

6 GENERAL TECHNICAL DATA

Data Book
DB_CV_NX2-W-G06-H 0042 - 0242_092023_EN
R454B

[SI System]

NX2-W-G06			0042	0052	0062	0072	0082	0092	0112	0122	0142	0162
Power supply		V/ph/Hz 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50										
PERFORMANCE												
PERFORMANCE MAX												
COOLING ONLY (GROSS VALUE)												
Cooling capacity	(1)(4)	kW	45,84	53,92	64,85	73,47	82,96	94,45	108,5	122,6	142,0	157,2
Total power input	(1)(4)	kW	10,04	11,34	13,18	14,94	16,13	18,48	21,38	23,89	27,78	31,48
EER	(1)(4)	kW/kW	4,580	4,770	4,909	4,933	5,155	5,103	5,070	5,130	5,108	4,990
HEATING ONLY (GROSS VALUE)												
Total heating capacity	(2)(4)	kW	53,53	62,61	73,37	83,31	92,62	105,4	121,3	136,8	158,9	176,7
Total power input	(2)(4)	kW	12,48	14,27	16,52	18,63	20,60	23,70	27,20	30,28	35,51	39,67
COP	(2)(4)	kW/kW	4,280	4,378	4,448	4,478	4,495	4,447	4,460	4,515	4,476	4,451
EXCHANGERS												
HEAT EXCHANGER USER SIDE IN COOLING												
Water flow	(1)(4)	l/s	2,192	2,579	3,101	3,513	3,967	4,517	5,188	5,865	6,788	7,519
Pressure drop at the heat exchanger	(1)(4)	kPa	36,4	39,4	25,3	24,8	25,1	25,2	27,4	27,7	28,2	28,4
HEAT EXCHANGER USER SIDE IN HEATING												
Water flow	(2)(4)	l/s	2,584	3,022	3,542	4,021	4,471	5,087	5,857	6,602	7,671	8,529
Pressure drop at the heat exchanger	(2)(4)	kPa	25,3	25,2	29,0	34,4	15,3	15,2	15,7	16,3	17,0	20,7
HEAT EXCHANGER SOURCE SIDE IN REFRIGERATION												
Water flow	(1)(4)	l/s	2,660	3,107	3,716	4,210	4,721	5,380	6,186	6,981	8,086	8,988
Pressure drop at the heat exchanger	(1)(4)	kPa	26,8	26,6	32,0	37,7	17,1	17,0	17,5	18,3	18,9	23,0
HEAT EXCHANGER SOURCE SIDE IN HEATING												
Water flow	(2)(4)	l/s	3,331	3,920	4,609	5,243	5,837	6,622	7,632	8,631	10,00	11,11
Pressure drop at the heat exchanger	(2)(4)	kPa	84,1	91,1	55,8	55,3	54,3	54,2	59,4	60,1	61,2	62,0
NOISE LEVEL												
Total sound Pressure	(7)(4)	dB(A)	57	58	59	61	61	63	63	63	69	70
Total sound power level in cooling	(1)(4)(8)	dB(A)	73	74	75	77	77	80	80	80	86	87
Sound power level in heating	(2)(4)(8)	dB(A)	74	75	76	78	78	81	81	81	87	88
SELEZIONE NOMINALE - DATI CERTIFICATI EUROVENT												
COOLING ONLY (EN14511 VALUE)												
Cooling capacity	(1)(3)(5)	kW	45,70	53,80	64,70	73,30	82,80	94,30	108,3	122,4	141,7	156,9
EER	(1)(3)(5)	kW/kW	4,390	4,560	4,740	4,720	5,000	4,970	4,930	4,980	4,960	4,830
HEATING ONLY (EN14511 VALUE)												
Total heating capacity	(2)(3)(5)	kW	53,60	62,70	73,50	83,50	92,70	105,5	121,5	136,9	159,1	176,9
COP	(2)(3)(5)	kW/kW	4,040	4,120	4,230	4,250	4,320	4,280	4,290	4,350	4,310	4,280
EXCHANGERS												
HEAT EXCHANGER USER SIDE IN COOLING												
Water flow	(1)(5)	l/s	2,192	2,579	3,101	3,513	3,967	4,517	5,188	5,865	6,788	7,519
Pressure drop at the heat exchanger	(1)(3)(5)	kPa	36,4	39,4	25,3	24,8	25,1	25,2	27,4	27,7	28,2	28,4
HEAT EXCHANGER USER SIDE IN HEATING												
Water flow	(2)(5)	l/s	2,584	3,022	3,542	4,021	4,471	5,087	5,857	6,602	7,671	8,529
Pressure drop at the heat exchanger	(2)(3)(5)	kPa	25,3	25,2	29,0	34,4	15,3	15,2	15,7	16,3	17,0	20,7
HEAT EXCHANGER SOURCE SIDE IN REFRIGERATION												
Water flow	(1)(5)	l/s	2,660	3,107	3,716	4,210	4,721	5,380	6,186	6,981	8,086	8,988
Pressure drop at the heat exchanger	(1)(3)(5)	kPa	26,8	26,6	32,0	37,7	17,1	17,0	17,5	18,3	18,9	23,0
HEAT EXCHANGER SOURCE SIDE IN HEATING												
Water flow	(2)(5)	l/s	3,331	3,920	4,609	5,243	5,837	6,622	7,632	8,631	10,00	11,11
Pressure drop at the heat exchanger	(2)(3)(5)	kPa	84,1	91,1	55,8	55,3	54,3	54,2	59,4	60,1	61,2	62,0
NOISE LEVEL												
Total sound Pressure	(7)(5)	dB(A)	57	58	59	61	61	63	63	63	69	70
Total sound power level in cooling	(1)(5)(8)	dB(A)	73	74	75	77	77	80	80	80	86	87
Sound power level in heating	(2)(5)(8)	dB(A)	74	75	76	78	78	81	81	81	87	88
REFRIGERANT CIRCUIT												
Compressors nr.		N°	2	2	2	2	2	2	2	2	2	2
Number of capacity steps		N°	2	2	2	2	2	2	2	2	2	2
No. Circuits		N°	1	1	1	1	1	1	1	1	1	1
Regulation			STEP	STEP	STEP	STEP	STEP	STEP	STEP	STEP	STEP	STEP
Min. capacity step		%	48	42	35	31	43	33	42	37	32	39
Refrigerant			R454B	R454B	R454B	R454B	R454B	R454B	R454B	R454B	R454B	R454B
Theoretical refrigerant charge	(10)	kg	3,40	4,70	5,00	6,00	7,20	8,60	9,90	11,3	12,5	13,3
Oil charge		kg	6,00	6,30	6,30	6,90	6,90	9,40	9,70	9,70	9,70	12,2
Rc (ASHRAE)	(6)(10)	kg/kW	0,08	0,09	0,08	0,08	0,09	0,09	0,09	0,09	0,09	0,09
SIZE AND WEIGHT												
A	(9)	mm	1370	1370	1370	1370	1370	1750	1750	1750	1750	1750
B	(9)	mm	885	885	885	885	885	885	885	885	885	885
H	(9)	mm	1495	1495	1495	1495	1495	1805	1805	1805	1805	1805
Operating weight	(9)	kg	470	490	510	530	560	670	690	700	770	820

Notes:

1 Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°C; Source (side) heat exchanger water (in/out) 30,00°C/35,00°C.
2 User side exchanger hot water temperature (in/out) 40,00°C/45,00°C; Source side exchanger water temperature (in/out) 10,00°C/7,00°C (or the maximum calculated temperature coming from the maximum flow rate allowed)
3 Values in compliance with EN14511
4 Unit performance with inverter compressor at maximum speeds.
5 Unit performance with inverter compressor at nominal speed.

6 Rated in accordance with AHRI Standard 550/590

7 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.

8 Sound power on the basis of measurements taken in compliance with ISO 9614.

9 Unit in standard configuration, without optional accessories.

10 Nominal value, please refer always to the printed value on the unit data plate.

- Not available

Data certified in EUROVENT

GENERAL TECHNICAL DATA

Data Book
DB_CV_NX2-W-G06-H 0042 - 0242_092023_EN
R454B

[SI System]

NX2-W-G06		0182 0202 0222 0242				
Power supply		V/ph/Hz 400/3/50 400/3/50 400/3/50 400/3/50				
PERFORMANCE						
PERFORMANCE MAX						
COOLING ONLY (GROSS VALUE)						
Cooling capacity	(1)(4)	kW	184,6	200,2	217,8	242,1
Total power input	(1)(4)	kW	36,25	38,67	42,78	48,13
EER	(1)(4)	kW/kW	5,099	5,173	5,089	5,033
HEATING ONLY (GROSS VALUE)						
Total heating capacity	(2)(4)	kW	207,4	222,9	244,9	275,6
Total power input	(2)(4)	kW	45,64	48,79	53,93	59,93
COP	(2)(4)	kW/kW	4,548	4,568	4,544	4,601
EXCHANGERS						
HEAT EXCHANGER USER SIDE IN COOLING						
Water flow	(1)(4)	l/s	8,830	9,572	10,41	11,58
Pressure drop at the heat exchanger	(1)(4)	kPa	32,3	29,2	34,3	41,5
HEAT EXCHANGER USER SIDE IN HEATING						
Water flow	(2)(4)	l/s	10,01	10,76	11,82	13,30
Pressure drop at the heat exchanger	(2)(4)	kPa	21,4	22,7	23,5	29,6
HEAT EXCHANGER SOURCE SIDE IN REFRIGERATION						
Water flow	(1)(4)	l/s	10,52	11,38	12,41	13,82
Pressure drop at the heat exchanger	(1)(4)	kPa	23,7	25,3	26,0	31,9
HEAT EXCHANGER SOURCE SIDE IN HEATING						
Water flow	(2)(4)	l/s	13,10	14,11	15,48	17,47
Pressure drop at the heat exchanger	(2)(4)	kPa	71,2	63,4	75,7	94,6
NOISE LEVEL						
Total sound Pressure	(7)(4)	dB(A)	70	70	72	72
Total sound power level in cooling	(1)(4)(8)	dB(A)	87	87	89	89
Sound power level in heating	(2)(4)(8)	dB(A)	88	88	90	90
SELEZIONE NOMINALE - DATI CERTIFICATI EUROVENT						
COOLING ONLY (EN14511 VALUE)						
Cooling capacity	(1)(3)(5)	kW	184,3	199,8	217,4	241,7
EER	(1)(3)(5)	kW/kW	4,920	5,000	4,910	4,840
HEATING ONLY (EN14511 VALUE)						
Total heating capacity	(2)(3)(5)	kW	207,6	223,2	245,3	275,9
COP	(2)(3)(5)	kW/kW	4,350	4,390	4,340	4,360
EXCHANGERS						
HEAT EXCHANGER USER SIDE IN COOLING						
Water flow	(1)(5)	l/s	8,830	9,572	10,41	11,58
Pressure drop at the heat exchanger	(1)(3)(5)	kPa	32,3	29,2	34,3	41,5
HEAT EXCHANGER USER SIDE IN HEATING						
Water flow	(2)(5)	l/s	10,01	10,76	11,82	13,30
Pressure drop at the heat exchanger	(2)(3)(5)	kPa	21,4	22,7	23,5	29,6
HEAT EXCHANGER SOURCE SIDE IN REFRIGERATION						
Water flow	(1)(5)	l/s	10,52	11,38	12,41	13,82
Pressure drop at the heat exchanger	(1)(3)(5)	kPa	23,7	25,3	26,0	31,9
HEAT EXCHANGER SOURCE SIDE IN HEATING						
Water flow	(2)(5)	l/s	13,10	14,11	15,48	17,47
Pressure drop at the heat exchanger	(2)(3)(5)	kPa	71,2	63,4	75,7	94,6
NOISE LEVEL						
Total sound Pressure	(7)(5)	dB(A)	70	70	72	72
Total sound power level in cooling	(1)(5)(8)	dB(A)	87	87	89	89
Sound power level in heating	(2)(5)(8)	dB(A)	88	88	90	90
REFRIGERANT CIRCUIT						
Compressors nr.		N°	2	2	2	2
Number of capacity steps		N°	2	2	2	2
No. Circuits		N°	1	1	1	1
Regulation		STEP	STEP	STEP	STEP	
Min. capacity step		%	33	37	44	49
Refrigerant			R454B	R454B	R454B	R454B
Theoretical refrigerant charge	(10)	kg	16,3	19,3	19,7	19,8
Oil charge		kg	12,2	12,2	12,2	12,2
Rc (ASHRAE)	(6)(10)	kg/kW	0,09	0,10	0,09	0,08
SIZE AND WEIGHT						
A	(9)	mm	1750	1750	1750	1750
B	(9)	mm	885	885	885	885
H	(9)	mm	1805	1805	1805	1805
Operating weight	(9)	kg	860	890	960	970

Notes:

- 1 Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°C; Source (side) heat exchanger water (in/out) 30,00°C/35,00°C.
- 2 User side exchanger hot water temperature (in/out) 40,00°C/45,00°C; Source side exchanger water temperature (in/out) 10,00°C/7,00°C (or the maximum calculated temperature coming from the maximum flow rate allowed)
- 3 Values in compliance with EN14511
- 4 Unit performance with inverter compressor at maximum speeds.
- 5 Unit performance with inverter compressor at nominal speed.

6 Rated in accordance with AHRI Standard 550/590

7 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.

8 Sound power on the basis of measurements taken in compliance with ISO 9614.

9 Unit in standard configuration, without optional accessories.

10 Nominal value, please refer always to the printed value on the unit data plate.

- Not available

Data certified in EUROVENT

7 TECHNICAL DATA SEASONAL EFFICIENCY IN HEATING (EN14825 VALUE)

ELCA_Engine ver.4.8.0.0

Data Book
DB_CV_NX2-W-G06-H 0042 - 0242_092023_EN
R454B

[SI System]

NX2-W-G06 - LOW TEMPERATURE application			0042	0052	0062	0072	0082	0092
Power supply	(V/ph/Hz)		400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
WEATHER CONDITIONS - AVERAGE								
Rated heat output at Tdesignh	(1)(2)	kW	63	74	87	99	110	125
Bivalent temperature	(1)(2)	°C	-7	-7	-7	-7	-7	-7
SCOP	(1)(2)		6,29	6,54	6,74	6,71	6,87	6,89
Seasonal space heating energy efficiency	(1)(2)	%	243	254	262	261	267	268
Seasonal space heating energy efficiency class	(1)(2)		A+++	A+++	-	-	-	-

1 Seasonal space heating energy efficiency class LOW TEMPERATURE [REGULATION (EU) N. 813/2013]

2 Type of calculation with variable flow and variable temperature.

NX2-W-G06 - MEDIUM TEMPERATURE application			0042	0052	0062	0072	0082	0092
Power supply	(V/ph/Hz)		400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
WEATHER CONDITIONS - AVERAGE								
Rated heat output at Tdesignh	(1)(2)	kW	59	69	80	91	101	115
Bivalent temperature	(1)(2)	°C	-7	-7	-7	-7	-7	-7
SCOP	(1)(2)		4,48	4,64	4,76	4,78	4,97	4,93
Seasonal space heating energy efficiency	(1)(2)	%	171	178	182	183	191	189
Seasonal space heating energy efficiency class	(1)(2)		A+++	A+++	-	-	-	-

1 Seasonal space heating energy efficiency class MEDIUM TEMPERATURE [REGULATION (EU) N. 813/2013]

2 Type of calculation with variable flow and variable temperature.

Data certified in EUROVENT

NX2-W-G06 - LOW TEMPERATURE application			0112	0122	0142	0162	0182	0202
Power supply	(V/ph/Hz)		400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
WEATHER CONDITIONS - AVERAGE								
Rated heat output at Tdesignh	(1)(2)	kW	144	163	189	210	247	265
Bivalent temperature	(1)(2)	°C	-7	-7	-7	-7	-7	-7
SCOP	(1)(2)		6,83	6,83	6,83	6,78	6,81	6,81
Seasonal space heating energy efficiency	(1)(2)	%	265	265	265	263	264	264
Seasonal space heating energy efficiency class	(1)(2)		-	-	-	-	-	-

1 Seasonal space heating energy efficiency class LOW TEMPERATURE [REGULATION (EU) N. 813/2013]

2 Type of calculation with variable flow and variable temperature.

NX2-W-G06 - MEDIUM TEMPERATURE application			0112	0122	0142	0162	0182	0202
Power supply	(V/ph/Hz)		400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
WEATHER CONDITIONS - AVERAGE								
Rated heat output at Tdesignh	(1)(2)	kW	133	150	175	194	227	244
Bivalent temperature	(1)(2)	°C	-7	-7	-7	-7	-7	-7
SCOP	(1)(2)		4,93	4,93	4,94	4,86	4,89	4,97
Seasonal space heating energy efficiency	(1)(2)	%	189	189	190	186	188	191
Seasonal space heating energy efficiency class	(1)(2)		-	-	-	-	-	-

1 Seasonal space heating energy efficiency class MEDIUM TEMPERATURE [REGULATION (EU) N. 813/2013]

2 Type of calculation with variable flow and variable temperature.

Data certified in EUROVENT

TECHNICAL DATA SEASONAL EFFICIENCY IN HEATING (EN14825 VALUE)

ELCA_Engine ver.4.8.0.0

Data Book
DB_CV_NX2-W-G06-H 0042 - 0242_092023_EN
R454B

[SI System]

NX2-W-G06 - LOW TEMPERATURE application			0222	0242
Power supply	(V/ph/Hz)		400/3/50	400/3/50
WEATHER CONDITIONS - AVERAGE				
Rated heat output at Tdesignh	(1)(2)	kW	291	325
Bivalent temperature	(1)(2)	°C	-7	-7
SCOP	(1)(2)		7,13	6,61
Seasonal space heating energy efficiency	(1)(2)	%	277	256
Seasonal space heating energy efficiency class	(1)(2)		-	-

1 Seasonal space heating energy efficiency class LOW TEMPERATURE [REGULATION (EU) N. 813/2013]

2 Type of calculation with variable flow and variable temperature.

NX2-W-G06 - MEDIUM TEMPERATURE application			0222	0242
Power supply	(V/ph/Hz)		400/3/50	400/3/50
WEATHER CONDITIONS - AVERAGE				
Rated heat output at Tdesignh	(1)(2)	kW	269	302
Bivalent temperature	(1)(2)	°C	-7	-7
SCOP	(1)(2)		5,14	4,84
Seasonal space heating energy efficiency	(1)(2)	%	197	186
Seasonal space heating energy efficiency class	(1)(2)		-	-

1 Seasonal space heating energy efficiency class MEDIUM TEMPERATURE [REGULATION (EU) N. 813/2013]

2 Type of calculation with variable flow and variable temperature.

Data certified in EUROVENT

8 TECHNICAL DATA SEASONAL EFFICIENCY IN COOLING (EN14825 VALUE)

ELCA_Engine ver.4.8.0.0

Data Book
DB_CV_NX2-W-G06-H 0042 - 0242_092023_EN
R454B

[SI System]

ENERGY EFFICIENCY

SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281) Ambient refrigeration

NX2-W-G06			0042	0052	0062	0072	0082	0092	0112	0122	0142	0162
Prated,c	(1)	kW	45,7	53,8	64,7	73,3	82,8	94,3	108,3	122,4	141,7	156,9
SEER	(1) (2)	-	6,31	6,63	7,01	7,04	7,18	7,41	6,97	7,09	7,20	7,02
Performance η_s	(1) (3)	%	250,0	262,0	278,0	279,0	284,0	293,0	276,0	281,0	285,0	278,0
NX2-W-G06			0182	0202	0222	0242						
Prated,c	(1)	kW	184,3	199,8	217,4	241,7						
SEER	(1) (2)	-	7,22	7,17	7,13	6,80						
Performance η_s	(1) (3)	%	286,0	284,0	282,0	269,0						

Notes:

(1) Parameter calculated according to [REGULATION (EU) N. 2016/2281]

(2) Seasonal energy efficiency ratio

(3) Seasonal space cooling energy efficiency

The units highlighted in this publication contain R454B [GWP₁₀₀ 467] fluorinated greenhouse gases.