

6 GENERAL TECHNICAL DATA

Data Book

DB_CV_NX2-W-G06 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 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50										
PERFORMANCE												
COOLING ONLY (GROSS VALUE)												
Cooling capacity	(1)	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)	kW	10,04	11,34	13,18	14,94	16,13	18,48	21,38	23,89	27,78	31,48
EER	(1)	kW/kW	4,580	4,770	4,909	4,933	5,155	5,103	5,070	5,130	5,108	4,990
COOLING ONLY (EN14511 VALUE)												
Cooling capacity	(1)(2)	kW	45,70	53,80	64,70	73,30	82,80	94,30	108,3	122,4	141,7	156,9
EER	(1)(2)	kW/kW	4,390	4,560	4,740	4,720	5,000	4,970	4,930	4,980	4,960	4,830
Cooling energy class												
COOLING WITH PARTIAL RECOVERY												
Cooling capacity	(3)	kW	47,56	55,95	67,28	76,22	86,07	97,99	112,5	127,2	147,3	163,1
Total power input	(3)	kW	9,689	10,94	12,72	14,42	15,57	17,83	20,63	23,05	26,81	30,38
Desuperheater heating capacity	(3)	kW	4,337	4,897	5,693	6,455	6,968	7,982	9,233	10,32	12,00	13,60
COOLING WITH TOTAL HEAT RECOVERY												
Cooling capacity	(4)	kW	-	-	-	-	-	-	-	-	-	-
Total power input	(4)	kW	-	-	-	-	-	-	-	-	-	-
Recovery heat exchanger capacity	(4)	kW	-	-	-	-	-	-	-	-	-	-
EXCHANGERS												
HEAT EXCHANGER USER SIDE IN COOLING												
Water flow	(1)	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)	kPa	36,4	39,4	25,3	24,8	25,1	25,2	27,4	27,7	28,2	28,4
HEAT EXCHANGER SOURCE SIDE IN REFRIGERATION												
Water flow	(1)	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)	kPa	26,8	26,6	32,0	37,7	17,1	17,0	17,5	18,3	18,9	23,0
PARTIAL RECOVERY USER SIDE IN REFRIGERATION												
Water flow	(3)	l/s	0,209	0,236	0,275	0,312	0,336	0,385	0,446	0,498	0,579	0,656
Pressure drop at the heat exchanger	(3)	kPa	1,00	1,28	1,73	2,22	1,28	1,68	2,24	2,80	2,67	3,42
HEAT EXCHANGER RECOVERY USER SIDE IN REFRIGERATION												
Water flow	(4)	l/s	-	-	-	-	-	-	-	-	-	-
Pressure drop at the heat exchanger	(4)	kPa	-	-	-	-	-	-	-	-	-	-
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	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		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)	(5)	kg/kW	0,08	0,09	0,08	0,08	0,09	0,09	0,09	0,09	0,09	0,09
NOISE LEVEL												
Total sound Pressure	(6)	dB(A)	57	58	59	61	61	63	63	63	69	70
Total sound power level in cooling	(7)(8)	dB(A)	73	74	75	77	77	80	80	80	86	87
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 Values in compliance with EN14511
 3 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; Plant (side) heat exchanger recovery water (in/out): <10035>/<10036>.
 4 Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°C; Plant (side) heat exchanger recovery water (in/out) <10035>/<10036>.

5 Rated in accordance with AHRI Standard 550/590
 6 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.
 7 Sound power on the basis of measurements taken in compliance with ISO 9614.
 8 Sound power level in cooling, indoors.
 9 Unit in standard configuration, without optional accessories.
 - Not available
 Data certified in EUROVENT

GENERAL TECHNICAL DATA

Data Book

DB_CV_NX2-W-G06 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					
COOLING ONLY (GROSS VALUE)					
Cooling capacity	(1)	kW	184,6	200,2	217,8 242,1
Total power input	(1)	kW	36,25	38,67	42,78 48,13
EER	(1)	kW/kW	5,099	5,173	5,089 5,033
COOLING ONLY (EN14511 VALUE)					
Cooling capacity	(1)(2)	kW	184,3	199,8	217,4 241,7
EER	(1)(2)	kW/kW	4,920	5,000	4,910 4,840
Cooling energy class		- - -			
COOLING WITH PARTIAL RECOVERY					
Cooling capacity	(3)	kW	191,6	207,7	225,9 251,2
Total power input	(3)	kW	34,98	37,32	41,28 46,44
Desuperheater heating capacity	(3)	kW	15,66	16,70	18,48 20,79
COOLING WITH TOTAL HEAT RECOVERY					
Cooling capacity	(4)	kW	-	-	- -
Total power input	(4)	kW	-	-	- -
Recovery heat exchanger capacity	(4)	kW	-	-	- -
EXCHANGERS					
HEAT EXCHANGER USER SIDE IN COOLING					
Water flow	(1)	l/s	8,830	9,572	10,41 11,58
Pressure drop at the heat exchanger	(1)	kPa	32,3	29,2	34,3 41,5
HEAT EXCHANGER SOURCE SIDE IN REFRIGERATION					
Water flow	(1)	l/s	10,52	11,38	12,41 13,82
Pressure drop at the heat exchanger	(1)	kPa	23,7	25,3	26,0 31,9
PARTIAL RECOVERY USER SIDE IN REFRIGERATION					
Water flow	(3)	l/s	0,756	0,806	0,892 1,003
Pressure drop at the heat exchanger	(3)	kPa	3,05	3,47	2,86 3,61
HEAT EXCHANGER RECOVERY USER SIDE IN REFRIGERATION					
Water flow	(4)	l/s	-	-	- -
Pressure drop at the heat exchanger	(4)	kPa	-	-	- -
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		kg	16,3	19,3	19,7 19,8
Oil charge		kg	12,2	12,2	12,2 12,2
Rc (ASHRAE)	(5)	kg/kW	0,09	0,10	0,09 0,08
NOISE LEVEL					
Total sound Pressure	(6)	dB(A)	70	70	72 72
Total sound power level in cooling	(7)(8)	dB(A)	87	87	89 89
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 Values in compliance with EN14511
 3 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; Plant (side) heat exchanger recovery water (in/out): <10035>/<10036>.
 4 Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°C; Plant (side) heat exchanger recovery water (in/out) <10035>/<10036>.

5 Rated in accordance with AHRI Standard 550/590
 6 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.
 7 Sound power on the basis of measurements taken in compliance with ISO 9614.
 8 Sound power level in cooling, indoors.
 9 Unit in standard configuration, without optional accessories.
 - Not available
 Data certified in EUROVENT

7 TECHNICAL DATA SEASONAL EFFICIENCY IN COOLING (EN14825 VALUE)

Data Book

DB_CV_NX2-W-G06 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	6,98	7,18	7,37	6,97	7,09	7,15	7,02
Performance η_s	(1) (3)	%	250,0	262,0	277,0	276,0	284,0	292,0	276,0	281,0	283,0	278,0
NX2-W-G06			0182	0202	0222	0242						
Prated,c	(1)	kW	184,3	199,8	217,4	241,7						
SEER	(1) (2)	-	7,17	7,17	7,13	6,80						
Performance η_s	(1) (3)	%	284,0	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.

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

High temperature process cooling

NX2-W-G06			0042	0052	0062	0072	0082	0092	0112	0122	0142	0162
Prated,c	(1)	kW	45,70	53,78	64,70	73,30	82,80	94,29	108,28	122,40	141,70	156,90
SEPR HT	(1) (3)	-	7,65	7,90	8,20	7,92	8,23	8,48	8,26	8,20	8,27	8,08
NX2-W-G06			0182	0202	0222	0242						
Prated,c	(1)	kW	184,27	199,79	217,40	241,70						
SEPR HT	(1) (3)	-	8,51	8,22	8,68	8,06						

SEASONAL EFFICIENCY IN COOLING (Reg. EU 2015/1095)

Process refrigeration at medium temperature

NX2-W-G06			0042	0052	0062	0072	0082	0092	0112	0122	0142	0162
Prated,c	(2)	kW	22,60	26,80	32,37	37,20	42,00	47,87	55,46	62,69	72,38	80,27
SEPR MT	(2) (3)	-	3,65	3,81	4,08	4,08	4,27	4,26	4,34	4,30	4,28	4,23
NX2-W-G06			0182	0202	0222	0242						
Prated,c	(2)	kW	94,60	102,60	111,48	124,20						
SEPR MT	(2) (3)	-	4,29	4,39	4,49	4,25						

Notes:

(1) Seasonal energy efficiency of high temperature process cooling [REGULATION (EU) N. 2016/2281]

(2) Seasonal Energy Efficiency of Process Cooling at Medium Temperature [REGULATION (EU) N. 2015/1095]

(3) Seasonal energy efficiency ratio

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

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