - (EN14825:2018) 12/7 with inverter fans (3)															
SEER	°	W/W	-(2)	-(2)	-(2)	-(2)	-(2)	-(2)	-(2)	-(2)	-(2)	-(2)	-(2)	-(2)	-(2)
	A	W/W	4,57	4,57	4,56	4,56	4,56	4,57	4,56	4,57	4,57	4,58	4,57	4,57	4,58
	E	W/W	4,58	4,56	4,59	4,57	4,59	4,57	4,58	4,60	4,61	4,58	4,60	-	-
	L	W/W	4,56	4,56	4,55	4,56	4,56	4,56	4,55	4,57	4,56	4,57	4,57	4,56	4,57
	N	W/W	4,60	4,59	4,61	4,60	4,60	4,59	4,60	4,62	-	-	-	-	-
	U	W/W	4,59	4,57	4,59	4,57	4,59	4,58	4,59	4,61	4,61	4,58	4,60	-	-
Seasonal efficiency	°	%	-(2)	-(2)	-(2)	-(2)	-(2)	-(2)	-(2)	-(2)	-(2)	-(2)	-(2)	-(2)	-(2)
	A	%	179,6%	179,6%	179,3%	179,5%	179,4%	179,6%	179,4%	179,9%	179,6%	180,0%	179,8%	179,8%	180,0%
	E	%	180,3%	179,5%	180,5%	179,7%	180,4%	179,9%	180,3%	181,0%	181,3%	180,0%	180,8%	-	-
	L	%	179,4%	179,3%	179,1%	179,2%	179,4%	179,5%	179,1%	179,7%	179,5%	179,7%	179,6%	179,5	179,7
	N	%	180,8%	180,6%	181,3%	180,9%	180,9%	180,6%	180,8%	181,6%	-	-	-	-	-
	U	%	180,4%	179,6%	180,6%	179,8%	180,6%	180,3%	180,5%	181,3%	181,3%	180,2%	180,9%	-	-
SEPR - (EN14825: 2018) High temperature with standard fans (4)															
SEPR	°	W/W	5,53	5,52	5,52	5,52	5,52	5,51	5,52	5,53	5,52	5,52	5,55	5,52	5,52
	A	W/W	5,51	5,56	5,55	5,52	5,55	5,56	5,52	5,65	5,59	5,69	5,66	5,60	5,65
	E	W/W	5,69	5,64	5,69	5,56	5,56	5,56	5,69	5,81	5,86	5,67	5,72	-	-
	L	W/W	5,53	5,51	5,52	5,51	5,54	5,54	5,54	5,63	5,59	5,66	5,65	5,62	5,66
	N	W/W	5,61	5,62	5,64	5,69	5,57	5,60	5,56	5,71	-	-	-	-	-
	U	W/W	5,76	5,71	5,75	5,64	5,63	5,63	5,74	5,86	5,89	5,73	5,77	-	-
SEPR - (EN14825: 2018) High temperature with inverter fans (4)															
SEPR	°	W/W	5,53	5,52	5,52	5,52	5,52	5,51	5,52	5,53	5,52	5,52	5,55	5,52	5,52
	A	W/W	5,51	5,56	5,55	5,52	5,55	5,56	5,52	5,65	5,59	5,69	5,66	5,60	5,65
	E	W/W	5,69	5,64	5,69	5,56	5,56	5,56	5,69	5,81	5,86	5,67	5,72	-	-
	L	W/W	5,53	5,51	5,52	5,51	5,54	5,54	5,54	5,63	5,59	5,66	5,65	5,62	5,66
	N	W/W	5,61	5,62	5,64	5,69	5,57	5,60	5,56	5,71	-	-	-	-	-
	U	W/W	5,76	5,71	5,75	5,64	5,63	5,63	5,74	5,86	5,89	5,73	5,77	-	-

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.

(2) Not covered by standard (EN14825: 2018 for comfort applications, 12°C / 7°C)

(3) Calculation performed with FIXED/VARIABLE water flow rate and FIXED/VARIABLE outlet temperature.

(4) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Electric data																
Maximum current (FLA)	°	A	223,7	241,3	264,3	300,3	327,4	346,4	365,4	386,4	407,4	431,3	446,3	470,3	494,3	543,1
	A,L	A	232,6	250,2	273,2	300,3	336,3	355,3	374,3	404,1	425,1	440,1	455,1	488,0	512,0	560,9
	E,U	A	232,6	250,2	282,1	309,2	336,3	364,1	383,1	413,0	434,0	449,0	464,0	496,9	520,9	569,8
	N	A	241,5	259,1	290,9	318,0	345,1	373,0	392,0	421,9	442,9	457,9	472,9	505,8	538,7	593,4
Peak current (LRA)	°	A	252,0	287,1	329,4	376,3	395,0	442,0	459,0	486,0	493,7	597,6	636,2	665,2	661,2	791,0
	A,L	A	260,9	296,0	338,3	376,3	403,9	450,9	467,9	503,7	511,4	606,4	645,0	682,9	678,9	808,8
	E,U	A	260,9	296,0	347,2	385,2	403,9	459,7	476,7	512,6	520,3	615,3	653,9	691,8	687,8	817,7
	N	A	269,8	304,9	356,0	394,0	412,7	468,6	485,6	521,5	529,2	624,2	662,8	700,7	705,6	841,3
Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603	
Electric data																
Maximum current (FLA)	°	A	583,1	625,0	658,0	697,9	728,9	760,9	801,8	831,8	871,8	946,7	994,4	1087,4	1183,4	
	A,L	A	600,9	642,8	675,8	706,8	746,7	793,4	825,4	864,3	904,3	988,1	1021,1	1122,9	1236,7	
	E,U	A	618,7	651,7	699,4	730,4	770,3	811,2	852,1	882,1	930,9	996,9	1038,8	-	-	
	N	A	633,4	684,2	726,1	765,9	805,8	837,8	869,8	908,7	-	-	-	-	-	
Peak current (LRA)	°	A	821,3	894,2	914,2	1078,1	1097,9	1209,9	1249,8	993,9	1024,2	1117,1	1151,8	1346,4	1520,4	
	A,L	A	839,1	912,0	932,0	1087,0	1115,7	1242,4	1273,4	1026,4	1056,7	1158,5	1178,5	1381,9	1573,7	
	E,U	A	856,9	920,9	955,6	1110,6	1139,3	1260,2	1300,1	1044,2	1083,3	1167,3	1196,2	-	-	
	N	A	871,6	953,4	982,3	1146,1	1174,8	1286,8	1317,8	1070,8	-	-	-	-	-	

GENERAL TECHNICAL DATA

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Compressor																
Type	°A,E,L,N,U	type	Screw													
Number	°A,E,L,N,U	no.	2	2	2	2	2	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	2	2	2	2	2
Refrigerant	°A,E,L,N,U	type	R1234ze													
Refrigerant charge	°	kg	42,0	46,0	50,0	56,0	60,0	63,0	66,0	69,0	72,0	80,0	84,0	88,0	92,0	100,0
	A	kg	58,0	62,0	66,0	70,0	80,0	83,0	86,0	93,0	96,0	100,0	104,0	114,0	118,0	128,0
	E	kg	62,0	66,0	76,0	80,0	84,0	93,0	96,0	105,0	108,0	112,0	116,0	126,0	130,0	142,0
	L	kg	50,0	54,0	58,0	62,0	70,0	73,0	76,0	83,0	86,0	90,0	94,0	102,0	106,0	116,0
	N	kg	70,0	74,0	84,0	88,0	92,0	101,0	104,0	113,0	116,0	120,0	124,0	134,0	144,0	156,0
	U	kg	64,0	68,0	78,0	82,0	86,0	95,0	98,0	107,0	110,0	114,0	118,0	128,0	132,0	144,0
System side heat exchanger																
Type	°A,E,L,N,U	type	Braze plate													
Number	°A,E,L,N,U	no.	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Hydraulic connections																
Connections (in/out)	°A,E,L,N,U	Type	Grooved joints													
Sizes (in/out)	°	Ø	5"	5"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"
	A,L	Ø	5"	5"	6"	6"	6"	6"	6"	6"	6"	6"	6"	8"	8"	8"
	E,N,U	Ø	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	8"	8"	8"
Sound data calculated in cooling mode (1)																
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
	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
	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
	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
	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
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	66,9	67,0	67,1	67,3	68,1
	A	dB(A)	64,9	65,0	65,4	65,5	65,7	65,8	65,9	66,2	66,3	66,4	66,5	66,5	66,6	67,2
	E	dB(A)	56,9	57,0	57,7	57,8	57,9	58,2	58,6	59,0	59,2	59,4	59,5	59,9	60,1	60,2
	L	dB(A)	56,5	56,6	56,7	56,8	57,8	58,0	58,1	58,2	58,3	58,4	58,5	58,5	58,6	59,5
	N	dB(A)	57,5	57,9	58,3	58,4	58,5	58,6	58,6	59,2	59,3	59,4	59,5	59,8	60,0	60,1
	U	dB(A)	64,6	65,0	65,5	65,7	65,9	66,2	66,2	66,2	66,3	66,4	66,5	67,0	67,1	67,4

(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
Compressor														
Type	°A,E,L,N,U	type	Screw											
Number	°A,L	no.	2	2	2	2	2	2	3	3	3	3	3	3
	E,U	no.	2	2	2	2	2	2	3	3	3	3	-	-
	N	no.	2	2	2	2	2	2	3	-	-	-	-	-
Circuits	°A,L	no.	2	2	2	2	2	2	3	3	3	3	3	3
	E,U	no.	2	2	2	2	2	2	3	3	3	3	-	-
	N	no.	2	2	2	2	2	2	3	-	-	-	-	-
Refrigerant	°A,E,L,N,U	type	R1234ze											
Refrigerant charge	°	kg	106,0	116,0	122,0	132,0	140,0	148,0	160,0	153,0	159,0	177,0	183,0	210,0
	A	kg	134,0	146,0	152,0	160,0	172,0	186,0	194,0	195,0	201,0	222,0	228,0	258,0
	E	kg	154,0	160,0	172,0	180,0	194,0	208,0	222,0	216,0	231,0	243,0	258,0	-
	L	kg	122,0	132,0	138,0	146,0	158,0	170,0	178,0	177,0	183,0	201,0	207,0	237,0
	N	kg	162,0	180,0	192,0	206,0	220,0	228,0	236,0	237,0	-	-	-	-
	U	kg	156,0	162,0	174,0	182,0	196,0	210,0	224,0	219,0	234,0	246,0	261,0	-
System side heat exchanger														
Type	°A,E,L,N,U	type	Braze plate											
Number	°	no.	1	1	1	1	1	1	1	1	1	1	1	1
	A,L	no.	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	-	-
	N	no.	1	2	2	2	2	2	2	-	-	-	-	-
Hydraulic connections														
Connections (in/out)	°A,E,L,N,U	Type	Grooved joints											
Sizes (in/out)	°	Ø	6"	6"	8"	8"	8"	8"	8"	10"	10"	10"	10"	10"
	A,L	Ø	8"	8"	8"	10"	10"	10"	10"	8"-6"	8"-6"	8"-6"	8"-6"	10"-6"
	E,U	Ø	8"	8"	10"	10"	6"-6"	6"-6"	6"-6"	8"-6"	8"-6"	8"-6"	10"-6"	-
	N	Ø	8"	6"-6"	6"-6"	6"-6"	6"-6"	6"-6"	6"-6"	8"-6"	-	-	-	-
Sound data calculated in cooling mode (1)														
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
	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
	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	-
	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
	N	dB(A)	93,4	94,3	94,4	94,8	95,0	95,2	95,3	95,4	-	-	-	-
	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	-
Sound pressure level (10 m)	°	dB(A)	68,2	68,4	68,5	68,6	68,8	68,9	69,1	69,3	69,4	69,9	69,9	70,0
	A	dB(A)	67,3	67,4	67,8	68,5	68,6	68,7	68,8	68,6	68,7	68,7	68,8	69,6
	E	dB(A)	60,4	60,5	60,5	60,6	60,5	60,5	60,6	60,7	60,6	60,7	61,0	-
	L	dB(A)	59,6	60,0	60,1	60,2	60,6	60,7	60,8	60,8	60,8	60,7	60,7	61,1
	N	dB(A)	60,2	60,8	60,8	61,1	61,2	61,4	61,5	61,5	-	-	-	-
	U	dB(A)	67,6	67,9	68,1	68,4	68,6	68,6	68,6	68,6	68,6	68,7	68,6	-

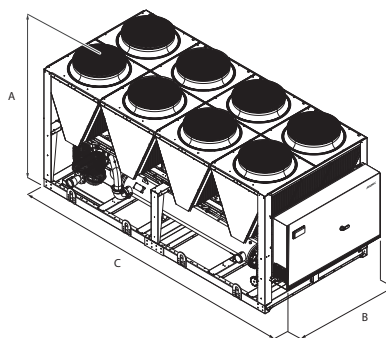
(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

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	Axial													
Fan motor	°A,E,L,N,U	type	On-Off													
Number	°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	Axial												
Fan motor	°A,E,L,N,U	type	On-Off												
Number	°A,L	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	°	m³/h	216000	252000	252000	288000	288000	288000	324000	324000	324000	360000	396000	396000	396000
	A	m³/h	256000	288000	288000	324000	360000	396000	396000	384000	384000	448000	448000	480000	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
	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



Dimensions and weights °

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	7540
	A,L	mm	5160	5160	5160	5160	6350	6350	6350	7540	7540	7540	7540	8730	8730	9920
	E,U	mm	5160	5160	6350	6350	6350	7540	7540	8730	8730	8730	8730	9920	9920	11110
	N	mm	6350	6350	7540	7540	7540	8730	8730	9920	9920	9920	9920	11110	12300	13490
Empty weight	°	kg	4100	4143	4275	5130	5508	5521	5545	5745	5871	6407	6464	6905	7406	8851
	A,L	kg	4766	4798	4972	5324	6112	6129	6475	7879	8131	8185	8256	9602	10084	10599
	E,U	kg	4972	5013	5468	6261	6622	8038	8062	8509	8602	8674	8746	10158	10626	11400
	N	kg	5399	5440	6869	7662	8023	8454	8478	8968	9061	9133	9205	10852	11747	12370
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	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,L	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	°	mm	7540	8730	8730	9920	9920	9920	11110	11110	11110	12300	12300	13490	13490	13490
	A,L	mm	9920	11110	11110	11110	12300	13490	13490	15080	15080	17460	17460	18650	18650	21030
	E,U	mm	12300	12300	13490	13490	15080	16270	17460	17460	18650	18650	19840	-	-	-
	N	mm	13490	16270	17460	18650	19840	19840	19840	21030	-	-	-	-	-	-
Empty weight	°	kg	8950	9377	9692	10226	10357	10421	11137	12212	12289	15051	15638	16021	16193	16193
	A,L	kg	10664	11384	11437	12307	12849	13431	13474	15689	15754	16919	16973	18609	19808	19808
	E,U	kg	11900	11949	13312	13440	13969	14418	14868	16872	17373	17477	18850	-	-	-
	N	kg	12444	13680	14403	15105	15808	15851	16326	18565	-	-	-	-	-	-

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.

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