



Outdoor unit with heat pump for the production of chilled/hot water with hermetic rotary scroll compressors dedicated to the use of R410A, axial fans, plate heat exchanger, condensing coil with copper tubes and aluminum fins and thermostatic or electronic expansion valve, according to the version. The range is composed by units equipped with two compressors in a single-circuit configuration.

Control



W3000 Base – W3000SE Compact

Two different versions of controllers are available:
W3000 Base: complete with keypad, easy-to-use interface and LCD display, menu with up to three languages (Italian and English come standard, a further language can be chosen within French, Spanish, German, Russian and Swedish)
W3000SE Compact: complete with keypad, easy-to-use interface and LCD display, multi-language menu, with selectable language setting on site. Internal clock also included. Both W3000 electronic controllers offer advanced functions and algorithms. The keypad features an easy-to-use interface and a complete LCD display, allowing to consult and intervene on the unit by means of a multi-level menu, with selectable language setting. Regulation based on the exclusive QuickMind algorithm, including self-adaptive control logics, beneficial in low water content systems. As alternatives the proportional- or proportional-integral regulations are also available. Complete alarm management, with the "black-box" and alarm logging functions for enhanced analysis of the unit operation (available on W3000SE Compact only).

For multiple units' systems, the regulation of the resources via optional proprietary devices, can be implemented. Energy metering, for both consumption and capacity, can also be developed and supervision can be executed via proprietary devices or the integration in third party systems by means of the most common protocols as ModBus, Bacnet, Bacnet-over-IP, Echelon LonWorks. Compatibility with the remote keyboard managing up to 10 units. The internal real time clock allows to manage a weekly schedule operating on 4-day profiles with 10 hour belts (available on W3000SE Compact only, optional on W3000 Base controller).

Refrigerant



Versions

K	Key efficiency, compact version	CA	Class A of efficiency
LN-K	Low Noise, Key efficiency and compact version	LN-CA	Low Noise, Class A of efficiency

Configurations

- Basic function
- D Partial condensing heat recovery function

Features

REFRIGERANT GAS R410A

The use of R410A allowed to achieve better energy efficiencies with environment full respect (ODP = 0)

ELECTRONIC EXPANSION VALVE

The use of the electronic expansion valve generates considerable benefits, especially in cases of variable demand and different external conditions. It has been introduced into these units as a result of accurate design choices concerning the cooling circuit and the optimisation of operation in various different working conditions. The electronic expansion valve comes standard in the high-efficiency CA version.

CLASS A EFFICIENCY

The full range is also available with the Class A efficiency rating (in heating). CA version guarantees within all the noise configurations premium levels of efficiency thanks to the generous sizing of the refrigerant-exchange surface areas and to an accurate control of the fans.

WIDE OPERATING RANGE

Unit's operation guaranteed with external air temperature down to -10 °C during winter and up to 46 °C during summer.

COMPLIANCE WITH THE STRICTEST EUROPEAN STANDARDS

The main new feature that distinguishes the new NX-N units regards the calculation methods used to define the energy efficiency values. These values are in fact now calculated not only based on the capacity delivered and power consumed by the unit, but also taking into account heat exchanger pressure drop, or the available pressure head if the unit is installed with pumps, as required by European standard EN14511.

In this way, energy efficiency is no longer an index for evaluating the unit alone, but rather extends the assessment by considering the unit within the system, consequently taking into account the energy required to pump the refrigerant or heat carrier fluid used in the system.

TWO SOUND EMISSION LEVELS

Two different sound emission levels available. This means the best unit can be identified based on requirements, according to the system where it will be installed and the application.

INTEGRATED HYDRONIC GROUP

The optional built-in hydronic module already contains the main water circuit components; it is available with single or twin in-line, for achieving both low or high head.

Accessories

- Soft starters
- Set-up for remote connectivity with ModBus/Echelon protocol cards
- Remote control keyboard (distance to 200m and to 500m)

NX-N / K	0152P	0182P	0202P	0252P	0262P	0302P	0352P	
Power supply	V/ph/Hz	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	
PERFORMANCE								
COOLING ONLY (GROSS VALUE)								
Cooling capacity	(1) kW	38,74	43,77	51,01	58,34	64,63	74,11	84,40
Total power input	(1) kW	13,72	15,79	18,40	20,55	23,26	28,18	32,15
EER	(1) kW/kW	2,825	2,772	2,772	2,844	2,773	2,628	2,629
ESEER	(1) kW/kW	4,010	4,030	4,180	3,940	3,960	3,890	4,030
COOLING ONLY (EN14511 VALUE)								
Cooling capacity	(1)(2) kW	38,50	43,50	50,70	58,00	64,30	73,80	83,90
EER	(1)(2) kW/kW	2,770	2,710	2,710	2,790	2,720	2,590	2,570
ESEER	(1)(2) kW/kW	3,830	3,850	4,000	3,780	3,820	3,770	3,840
Cooling energy class	C	C	C	C	C	D	D	
HEATING ONLY (GROSS VALUE)								
Total heating capacity	(3) kW	42,92	47,38	55,34	65,03	70,69	80,07	92,14
Total power input	(3) kW	14,03	15,46	18,04	21,30	22,78	25,97	29,56
COP	(3) kW/kW	3,064	3,058	3,072	3,052	3,101	3,081	3,111
HEATING ONLY (EN14511 VALUE)								
Total heating capacity	(3)(2) kW	43,20	47,70	55,60	65,40	71,10	80,50	92,70
COP	(3)(2) kW/kW	3,020	3,020	3,030	3,010	3,060	3,050	3,070
Cooling energy class	B	B	B	B	B	B	B	
ENERGY EFFICIENCY								
SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281)								
Ambient refrigeration								
Prated,c	(10) kW	-	-	-	-	-	-	
SEER	(10)(11)	-	-	-	-	-	-	
Performance ηs	(10)(12) %	-	-	-	-	-	-	
SEASONAL EFFICIENCY IN HEATING (Reg. EU 813/2013)								
PDesign	(4) kW	31,0	34,3	42,1	47,9	51,8	59,1	72,2
SCOP	(4)(13)	3,42	3,42	3,55	3,40	3,44	3,42	3,55
Performance ηs	(4)(14) %	134	134	139	133	135	134	139
Seasonal efficiency class	(15)	A+	A+	A+	A+	A+	A+	-
EXCHANGERS								
HEAT EXCHANGER USER SIDE IN REFRIGERATION								
Water flow	(1) l/s	1,853	2,093	2,440	2,790	3,091	3,544	4,036
Pressure drop	(1) kPa	35,4	33,3	35,0	32,8	32,8	30,9	49,2
HEAT EXCHANGER USER SIDE IN HEATING								
Water flow	(3) l/s	2,072	2,287	2,671	3,139	3,412	3,865	4,448
Pressure drop	(3) kPa	44,2	39,8	42,0	41,5	40,0	36,8	59,7
REFRIGERANT CIRCUIT								
Compressors nr.	N°	2	2	2	2	2	2	2
No. Circuits	N°	1	1	1	1	1	1	1
Refrigerant charge	kg	12,0	13,3	15,6	17,1	17,2	18,1	26,0
NOISE LEVEL								
Sound Pressure	(5) dB(A)	67	67	67	67	67	67	68
Sound power level in cooling	(6)(7) dB(A)	84	84	84	85	85	85	86
Sound power level in heating	(6)(8) dB(A)	84	84	84	85	85	85	86
SIZE AND WEIGHT								
Operating weight	(9) kg	510	550	570	640	650	660	790
A	(9) mm	1825	1825	1825	2395	2395	2395	2395
B	(9) mm	1195	1195	1195	1195	1195	1195	1195
H	(9) mm	1865	1865	1865	1865	1865	1865	1865

Notes

- 1 Plant (side) cooling exchanger water (in/out) 12°C/7°C; Source (side) heat exchanger air (in) 35°C.
- 2 Values in compliance with EN14511
- 3 Plant (side) heat exchanger water (in/out) 40°C/45°C; Source (side) heat exchanger air (in) 7°C - 87% R.H.
- 4 Parameter calculated for LOW-TEMPERATURE application in AVERAGE climate conditions according to [REGULATION (EU) N. 813/2013]
- 5 Average sound pressure level at 1m distance, unit in a free field on a reflective surface; non-binding value calculated from the sound power level.
- 6 Sound power on the basis of measurements made in compliance with ISO 9614.
- 7 Sound power level in cooling, outdoors.
- 8 Sound power level in heating, outdoors.
- 9 Unit in standard configuration/execution, without optional accessories.
- 10 Parameter calculated according to [REGULATION (EU) N. 2016/2281]
- 11 Seasonal energy efficiency ratio
- 12 Seasonal space cooling energy efficiency
- 13 Seasonal coefficient of performance
- 14 Seasonal space heating energy efficiency
- 15 Energy efficiency class referred to LOW-TEMPERATURE application in AVERAGE climate conditions according to [REGULATION (EU) N. 811/2013]

The units highlighted in this publication contain HFC R410A [GWP₁₀₀ 2088] fluorinated greenhouse gases.

Certified data in EUROVENT

NX-N /K		0402P	0452P	0502P	0552P	0602P	0702P	0802P
Power supply	V/ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
PERFORMANCE								
COOLING ONLY (GROSS VALUE)								
Cooling capacity	(1) kW	100,2	112,5	125,0	138,2	161,9	179,7	198,8
Total power input	(1) kW	35,65	40,65	45,16	52,25	58,23	67,64	77,66
EER	(1) kW/kW	2,807	2,764	2,765	2,642	2,782	2,658	2,559
ESEER	(1) kW/kW	3,730	3,820	3,870	3,870	3,780	3,800	3,690
COOLING ONLY (EN14511 VALUE)								
Cooling capacity	(1)(2) kW	99,60	111,9	124,4	137,5	161,1	178,9	197,8
EER	(1)(2) kW/kW	2,740	2,710	2,720	2,590	2,730	2,620	2,510
ESEER	(1)(2) kW/kW	3,580	3,670	3,740	3,720	3,650	3,670	3,560
Cooling energy class	C	C	C	D	C	D	D	D
HEATING ONLY (GROSS VALUE)								
Total heating capacity	(3) kW	108,3	119,5	133,9	150,1	174,6	193,2	211,4
Total power input	(3) kW	35,52	39,23	42,92	48,57	57,01	63,19	69,48
COP	(3) kW/kW	3,051	3,048	3,121	3,088	3,063	3,057	3,042
HEATING ONLY (EN14511 VALUE)								
Total heating capacity	(3)(2) kW	109,0	120,2	134,7	150,9	175,5	194,1	212,6
COP	(3)(2) kW/kW	3,010	3,010	3,080	3,050	3,030	3,030	3,010
Cooling energy class	B	B	B	B	B	B	B	B
ENERGY EFFICIENCY								
SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281)								
Ambient refrigeration								
Prated,c	(10) kW	-	-	-	-	-	-	-
SEER	(10)(11)	-	-	-	-	-	-	-
Performance ηs	(10)(12) %	-	-	-	-	-	-	-
SEASONAL EFFICIENCY IN HEATING (Reg. EU 813/2013)								
PDesign	(4) kW	80,1	92,5	103	119	133	157	183
SCOP	(4)(13)	3,22	3,23	3,26	3,36	3,24	3,28	3,22
Performance ηs	(4)(14) %	126	126	127	131	126	128	126
Seasonal efficiency class	(15)	-	-	-	-	-	-	-
EXCHANGERS								
HEAT EXCHANGER USER SIDE IN REFRIGERATION								
Water flow	(1) l/s	4,790	5,381	5,977	6,611	7,740	8,594	9,506
Pressure drop	(1) kPa	48,2	49,5	47,2	47,9	47,0	44,8	54,8
HEAT EXCHANGER USER SIDE IN HEATING								
Water flow	(3) l/s	5,226	5,767	6,465	7,244	8,426	9,328	10,20
Pressure drop	(3) kPa	57,3	56,9	55,3	57,5	55,8	52,8	63,2
REFRIGERANT CIRCUIT								
Compressors nr.	N°	2	2	2	2	2	2	2
No. Circuits	N°	1	1	1	1	1	1	1
Refrigerant charge	kg	30,5	35,1	46,8	47,2	48,9	50,4	52,8
NOISE LEVEL								
Sound Pressure	(5) dB(A)	70	70	70	72	71	71	72
Sound power level in cooling	(6)(7) dB(A)	88	88	88	90	90	90	91
Sound power level in heating	(6)(8) dB(A)	88	88	88	90	90	90	91
SIZE AND WEIGHT								
Operating weight	(9) kg	970	1020	1150	1210	1330	1360	1380
A	(9) mm	2825	2825	3360	3360	3980	3980	3980
B	(9) mm	1195	1195	1195	1195	1195	1195	1195
H	(9) mm	1980	1980	1980	1980	1980	1980	1980

Notes

- 1 Plant (side) cooling exchanger water (in/out) 12°C/7°C; Source (side) heat exchanger air (in) 35°C.
- 2 Values in compliance with EN14511
- 3 Plant (side) heat exchanger water (in/out) 40°C/45°C; Source (side) heat exchanger air (in) 7°C - 87% R.H.
- 4 Parameter calculated for LOW-TEMPERATURE application in AVERAGE climate conditions according to [REGULATION (EU) N. 813/2013]
- 5 Average sound pressure level at 1m distance, unit in a free field on a reflective surface; non-binding value calculated from the sound power level.
- 6 Sound power on the basis of measurements made in compliance with ISO 9614.
- 7 Sound power level in cooling, outdoors.
- 8 Sound power level in heating, outdoors.
- 9 Unit in standard configuration/execution, without optional accessories.
- 10 Parameter calculated according to [REGULATION (EU) N. 2016/2281]
- 11 Seasonal energy efficiency ratio
- 12 Seasonal space cooling energy efficiency
- 13 Seasonal coefficient of performance
- 14 Seasonal space heating energy efficiency
- 15 Energy efficiency class referred to LOW-TEMPERATURE application in AVERAGE climate conditions according to [REGULATION (EU) N. 811/2013]

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Certified data in EUROVENT

NX-N /LN-K	0152P	0182P	0202P	0252P	0262P	0302P	0352P		
Power supply	V/ph/Hz	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50		
PERFORMANCE									
COOLING ONLY (GROSS VALUE)									
Cooling capacity	(1)	kW	35,79	39,83	46,78	53,44	60,38	69,88	77,90
Total power input	(1)	kW	15,18	17,57	19,87	22,43	25,78	29,89	34,94
EER	(1)	kW/kW	2,355	2,261	2,352	2,384	2,341	2,338	2,232
ESEER	(1)	kW/kW	3,910	3,750	4,070	3,820	3,840	3,850	3,920
COOLING ONLY (EN14511 VALUE)									
Cooling capacity	(1)(2)	kW	35,60	39,60	46,60	53,10	60,10	69,60	77,50
EER	(1)(2)	kW/kW	2,310	2,220	2,320	2,350	2,300	2,300	2,200
ESEER	(1)(2)	kW/kW	3,750	3,620	3,910	3,680	3,710	3,720	3,770
Cooling energy class	E	F	E	E	E	E	E	F	
HEATING ONLY (GROSS VALUE)									
Total heating capacity	(3)	kW	42,92	47,38	55,34	65,03	70,69	80,07	92,14
Total power input	(3)	kW	14,03	15,46	18,04	21,30	22,78	25,97	29,56
COP	(3)	kW/kW	3,064	3,058	3,072	3,052	3,101	3,081	3,111
HEATING ONLY (EN14511 VALUE)									
Total heating capacity	(3)(2)	kW	43,20	47,70	55,60	65,40	71,10	80,50	92,70
COP	(3)(2)	kW/kW	3,020	3,020	3,030	3,010	3,060	3,050	3,070
Cooling energy class	B	B	B	B	B	B	B	B	
ENERGY EFFICIENCY									
SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281)									
Ambient refrigeration									
Prated,c	(10)	kW	-	-	-	-	-	-	
SEER	(10)(11)		-	-	-	-	-	-	
Performance ηs	(10)(12)	%	-	-	-	-	-	-	
SEASONAL EFFICIENCY IN HEATING (Reg. EU 813/2013)									
PDesign	(4)	kW	31,0	34,3	42,1	47,9	51,8	59,1	72,2
SCOP	(4)(13)		3,42	3,42	3,55	3,40	3,44	3,42	3,55
Performance ηs	(4)(14)	%	134	134	139	133	135	134	139
Seasonal efficiency class	(15)	A+	A+	A+	A+	A+	A+	-	
EXCHANGERS									
HEAT EXCHANGER USER SIDE IN REFRIGERATION									
Water flow	(1)	l/s	1,712	1,905	2,237	2,556	2,887	3,342	3,725
Pressure drop	(1)	kPa	30,2	27,6	29,4	27,5	28,6	27,5	41,9
HEAT EXCHANGER USER SIDE IN HEATING									
Water flow	(3)	l/s	2,072	2,287	2,671	3,139	3,412	3,865	4,448
Pressure drop	(3)	kPa	44,2	39,8	42,0	41,5	40,0	36,8	59,7
REFRIGERANT CIRCUIT									
Compressors nr.	N°	2	2	2	2	2	2	2	
No. Circuits	N°	1	1	1	1	1	1	1	
Refrigerant charge	kg	12,0	13,3	15,6	17,1	17,2	18,1	26,0	
NOISE LEVEL									
Sound Pressure	(5)	dB(A)	60	60	60	60	61	62	64
Sound power level in cooling	(6)(7)	dB(A)	77	77	77	78	79	80	82
Sound power level in heating	(6)(8)	dB(A)	78	78	78	79	80	81	83
SIZE AND WEIGHT									
Operating weight	(9)	kg	510	560	580	650	660	670	800
A	(9)	mm	1825	1825	1825	2395	2395	2395	2395
B	(9)	mm	1195	1195	1195	1195	1195	1195	1195
H	(9)	mm	1865	1865	1865	1865	1865	1865	1865

Notes

- 1 Plant (side) cooling exchanger water (in/out) 12°C/7°C; Source (side) heat exchanger air (in) 35°C.
- 2 Values in compliance with EN14511
- 3 Plant (side) heat exchanger water (in/out) 40°C/45°C; Source (side) heat exchanger air (in) 7°C - 87% R.H.
- 4 Parameter calculated for LOW-TEMPERATURE application in AVERAGE climate conditions according to [REGULATION (EU) N. 813/2013]
- 5 Average sound pressure level at 1m distance, unit in a free field on a reflective surface; non-binding value calculated from the sound power level.
- 6 Sound power on the basis of measurements made in compliance with ISO 9614.
- 7 Sound power level in cooling, outdoors.
- 8 Sound power level in heating, outdoors.
- 9 Unit in standard configuration/execution, without optional accessories.
- 10 Parameter calculated according to [REGULATION (EU) N. 2016/2281]
- 11 Seasonal energy efficiency ratio
- 12 Seasonal space cooling energy efficiency
- 13 Seasonal coefficient of performance
- 14 Seasonal space heating energy efficiency
- 15 Energy efficiency class referred to LOW-TEMPERATURE application in AVERAGE climate conditions according to [REGULATION (EU) N. 811/2013]

The units highlighted in this publication contain HFC R410A [GWP₁₀₀ 2088] fluorinated greenhouse gases.

Certified data in EUROVENT

NX-N /LN-K		0402P	0452P	0502P	0552P	0602P	0702P	0802P
Power supply	V/ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
PERFORMANCE								
COOLING ONLY (GROSS VALUE)								
Cooling capacity	(1) kW	94,49	103,6	113,9	131,6	154,3	168,3	179,5
Total power input	(1) kW	36,72	42,46	47,78	54,13	60,50	71,63	83,80
EER	(1) kW/kW	2,575	2,438	2,383	2,433	2,550	2,351	2,142
ESEER	(1) kW/kW	3,890	3,890	3,850	3,990	3,960	3,910	3,620
COOLING ONLY (EN14511 VALUE)								
Cooling capacity	(1)(2) kW	94,00	103,1	113,4	131,0	153,6	167,6	178,7
EER	(1)(2) kW/kW	2,530	2,400	2,350	2,390	2,510	2,320	2,110
ESEER	(1)(2) kW/kW	3,750	3,750	3,730	3,850	3,820	3,780	3,500
Cooling energy class	D E E E D E F							
HEATING ONLY (GROSS VALUE)								
Total heating capacity	(3) kW	108,3	119,5	133,9	150,1	174,6	193,2	211,4
Total power input	(3) kW	35,52	39,23	42,92	48,57	57,01	63,19	69,48
COP	(3) kW/kW	3,051	3,048	3,121	3,088	3,063	3,057	3,042
HEATING ONLY (EN14511 VALUE)								
Total heating capacity	(3)(2) kW	109,0	120,2	134,7	150,9	175,5	194,1	212,6
COP	(3)(2) kW/kW	3,010	3,010	3,080	3,050	3,030	3,030	3,010
Cooling energy class	B B B B B B B							
ENERGY EFFICIENCY								
SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281)								
Ambient refrigeration								
Prated,c	(10) kW	-	-	-	-	-	-	-
SEER	(10)(11)	-	-	-	-	-	-	-
Performance ηs	(10)(12) %	-	-	-	-	-	-	-
SEASONAL EFFICIENCY IN HEATING (Reg. EU 813/2013)								
PDesign	(4) kW	80,1	92,5	103	119	133	157	183
SCOP	(4)(13)	3,31	3,41	3,46	3,51	3,41	3,48	3,38
Performance ηs	(4)(14) %	130	133	136	137	134	136	132
Seasonal efficiency class	(15)	-	-	-	-	-	-	-
EXCHANGERS								
HEAT EXCHANGER USER SIDE IN REFRIGERATION								
Water flow	(1) l/s	4,519	4,955	5,447	6,294	7,379	8,047	8,586
Pressure drop	(1) kPa	42,9	42,0	39,2	43,4	42,8	39,3	44,7
HEAT EXCHANGER USER SIDE IN HEATING								
Water flow	(3) l/s	5,226	5,767	6,465	7,244	8,426	9,328	10,20
Pressure drop	(3) kPa	57,3	56,9	55,3	57,5	55,8	52,8	63,2
REFRIGERANT CIRCUIT								
Compressors nr.	N°	2	2	2	2	2	2	2
No. Circuits	N°	1	1	1	1	1	1	1
Refrigerant charge	kg	30,5	35,1	46,8	47,2	48,9	50,4	52,8
NOISE LEVEL								
Sound Pressure	(5) dB(A)	65	65	65	66	65	65	67
Sound power level in cooling	(6)(7) dB(A)	83	83	83	84	84	84	86
Sound power level in heating	(6)(8) dB(A)	84	84	84	85	85	85	87
SIZE AND WEIGHT								
Operating weight	(9) kg	1010	1100	1200	1250	1360	1410	1430
A	(9) mm	2825	2825	3360	3360	3980	3980	3980
B	(9) mm	1195	1195	1195	1195	1195	1195	1195
H	(9) mm	1980	1980	1980	1980	1980	1980	1980

Notes

- 1 Plant (side) cooling exchanger water (in/out) 12°C/7°C; Source (side) heat exchanger air (in) 35°C.
- 2 Values in compliance with EN14511
- 3 Plant (side) heat exchanger water (in/out) 40°C/45°C; Source (side) heat exchanger air (in) 7°C - 87% R.H.
- 4 Parameter calculated for LOW-TEMPERATURE application in AVERAGE climate conditions according to [REGULATION (EU) N. 813/2013]
- 5 Average sound pressure level at 1m distance, unit in a free field on a reflective surface; non-binding value calculated from the sound power level.
- 6 Sound power on the basis of measurements made in compliance with ISO 9614.
- 7 Sound power level in cooling, outdoors.
- 8 Sound power level in heating, outdoors.
- 9 Unit in standard configuration/execution, without optional accessories.
- 10 Parameter calculated according to [REGULATION (EU) N. 2016/2281]
- 11 Seasonal energy efficiency ratio
- 12 Seasonal space cooling energy efficiency
- 13 Seasonal coefficient of performance
- 14 Seasonal space heating energy efficiency
- 15 Energy efficiency class referred to LOW-TEMPERATURE application in AVERAGE climate conditions according to [REGULATION (EU) N. 811/2013]

The units highlighted in this publication contain HFC R410A [GWP₁₀₀ 2088] fluorinated greenhouse gases.

Certified data in EUROVENT

NX-N /CA	0152P	0182P	0202P	0252P	0262P	0302P	0352P
Power supply	V/ph/Hz	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50
PERFORMANCE							
COOLING ONLY (GROSS VALUE)							
Cooling capacity	(1) kW	40,00	45,28	51,24	59,61	66,85	80,91
Total power input	(1) kW	13,05	14,98	18,03	19,90	22,45	27,02
EER	(1) kW/kW	3,077	3,020	2,844	2,995	2,969	2,996
ESEER	(1) kW/kW	4,190	4,240	4,220	4,050	4,120	4,120
COOLING ONLY (EN14511 VALUE)							
Cooling capacity	(1)(2) kW	39,70	45,00	50,90	59,30	66,50	80,50
EER	(1)(2) kW/kW	3,000	2,950	2,780	2,940	2,920	2,940
ESEER	(1)(2) kW/kW	3,970	4,030	4,030	3,880	3,960	3,890
Cooling energy class	B	B	C	B	B	B	B
HEATING ONLY (GROSS VALUE)							
Total heating capacity	(3) kW	46,11	50,95	59,03	69,51	74,54	86,77
Total power input	(3) kW	14,11	15,52	18,10	21,35	22,90	26,67
COP	(3) kW/kW	3,270	3,290	3,260	3,263	3,253	3,254
HEATING ONLY (EN14511 VALUE)							
Total heating capacity	(3)(2) kW	46,40	51,30	59,40	69,90	74,90	87,30
COP	(3)(2) kW/kW	3,210	3,240	3,210	3,220	3,210	3,210
Cooling energy class	A	A	A	A	A	A	A
ENERGY EFFICIENCY							
SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281)							
Ambient refrigeration							
Prated,c	(10) kW	-	-	-	-	-	-
SEER	(10)(11)	-	-	-	-	-	-
Performance ηs	(10)(12) %	-	-	-	-	-	-
SEASONAL EFFICIENCY IN HEATING (Reg. EU 813/2013)							
PDesign	(4) kW	33,5	37,2	43,9	51,5	55,6	64,9
SCOP	(4)(13)	3,77	3,77	3,89	3,76	3,76	3,55
Performance ηs	(4)(14) %	148	148	153	147	147	140
Seasonal efficiency class	(15)	A+	A+	A++	A+	A+	-
EXCHANGERS							
HEAT EXCHANGER USER SIDE IN REFRIGERATION							
Water flow	(1) l/s	1,913	2,165	2,450	2,851	3,197	3,869
Pressure drop	(1) kPa	37,7	35,7	35,3	34,2	35,1	36,9
HEAT EXCHANGER USER SIDE IN HEATING							
Water flow	(3) l/s	2,226	2,459	2,849	3,355	3,598	4,189
Pressure drop	(3) kPa	51,0	46,0	47,8	47,4	44,5	43,2
REFRIGERANT CIRCUIT							
Compressors nr.	N°	2	2	2	2	2	2
No. Circuits	N°	1	1	1	1	1	1
Refrigerant charge	kg	14,3	15,0	15,0	16,5	16,9	20,0
NOISE LEVEL							
Sound Pressure	(5) dB(A)	66	66	66	67	67	70
Sound power level in cooling	(6)(7) dB(A)	84	84	84	85	85	88
Sound power level in heating	(6)(8) dB(A)	84	84	84	85	85	88
SIZE AND WEIGHT							
Operating weight	(9) kg	590	640	640	670	670	800
A	(9) mm	2395	2395	2395	2395	2395	2825
B	(9) mm	1195	1195	1195	1195	1195	1195
H	(9) mm	1865	1865	1865	1865	1865	1980

Notes

- 1 Plant (side) cooling exchanger water (in/out) 12°C/7°C; Source (side) heat exchanger air (in) 35°C.
- 2 Values in compliance with EN14511
- 3 Plant (side) heat exchanger water (in/out) 40°C/45°C; Source (side) heat exchanger air (in) 7°C - 87% R.H.
- 4 Parameter calculated for LOW-TEMPERATURE application in AVERAGE climate conditions according to [REGULATION (EU) N. 813/2013]
- 5 Average sound pressure level at 1m distance, unit in a free field on a reflective surface; non-binding value calculated from the sound power level.
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Certified data in EUROVENT

NX-N /CA		0402P	0452P	0502P	0562P	0612P	0712P	0812P
Power supply	V/ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
PERFORMANCE								
COOLING ONLY (GROSS VALUE)								
Cooling capacity	(1) kW	102,2	116,2	130,9	152,5	169,7	197,7	219,5
Total power input	(1) kW	34,37	39,11	43,52	51,30	56,48	66,46	72,23
EER	(1) kW/kW	2,971	2,972	3,009	2,973	3,004	2,973	3,040
ESEER	(1) kW/kW	4,130	4,170	4,050	4,040	4,050	3,930	3,860
COOLING ONLY (EN14511 VALUE)								
Cooling capacity	(1)(2) kW	101,6	115,5	130,2	151,6	168,8	196,7	218,3
EER	(1)(2) kW/kW	2,900	2,900	2,950	2,900	2,940	2,910	2,970
ESEER	(1)(2) kW/kW	3,940	3,960	3,880	3,840	3,890	3,770	3,700
Cooling energy class	B	B	B	B	B	B	B	B
HEATING ONLY (GROSS VALUE)								
Total heating capacity	(3) kW	110,4	122,2	138,2	161,4	180,6	209,2	232,2
Total power input	(3) kW	33,87	37,61	42,39	49,67	55,59	64,39	71,18
COP	(3) kW/kW	3,257	3,250	3,259	3,247	3,248	3,248	3,261
HEATING ONLY (EN14511 VALUE)								
Total heating capacity	(3)(2) kW	111,1	123,0	139,0	162,4	181,6	210,3	233,7
COP	(3)(2) kW/kW	3,210	3,200	3,220	3,200	3,210	3,210	3,210
Cooling energy class	A	A	A	A	A	A	A	A
ENERGY EFFICIENCY								
SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281)								
Ambient refrigeration								
Prated,c	(10) kW	-	-	-	-	-	-	-
SEER	(10)(11)	-	-	-	-	-	-	-
Performance ηs	(10)(12) %	-	-	-	-	-	-	-
SEASONAL EFFICIENCY IN HEATING (Reg. EU 813/2013)								
PDesign	(4) kW	81,1	92,2	104	115	134	154	179
SCOP	(4)(13)	3,58	3,65	3,56	3,45	3,55	3,39	3,34
Performance ηs	(4)(14) %	140	143	139	135	139	133	131
Seasonal efficiency class	(15)	-	-	-	-	-	-	-
EXCHANGERS								
HEAT EXCHANGER USER SIDE IN REFRIGERATION								
Water flow	(1) l/s	4,885	5,558	6,260	7,294	8,117	9,453	10,50
Pressure drop	(1) kPa	50,1	52,8	51,8	58,3	51,7	54,2	66,8
HEAT EXCHANGER USER SIDE IN HEATING								
Water flow	(3) l/s	5,328	5,898	6,670	7,791	8,719	10,10	11,21
Pressure drop	(3) kPa	59,6	59,5	58,8	66,5	59,7	61,9	76,2
REFRIGERANT CIRCUIT								
Compressors nr.	N°	2	2	2	2	2	2	2
No. Circuits	N°	1	1	1	1	1	1	1
Refrigerant charge	kg	31,3	33,6	38,5	46,3	54,1	60,3	70,9
NOISE LEVEL								
Sound Pressure	(5) dB(A)	71	71	71	71	71	72	73
Sound power level in cooling	(6)(7) dB(A)	89	89	90	91	91	92	93
Sound power level in heating	(6)(8) dB(A)	89	89	90	91	91	92	93
SIZE AND WEIGHT								
Operating weight	(9) kg	1120	1170	1290	1790	1890	2150	2260
A	(9) mm	3360	3360	3980	4110	4110	5110	5110
B	(9) mm	1195	1195	1195	2220	2220	2220	2220
H	(9) mm	1980	1980	1980	2150	2150	2150	2150

Notes

- 1 Plant (side) cooling exchanger water (in/out) 12°C/7°C; Source (side) heat exchanger air (in) 35°C.
- 2 Values in compliance with EN14511
- 3 Plant (side) heat exchanger water (in/out) 40°C/45°C; Source (side) heat exchanger air (in) 7°C - 87% R.H.
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- 8 Sound power level in heating, outdoors.
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Certified data in EUROVENT

NX-N /LN-CA	0152P	0182P	0202P	0252P	0262P	0302P	0352P
Power supply	V/ph/Hz	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50
PERFORMANCE							
COOLING ONLY (GROSS VALUE)							
Cooling capacity	(1) kW	36,27	40,93	47,54	54,33	59,83	79,38
Total power input	(1) kW	14,64	16,94	19,49	21,98	25,21	26,81
EER	(1) kW/kW	2,486	2,420	2,436	2,468	2,373	2,963
ESEER	(1) kW/kW	3,980	3,900	4,140	3,890	3,830	4,120
COOLING ONLY (EN14511 VALUE)							
Cooling capacity	(1)(2) kW	36,10	40,70	47,30	54,00	59,50	79,00
EER	(1)(2) kW/kW	2,440	2,380	2,400	2,430	2,330	2,900
ESEER	(1)(2) kW/kW	3,810	3,760	3,970	3,750	3,700	3,960
Cooling energy class	E	E	E	E	E	B	C
HEATING ONLY (GROSS VALUE)							
Total heating capacity	(3) kW	46,11	50,95	59,03	69,51	74,54	86,77
Total power input	(3) kW	14,11	15,52	18,10	21,35	22,90	26,67
COP	(3) kW/kW	3,270	3,290	3,260	3,263	3,253	3,254
HEATING ONLY (EN14511 VALUE)							
Total heating capacity	(3)(2) kW	46,40	51,30	59,40	69,90	74,90	87,30
COP	(3)(2) kW/kW	3,210	3,240	3,210	3,220	3,210	3,210
Cooling energy class	A	A	A	A	A	A	A
ENERGY EFFICIENCY							
SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281)							
Ambient refrigeration							
Prated,c	(10) kW	-	-	-	-	-	-
SEER	(10)(11)	-	-	-	-	-	-
Performance ηs	(10)(12) %	-	-	-	-	-	-
SEASONAL EFFICIENCY IN HEATING (Reg. EU 813/2013)							
PDesign	(4) kW	33,5	37,2	43,9	51,5	55,6	64,9
SCOP	(4)(13)	3,77	3,77	3,89	3,76	3,76	3,55
Performance ηs	(4)(14) %	148	148	153	147	147	140
Seasonal efficiency class	(15)	A+	A+	A++	A+	A+	-
EXCHANGERS							
HEAT EXCHANGER USER SIDE IN REFRIGERATION							
Water flow	(1) l/s	1,734	1,957	2,274	2,598	2,861	3,796
Pressure drop	(1) kPa	31,0	29,1	30,4	28,4	28,1	35,5
HEAT EXCHANGER USER SIDE IN HEATING							
Water flow	(3) l/s	2,226	2,459	2,849	3,355	3,598	4,189
Pressure drop	(3) kPa	51,0	46,0	47,8	47,4	44,5	43,2
REFRIGERANT CIRCUIT							
Compressors nr.	N°	2	2	2	2	2	2
No. Circuits	N°	1	1	1	1	1	1
Refrigerant charge	kg	14,3	15,0	15,0	16,5	16,9	20,0
NOISE LEVEL							
Sound Pressure	(5) dB(A)	59	59	59	60	61	64
Sound power level in cooling	(6)(7) dB(A)	77	77	77	78	79	82
Sound power level in heating	(6)(8) dB(A)	78	78	78	79	80	83
SIZE AND WEIGHT							
Operating weight	(9) kg	600	640	650	710	720	840
A	(9) mm	2395	2395	2395	2395	2395	2825
B	(9) mm	1195	1195	1195	1195	1195	1195
H	(9) mm	1865	1865	1865	1865	1865	1980

Notes

- 1 Plant (side) cooling exchanger water (in/out) 12°C/7°C; Source (side) heat exchanger air (in) 35°C.
- 2 Values in compliance with EN14511
- 3 Plant (side) heat exchanger water (in/out) 40°C/45°C; Source (side) heat exchanger air (in) 7°C - 87% R.H.
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- 7 Sound power level in cooling, outdoors.
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Certified data in EUROVENT

NX-N /LN-CA		0402P	0452P	0502P	0562P	0612P	0712P	0812P
Power supply	V/ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
PERFORMANCE								
COOLING ONLY (GROSS VALUE)								
Cooling capacity	(1) kW	98,99	109,9	124,9	144,3	165,3	188,9	212,4
Total power input	(1) kW	34,53	39,69	43,65	50,06	55,75	63,77	70,06
EER	(1) kW/kW	2,870	2,768	2,858	2,880	2,968	2,961	3,030
ESEER	(1) kW/kW	4,090	4,120	4,040	4,010	4,120	3,950	3,910
COOLING ONLY (EN14511 VALUE)								
Cooling capacity	(1)(2) kW	98,40	109,3	124,3	143,5	164,5	188,0	211,3
EER	(1)(2) kW/kW	2,800	2,710	2,810	2,820	2,910	2,910	2,970
ESEER	(1)(2) kW/kW	3,900	3,930	3,890	3,820	3,970	3,800	3,760
Cooling energy class	C C C C B B B							
HEATING ONLY (GROSS VALUE)								
Total heating capacity	(3) kW	110,4	122,2	138,2	161,4	180,6	209,2	232,2
Total power input	(3) kW	33,87	37,61	42,39	49,67	55,59	64,39	71,18
COP	(3) kW/kW	3,257	3,250	3,259	3,247	3,248	3,248	3,261
HEATING ONLY (EN14511 VALUE)								
Total heating capacity	(3)(2) kW	111,1	123,0	139,0	162,4	181,6	210,3	233,7
COP	(3)(2) kW/kW	3,210	3,200	3,220	3,200	3,210	3,210	3,210
Cooling energy class	A A A A A A A							
ENERGY EFFICIENCY								
SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281)								
Ambient refrigeration								
Prated,c	(10) kW	-	-	-	-	-	-	-
SEER	(10)(11)	-	-	-	-	-	-	-
Performance ηs	(10)(12) %	-	-	-	-	-	-	-
SEASONAL EFFICIENCY IN HEATING (Reg. EU 813/2013)								
PDesign	(4) kW	81,1	92,2	104	115	134	154	179
SCOP	(4)(13)	3,58	3,65	3,56	3,45	3,55	3,39	3,34
Performance ηs	(4)(14) %	140	143	139	135	139	133	131
Seasonal efficiency class	(15)	-	-	-	-	-	-	-
EXCHANGERS								
HEAT EXCHANGER USER SIDE IN REFRIGERATION								
Water flow	(1) l/s	4,734	5,256	5,971	6,900	7,906	9,034	10,16
Pressure drop	(1) kPa	47,0	47,3	47,1	52,1	49,1	49,5	62,6
HEAT EXCHANGER USER SIDE IN HEATING								
Water flow	(3) l/s	5,328	5,898	6,670	7,791	8,719	10,10	11,21
Pressure drop	(3) kPa	59,6	59,5	58,8	66,5	59,7	61,9	76,2
REFRIGERANT CIRCUIT								
Compressors nr.	N°	2	2	2	2	2	2	2
No. Circuits	N°	1	1	1	1	1	1	1
Refrigerant charge	kg	31,3	33,6	38,5	46,3	54,1	60,3	70,9
NOISE LEVEL								
Sound Pressure	(5) dB(A)	66	66	65	65	65	66	67
Sound power level in cooling	(6)(7) dB(A)	84	84	84	85	85	86	87
Sound power level in heating	(6)(8) dB(A)	85	85	86	86	86	87	88
SIZE AND WEIGHT								
Operating weight	(9) kg	1130	1190	1300	1800	1900	2160	2270
A	(9) mm	3360	3360	3980	4110	4110	5110	5110
B	(9) mm	1195	1195	1195	2220	2220	2220	2220
H	(9) mm	1980	1980	1980	2150	2150	2150	2150

Notes

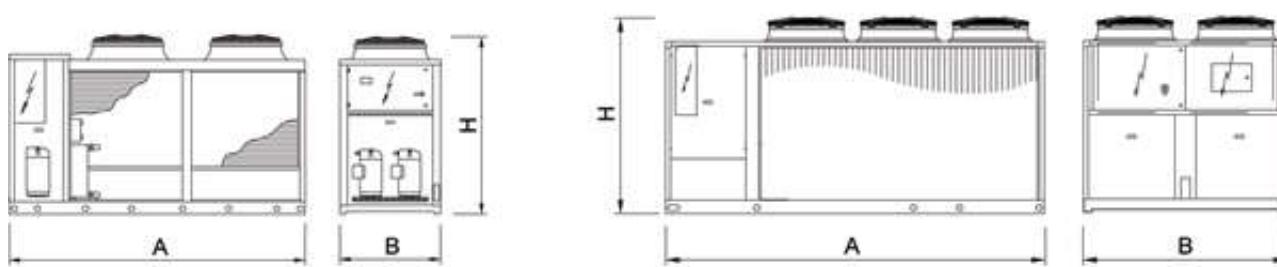
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- 2 Values in compliance with EN14511
- 3 Plant (side) heat exchanger water (in/out) 40°C/45°C; Source (side) heat exchanger air (in) 7°C - 87% R.H.
- 4 Parameter calculated for LOW-TEMPERATURE application in AVERAGE climate conditions according to [REGULATION (EU) N. 813/2013]
- 5 Average sound pressure level at 1m distance, unit in a free field on a reflective surface; non-binding value calculated from the sound power level.
- 6 Sound power on the basis of measurements made in compliance with ISO 9614.

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Certified data in EUROVENT

- 7 Sound power level in cooling, outdoors.
- 8 Sound power level in heating, outdoors.
- 9 Unit in standard configuration/execution, without optional accessories.
- 10 Parameter calculated according to [REGULATION (EU) N. 2016/2281]
- 11 Seasonal energy efficiency ratio
- 12 Seasonal space cooling energy efficiency
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- 14 Seasonal space heating energy efficiency
- 15 Energy efficiency class referred to LOW-TEMPERATURE application in AVERAGE climate conditions according to [REGULATION (EU) N. 811/2013]

Dimensional drawing







Outdoor reversible unit for the production of chilled/hot water with hermetic rotary Scroll compressors, ozone-friendly refrigerant R410A, axial-flow fans, copper tubes aluminum fins air coils, braze-welded plate-type exchanger and thermostatic expansion valve. External panels in pre-clad sheet steel and base in galvanised steel with paint finish. The range is composed by units equipped with four compressors in tandem configuration on two independent refrigerant circuits.

Control



W3000SE Compact

W3000SE Compact offers advanced functions and algorithms. The keypad features an easy-to-use interface and a LCD display, allowing to consult and intervene on the unit by means of a multi-level menu, with selectable language setting. Regulation based on the exclusive QuickMind algorithm, including self-adaptive control logics, beneficial in low water content systems. As alternatives the proportional- or proportional-integral regulations are also available.

The diagnostics includes a complete alarm management, with the "black-box" and alarm logging functions for enhanced analysis of the unit operation.

For multiple units' systems, the regulation of the resources, via optional proprietary devices, can be implemented. Energy metering, for both consumption and capacity, can also be developed. Supervision can be easily developed via proprietary devices or the integration in third party systems by means of the most common protocols as ModBus, Bacnet, Bacnet-over-IP, Echelon LonWorks.

- Compatibility with the remote keyboard managing up to 10 units.

- Internal real time clock available for operation scheduling (4-day profiles with 10 hour belts).

The defrost adopts a proprietary self-adaptive logic, which features the monitoring of numerous operational parameters. This allows to reduce the number and duration of the defrost cycles, with a benefit for the overall energy efficiency.

Refrigerant

Versions

K	Key efficiency, compact version	SL-K	Super Low noise, Key efficiency and compact version
LN-K	Low Noise, Key efficiency and compact version		

Configurations

- Basic function	D Partial condensing heat recovery function
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Features

REFRIGERANT GAS R410A

The use of R410A allowed to achieve better energy efficiencies with environment full respect (ODP = 0)

INTEGRATED HYDRONIC GROUP

The optional built-in hydronic module already contains the main water circuit components; it is available with single or twin in-line, for achieving both low or high head.

Accessories

- Set-up for remote connectivity with ModBus/Echelon protocol cards
- Remote control keyboard (distance to 200m and to 500m)
- Soft starters
- Rubber anti-vibration mounting kit. Spring anti-vibration mounting kit (4 compressors models only)

NX-N / K	0604P	0704P	0804P	0904P	1004P	1104P	1204P
Power supply	V/ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
PERFORMANCE							
COOLING ONLY (GROSS VALUE)							
Cooling capacity	(1) kW	160,1	185,8	211,0	245,2	274,1	298,0
Total power input	(1) kW	56,89	67,41	75,89	88,76	99,42	106,4
EER	(1) kW/kW	2,814	2,757	2,780	2,761	2,758	2,801
ESEER	(1) kW/kW	3,870	4,010	4,070	3,950	3,990	4,050
COOLING ONLY (EN14511 VALUE)							
Cooling capacity	(1)(2) kW	159,4	185,0	210,1	244,1	272,9	296,9
EER	(1)(2) kW/kW	2,770	2,710	2,740	2,720	2,710	2,760
ESEER	(1)(2) kW/kW	3,700	3,830	3,890	3,770	3,810	3,880
Cooling energy class	C	C	C	C	C	C	C
HEATING ONLY (GROSS VALUE)							
Total heating capacity	(3) kW	173,5	201,7	230,4	271,3	299,5	324,0
Total power input	(3) kW	56,39	66,40	75,45	89,20	98,31	105,7
COP	(3) kW/kW	3,076	3,038	3,056	3,041	3,047	3,065
HEATING ONLY (EN14511 VALUE)							
Total heating capacity	(3)(2) kW	174,4	202,6	231,5	272,7	301,0	325,4
COP	(3)(2) kW/kW	3,040	3,010	3,030	3,010	3,020	3,040
Cooling energy class	B	B	B	B	B	B	B
ENERGY EFFICIENCY							
SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281)							
Ambient refrigeration							
Prated,c	(10) kW	-	-	-	-	-	-
SEER	(10)(11)	-	-	-	-	-	-
Performance ηs	(10)(12) %	-	-	-	-	-	-
SEASONAL EFFICIENCY IN HEATING (Reg. EU 813/2013)							
PDesign	(4) kW	127	148	172	200	226	242
SCOP	(4)(13)	3,23	3,27	3,27	3,21	3,24	3,26
Performance ηs	(4)(14) %	126	128	128	125	126	127
Seasonal efficiency class	(15)	-	-	-	-	-	-
EXCHANGERS							
HEAT EXCHANGER USER SIDE IN REFRIGERATION							
Water flow	(1) l/s	7,655	8,885	10,09	11,73	13,11	14,25
Pressure drop	(1) kPa	42,5	43,2	44,9	49,2	49,2	43,7
HEAT EXCHANGER USER SIDE IN HEATING							
Water flow	(3) l/s	8,375	9,738	11,12	13,09	14,45	15,64
Pressure drop	(3) kPa	50,9	51,9	54,5	61,3	59,8	52,6
REFRIGERANT CIRCUIT							
Compressors nr.	N°	4	4	4	4	4	4
No. Circuits	N°	2	2	2	2	2	2
Refrigerant charge	kg	35,8	55,6	79,1	79,2	82,8	104
NOISE LEVEL							
Sound Pressure	(5) dB(A)	73	72	73	74	75	75
Sound power level in cooling	(6)(7) dB(A)	92	92	93	94	95	95
Sound power level in heating	(6)(8) dB(A)	92	92	93	94	95	95
SIZE AND WEIGHT							
Operating weight	(9) kg	1640	1990	2120	2360	2500	2850
A	(9) mm	3110	4110	4110	4110	4110	5110
B	(9) mm	2220	2220	2220	2220	2220	2220
H	(9) mm	2150	2150	2150	2150	2150	2150

Notes

- 1 Plant (side) cooling exchanger water (in/out) 12°C/7°C; Source (side) heat exchanger air (in) 35°C.
- 2 Values in compliance with EN14511
- 3 Plant (side) heat exchanger water (in/out) 40°C/45°C; Source (side) heat exchanger air (in) 7°C - 87% R.H.
- 4 Parameter calculated for LOW-TEMPERATURE application in AVERAGE climate conditions according to [REGULATION (EU) N. 813/2013]
- 5 Average sound pressure level at 1m distance, unit in a free field on a reflective surface; non-binding value calculated from the sound power level.
- 6 Sound power on the basis of measurements made in compliance with ISO 9614.
- 7 Sound power level in cooling, outdoors.
- 8 Sound power level in heating, outdoors.
- 9 Unit in standard configuration/execution, without optional accessories.
- 10 Parameter calculated according to [REGULATION (EU) N. 2016/2281]
- 11 Seasonal energy efficiency ratio
- 12 Seasonal space cooling energy efficiency
- 13 Seasonal coefficient of performance
- 14 Seasonal space heating energy efficiency
- 15 Energy efficiency class referred to LOW-TEMPERATURE application in AVERAGE climate conditions according to [REGULATION (EU) N. 811/2013]

The units highlighted in this publication contain HFC R410A [GWP₁₀₀ 2088] fluorinated greenhouse gases.

Certified data in EUROVENT

NX-N / LN-K		0604P	0704P	0804P	0904P	1004P	1104P	1204P
Power supply	V/ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
PERFORMANCE								
COOLING ONLY (GROSS VALUE)								
Cooling capacity	(1) kW	152,7	174,4	200,7	234,3	258,2	282,8	303,1
Total power input	(1) kW	56,90	68,54	78,32	90,02	101,4	108,7	119,2
EER	(1) kW/kW	2,684	2,546	2,563	2,603	2,546	2,602	2,543
ESEER	(1) kW/kW	3,960	4,080	4,120	4,080	4,020	4,060	4,050
COOLING ONLY (EN14511 VALUE)								
Cooling capacity	(1)(2) kW	152,0	173,7	199,9	233,4	257,2	281,8	301,9
EER	(1)(2) kW/kW	2,640	2,510	2,530	2,570	2,510	2,570	2,510
ESEER	(1)(2) kW/kW	3,780	3,900	3,950	3,900	3,860	3,910	3,880
Cooling energy class	D	D	D	D	D	D	D	D
HEATING ONLY (GROSS VALUE)								
Total heating capacity	(3) kW	165,4	192,2	221,4	255,0	283,8	310,1	329,1
Total power input	(3) kW	52,69	62,99	71,89	83,89	92,88	100,4	107,3
COP	(3) kW/kW	3,139	3,051	3,079	3,039	3,055	3,089	3,067
HEATING ONLY (EN14511 VALUE)								
Total heating capacity	(3)(2) kW	166,2	193,1	222,4	256,2	285,1	311,4	330,6
COP	(3)(2) kW/kW	3,110	3,020	3,050	3,010	3,030	3,060	3,040
Cooling energy class	B	B	B	B	B	B	B	B
ENERGY EFFICIENCY								
SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281)								
Ambient refrigeration								
Prated,c	(10) kW	-	-	-	-	-	-	-
SEER	(10)(11)	-	-	-	-	-	-	-
Performance ηs	(10)(12) %	-	-	-	-	-	-	-
SEASONAL EFFICIENCY IN HEATING (Reg. EU 813/2013)								
PDesign	(4) kW	126	132	170	196	223	239	257
SCOP	(4)(13)	3,34	3,30	3,51	3,37	3,38	3,42	3,43
Performance ηs	(4)(14) %	130	129	137	132	132	134	134
Seasonal efficiency class	(15)	-	-	-	-	-	-	-
EXCHANGERS								
HEAT EXCHANGER USER SIDE IN REFRIGERATION								
Water flow	(1) l/s	7,304	8,339	9,597	11,20	12,35	13,52	14,49
Pressure drop	(1) kPa	38,7	38,0	40,6	44,9	43,7	39,3	45,2
HEAT EXCHANGER USER SIDE IN HEATING								
Water flow	(3) l/s	7,982	9,279	10,69	12,31	13,70	14,97	15,88
Pressure drop	(3) kPa	46,2	47,1	50,3	54,2	53,7	48,2	54,3
REFRIGERANT CIRCUIT								
Compressors nr.	N°	4	4	4	4	4	4	4
No. Circuits	N°	2	2	2	2	2	2	2
Refrigerant charge	kg	35,8	55,6	79,1	79,2	82,8	104	104
NOISE LEVEL								
Sound Pressure	(5) dB(A)	67	66	67	68	69	70	70
Sound power level in cooling	(6)(7) dB(A)	86	86	87	88	89	90	90
Sound power level in heating	(6)(8) dB(A)	87	87	88	89	90	91	91
SIZE AND WEIGHT								
Operating weight	(9) kg	1690	2040	2170	2410	2550	2900	2930
A	(9) mm	3110	4110	4110	4110	4110	5110	5110
B	(9) mm	2220	2220	2220	2220	2220	2220	2220
H	(9) mm	2150	2150	2150	2150	2150	2150	2150

Notes

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- 2 Values in compliance with EN14511
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- 8 Sound power level in heating, outdoors.
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Certified data in EUROVENT

NX-N / SL-K	0604P	0704P	0804P	0904P	1004P	1104P	1204P
Power supply	V/ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
PERFORMANCE							
COOLING ONLY (GROSS VALUE)							
Cooling capacity	(1) kW	148,0	175,5	201,7	232,0	255,7	281,1
Total power input	(1) kW	57,83	68,54	78,93	88,21	100,4	110,5
EER	(1) kW/kW	2,561	2,562	2,556	2,630	2,547	2,544
ESEER	(1) kW/kW	4,070	4,070	4,110	4,120	4,120	4,090
COOLING ONLY (EN14511 VALUE)							
Cooling capacity	(1)(2) kW	147,4	174,8	200,9	231,1	254,7	280,1
EER	(1)(2) kW/kW	2,520	2,530	2,520	2,590	2,510	2,510
ESEER	(1)(2) kW/kW	3,900	3,890	3,930	3,930	3,950	3,920
Cooling energy class	D	D	D	D	D	D	D
HEATING ONLY (GROSS VALUE)							
Total heating capacity	(3) kW	160,2	193,0	223,2	256,8	282,7	307,3
Total power input	(3) kW	51,18	63,61	72,49	82,20	91,24	100,2
COP	(3) kW/kW	3,129	3,035	3,079	3,124	3,100	3,067
HEATING ONLY (EN14511 VALUE)							
Total heating capacity	(3)(2) kW	160,9	193,9	224,2	258,0	284,0	308,5
COP	(3)(2) kW/kW	3,100	3,010	3,050	3,090	3,070	3,040
Cooling energy class	B	B	B	B	B	B	B
ENERGY EFFICIENCY							
SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281)							
Ambient refrigeration							
Prated,c	(10) kW	-	-	-	-	-	-
SEER	(10)(11)	-	-	-	-	-	-
Performance ηs	(10)(12) %	-	-	-	-	-	-
SEASONAL EFFICIENCY IN HEATING (Reg. EU 813/2013)							
PDesign	(4) kW	125	135	172	197	219	239
SCOP	(4)(13)	3,45	3,24	3,47	3,54	3,46	3,40
Performance ηs	(4)(14) %	135	127	136	139	136	133
Seasonal efficiency class	(15)	-	-	-	-	-	-
EXCHANGERS							
HEAT EXCHANGER USER SIDE IN REFRIGERATION							
Water flow	(1) l/s	7,079	8,392	9,645	11,10	12,23	13,44
Pressure drop	(1) kPa	36,4	38,5	41,0	44,0	42,8	38,9
HEAT EXCHANGER USER SIDE IN HEATING							
Water flow	(3) l/s	7,734	9,316	10,78	12,40	13,65	14,83
Pressure drop	(3) kPa	43,4	47,5	51,2	55,0	53,3	47,3
REFRIGERANT CIRCUIT							
Compressors nr.	N°	4	4	4	4	4	4
No. Circuits	N°	2	2	2	2	2	2
Refrigerant charge	kg	35,8	59,6	79,1	79,2	82,8	104
NOISE LEVEL							
Sound Pressure	(5) dB(A)	63	63	63	64	65	66
Sound power level in cooling	(6)(7) dB(A)	82	83	83	84	85	86
Sound power level in heating	(6)(8) dB(A)	83	84	84	85	86	88
SIZE AND WEIGHT							
Operating weight	(9) kg	1690	2130	2260	2690	2830	3020
A	(9) mm	3110	4110	4110	5110	5110	5110
B	(9) mm	2220	2220	2220	2220	2220	2220
H	(9) mm	2150	2150	2150	2150	2150	2150

Notes

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Dimensional drawing

