

6.1 GENERAL TECHNICAL DATA

i-NX-Q

[SI System]

i-NX-Q		0152P 0182P 0202P 0252P 0262P 0302P 0352P 0402P 0502P 0552P										
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/50 400/3+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	44,75	51,29	60,92	67,68	79,19	88,03	101,0	114,3	133,3	152,0
Total power input	(1)	kW	15,11	17,80	20,14	24,00	26,72	31,66	32,38	39,37	44,83	50,80
EER	(1)	kW/kW	2,960	2,882	3,030	2,821	2,966	2,776	3,117	2,901	2,975	2,992
ESEER	(1)	kW/kW										
COOLING ONLY (EN14511 VALUE)												
Cooling capacity	(1)(2)	kW	44,70	51,20	60,80	67,50	79,00	87,80	100,7	114,0	132,9	151,7
EER	(1)(2)	kW/kW	2,930	2,840	2,990	2,780	2,930	2,740	3,070	2,860	2,920	2,950
ESEER	(1)(2)	kW/kW	-	-	-	-	-	-	-	-	-	-
HEATING ONLY (GROSS VALUE)												
Total heating capacity	(3)	kW	48,01	55,96	66,13	73,93	85,50	95,24	108,0	122,5	143,3	164,8
Total power input	(3)	kW	14,92	17,47	20,43	23,35	25,68	29,25	31,75	36,81	42,81	49,26
COP	(3)	kW/kW	3,221	3,200	3,240	3,158	3,327	3,260	3,396	3,329	3,348	3,343
HEATING ONLY (EN14511 VALUE)												
Total heating capacity	(2)(3)	kW	48,10	56,10	66,30	74,10	85,70	95,50	108,3	122,9	143,6	165,2
COP	(2)(3)	kW/kW	3,190	3,160	3,210	3,120	3,290	3,220	3,350	3,280	3,300	3,290
COOLING WITH TOTAL HEAT RECOVERY												
Cooling capacity	(4)	kW	47,07	53,06	61,55	68,77	79,93	89,25	102,1	116,5	135,0	154,5
Total power input	(4)	kW	13,78	16,52	18,81	22,06	24,94	29,03	30,59	36,51	42,80	48,49
Recovery heat exchanger capacity	(4)	kW	60,02	68,59	79,23	89,50	103,4	116,5	130,8	150,8	175,3	200,1
TER		kW/kW	7,761	7,370	7,489	7,163	7,361	7,097	7,611	7,323	7,250	7,311
SEASONAL EFFICIENCY IN HEATING (Reg. EU 813/2013)												
PDesign	(5)	kW	-	-	-	-	-	-	-	-	-	-
SCOP	(5)		-	-	-	-	-	-	-	-	-	-
Performance ηs	(5)	%	-	-	-	-	-	-	-	-	-	-
Seasonal efficiency class	(5)		-	-	-	-	-	-	-	-	-	-
EXCHANGERS												
HEAT EXCHANGER USER SIDE IN REFRIGERATION												
Water flow	(1)	l/s	2,140	2,453	2,913	3,237	3,787	4,210	4,829	5,465	6,372	7,271
Pressure drop	(1)	kPa	25,0	32,9	26,1	32,3	29,4	36,3	34,1	41,0	43,4	42,1
HEAT EXCHANGER USER SIDE IN HEATING												
Water flow	(3)	l/s	2,317	2,701	3,192	3,569	4,127	4,597	5,214	5,914	6,917	7,957
Pressure drop	(3)	kPa	29,4	39,9	31,4	39,2	34,9	43,3	39,8	48,0	51,1	50,4
REFRIGERANT CIRCUIT												
Compressors nr.		N°	2	2	2	2	2	2	2	2	2	2
Number of capacity steps		N°	0	0	0	0	0	0	0	0	0	0
No. Circuits		N°	2	2	2	2	2	2	2	2	2	2
Regulation			STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS
Min. capacity step		%	-	-	-	-	-	-	-	-	-	-
Refrigerant			R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Refrigerant charge		kg	16,4	20,6	22,2	22,6	30,6	30,8	38,4	38,8	53,2	60,0
Oil charge		kg	4,60	4,60	4,60	4,60	7,20	7,20	13,4	13,4	13,4	13,4
Rc (ASHRAE)	(6)	kg/kW	0,37	0,41	0,37	0,34	0,39	0,35	0,38	0,34	0,40	0,40
NOISE LEVEL												
Sound Pressure	(7)	dB(A)	52	53	55	55	55	56	56	57	59	61
Sound power level in cooling	(8)(9)	dB(A)	84	85	87	87	87	88	88	89	91	93
Sound power level in heating	(8)(10)	dB(A)	84	85	87	87	87	88	88	89	91	93
SIZE AND WEIGHT												
A	(11)	mm	2000	2000	2625	2625	2625	2625	3250	3250	3875	4500
B	(11)	mm	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350
H	(11)	mm	2070	2070	2070	2070	2070	2070	2070	2070	2070	2070
Operating weight	(11)	kg	800	820	930	930	1050	1050	1290	1300	1480	1630

Notes:

1 Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°C; Source (side) heat exchanger air (in) 35,0°C.

2 Values in compliance with EN14511

3 Plant (side) heat exchanger water (in/out) 40,00°C/45,00°C; Source (side) heat exchanger air (in) 7,0°C - 87% R.H.

4 Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°C; Plant (side) heat exchanger water (in/out) 40,00°C/45,00°C.

5 Parameter calculated for LOW-TEMPERATURE application in AVERAGE climate conditions according to [REGULATION (EU) N. 813/2013]

6 Rated in accordance with AHRI Standard 550/590 (2011 with addendum 1).

7 Average sound pressure level at 10m 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 made in compliance with ISO 9614.

9 Sound power level in cooling, outdoors.

10 Sound power level in heating, outdoors.

11 Unit in standard configuration/execution, without optional accessories.

Certified data in EUROVENT

GENERAL TECHNICAL DATA

i-NX-Q/SL

[SI System]

i-NX-Q/SL		0152P 0182P 0202P 0252P 0262P 0302P 0352P 0402P 0502P 0552P										
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/50 400/3+N/50 400/3+N/50 400/3+N/50 400/3+N/50										
PERFORMANCE												
COOLING ONLY (GROSS VALUE)												
Cooling capacity	(1)	kW	45,67	52,46	56,36	63,00	71,07	84,20	89,71	105,2	120,2	138,7
Total power input	(1)	kW	13,96	17,05	18,51	22,46	25,78	29,00	30,59	36,92	43,64	49,30
EER	(1)	kW/kW	3,264	3,088	3,049	2,800	2,756	2,903	2,931	2,851	2,757	2,813
ESEER	(1)	kW/kW										
COOLING ONLY (EN14511 VALUE)												
Cooling capacity	(1)(2)	kW	45,60	52,30	56,30	62,90	70,90	84,00	89,50	105,0	119,9	138,4
EER	(1)(2)	kW/kW	3,230	3,030	3,010	2,770	2,730	2,870	2,900	2,810	2,720	2,780
ESEER	(1)(2)	kW/kW	-	-	-	-	-	-	-	-	-	-
HEATING ONLY (GROSS VALUE)												
Total heating capacity	(3)	kW	51,08	58,80	62,37	70,48	78,37	92,86	97,87	113,9	132,1	152,9
Total power input	(3)	kW	15,01	17,53	18,24	21,17	23,03	27,18	28,05	33,56	38,79	44,64
COP	(3)	kW/kW	3,407	3,360	3,429	3,325	3,409	3,415	3,484	3,390	3,405	3,428
HEATING ONLY (EN14511 VALUE)												
Total heating capacity	(2)(3)	kW	51,20	59,00	62,50	70,70	78,50	93,10	98,10	114,2	132,4	153,2
COP	(2)(3)	kW/kW	3,370	3,310	3,400	3,290	3,380	3,370	3,450	3,350	3,360	3,380
COOLING WITH TOTAL HEAT RECOVERY												
Cooling capacity	(4)	kW	46,14	53,06	57,75	65,22	75,09	84,65	94,59	109,4	126,4	145,5
Total power input	(4)	kW	13,78	16,52	17,25	20,42	22,95	26,96	27,75	33,52	39,50	44,93
Recovery heat exchanger capacity	(4)	kW	59,10	68,59	73,97	84,41	96,67	110,0	120,7	140,9	163,6	187,7
TER		kW/kW	7,623	7,370	7,613	7,333	7,470	7,207	7,773	7,469	7,342	7,421
SEASONAL EFFICIENCY IN HEATING (Reg. EU 813/2013)												
PDesign	(5)	kW	-	-	-	-	-	-	-	-	-	-
SCOP	(5)		-	-	-	-	-	-	-	-	-	-
Performance ηs	(5)	%	-	-	-	-	-	-	-	-	-	-
Seasonal efficiency class	(5)		-	-	-	-	-	-	-	-	-	-
EXCHANGERS												
HEAT EXCHANGER USER SIDE IN REFRIGERATION												
Water flow	(1)	l/s	2,184	2,509	2,695	3,013	3,399	4,027	4,290	5,031	5,746	6,632
Pressure drop	(1)	kPa	26,1	34,4	22,4	27,9	23,7	33,2	27,0	34,8	35,3	35,0
HEAT EXCHANGER USER SIDE IN HEATING												
Water flow	(3)	l/s	2,466	2,838	3,011	3,402	3,783	4,482	4,724	5,500	6,376	7,381
Pressure drop	(3)	kPa	33,2	44,0	27,9	35,6	29,3	41,1	32,7	41,6	43,4	43,3
REFRIGERANT CIRCUIT												
Compressors nr.		N°	2	2	2	2	2	2	2	2	2	2
Number of capacity steps		N°	0	0	0	0	0	0	0	0	0	0
No. Circuits		N°	2	2	2	2	2	2	2	2	2	2
Regulation		STEPLESS STEPLESS STEPLESS STEPLESS STEPLESS STEPLESS STEPLESS STEPLESS STEPLESS STEPLESS										
Min. capacity step		%	-	-	-	-	-	-	-	-	-	-
Refrigerant		R410A R410A R410A R410A R410A R410A R410A R410A R410A R410A										
Refrigerant charge		kg	26,7	27,3	27,8	29,2	31,2	43,8	40,6	45,8	53,4	60,0
Oil charge		kg	4,60	4,60	4,60	4,60	7,20	7,20	13,4	13,4	13,4	13,4
Rc (ASHRAE)	(6)	kg/kW	0,59	0,53	0,50	0,47	0,44	0,53	0,46	0,44	0,45	0,44
NOISE LEVEL												
Sound Pressure	(7)	dB(A)	47	47	48	49	49	50	50	51	53	55
Sound power level in cooling	(8)(9)	dB(A)	79	79	80	81	81	82	82	83	85	87
Sound power level in heating	(8)(10)	dB(A)	79	79	80	81	81	82	82	83	85	87
SIZE AND WEIGHT												
A	(11)	mm	2625	2625	2625	2625	2625	3250	3250	3250	3875	4500
B	(11)	mm	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350
H	(11)	mm	2070	2070	2070	2070	2070	2070	2070	2070	2070	2070
Operating weight	(11)	kg	960	960	990	990	1080	1210	1330	1440	1520	1660

Notes:

- 1 Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°C; Source (side) heat exchanger air (in) 35,0°C.
- 2 Values in compliance with EN14511
- 3 Plant (side) heat exchanger water (in/out) 40,00°C/45,00°C; Source (side) heat exchanger air (in) 7,0°C - 87% R.H.
- 4 Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°C; Plant (side) heat exchanger water (in/out) 40,00°C/45,00°C.
- 5 Parameter calculated for LOW-TEMPERATURE application in AVERAGE climate conditions according to [REGULATION (EU) N. 813/2013]
- 6 Rated in accordance with AHRI Standard 550/590 (2011 with addendum 1).
- 7 Average sound pressure level at 10m 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 made in compliance with ISO 9614.
- 9 Sound power level in cooling, outdoors.
- 10 Sound power level in heating, outdoors.
- 11 Unit in standard configuration/execution, without optional accessories.

Certified data in EUROVENT

7.1 TECHNICAL DATA SEASONAL EFFICIENCY IN HEATING (EN14825 VALUE)

i-NX-Q

[SI System]

i-NX-Q - LOW TEMPERATURE application			0152P	0182P	0202P	0252P	0262P	0302P
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
WEATHER CONDITIONS - WARMER								
Rated heat output at T _{designh}	(1)(2)	kW	37	44	52	58	68	75
Bivalent temperature	(1)(2)	°C	2	2	2	2	2	2
SCOP	(1)(2)		5,02	5,08	5,01	5,12	4,88	4,99
Seasonal space heating energy efficiency	(1)(2)	%	198	200	197	202	192	196
Seasonal space heating energy efficiency class	(1)(2)		-	-	-	-	-	-
WEATHER CONDITIONS - AVERAGE								
Rated heat output at T _{designh}	(1)(2)	kW	33	40	47	53	64	71
Bivalent temperature	(1)(2)	°C	-7	-7	-7	-7	-7	-7
SCOP	(1)(2)		3,85	3,97	3,87	3,97	3,94	3,96
Seasonal space heating energy efficiency	(1)(2)	%	151	156	152	156	155	155
Seasonal space heating energy efficiency class	(1)(2)		A++	A++	A++	A++	A++	-

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

2 Tipo di calcolo con portata variabile e temperatura variabile.

Certified data in EUROVENT

i-NX-Q - LOW TEMPERATURE application			0352P	0402P	0502P	0552P
Power supply	(V/ph/Hz)		400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50
WEATHER CONDITIONS - WARMER						
Rated heat output at T _{designh}	(1)(2)	kW	86	97	113	130
Bivalent temperature	(1)(2)	°C	2	2	2	2
SCOP	(1)(2)		5,10	5,17	5,20	5,25
Seasonal space heating energy efficiency	(1)(2)	%	201	204	205	207
Seasonal space heating energy efficiency class	(1)(2)		-	-	-	-
WEATHER CONDITIONS - AVERAGE						
Rated heat output at T _{designh}	(1)(2)	kW	81	91	107	123
Bivalent temperature	(1)(2)	°C	-7	-7	-7	-7
SCOP	(1)(2)		4,08	4,11	4,12	4,16
Seasonal space heating energy efficiency	(1)(2)	%	160	162	162	163
Seasonal space heating energy efficiency class	(1)(2)		-	-	-	-
WEATHER CONDITIONS - COLDER						
Rated heat output at T _{designh}	(1)(2)	kW	80	90	106	120
Bivalent temperature	(1)(2)	°C	-15	-15	-15	-15
SCOP	(1)(2)		3,40	3,41	3,42	3,42
Seasonal space heating energy efficiency	(1)(2)	%	133	134	134	134
Seasonal space heating energy efficiency class	(1)(2)		-	-	-	-

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

2 Tipo di calcolo con portata variabile e temperatura variabile.

**TECHNICAL DATA SEASONAL
EFFICIENCY IN HEATING (EN14825
VALUE)**

i-NX-Q/SL

[SI System]

i-NX-Q/SL - LOW TEMPERATURE application			0152P	0182P	0202P	0252P	0262P	0302P
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
WEATHER CONDITIONS - WARMER								
Rated heat output at T _{designh}	(1)(2)	kW	41	47	49	56	62	74
Bivalent temperature	(1)(2)	°C	2	2	2	2	2	2
SCOP	(1)(2)		4,92	4,94	5,03	5,05	4,89	5,02
Seasonal space heating energy efficiency	(1)(2)	%	194	195	198	199	192	198
Seasonal space heating energy efficiency class	(1)(2)		-	-	-	-	-	-
WEATHER CONDITIONS - AVERAGE								
Rated heat output at T _{designh}	(1)(2)	kW	37	43	45	52	59	70
Bivalent temperature	(1)(2)	°C	-7	-7	-7	-7	-7	-7
SCOP	(1)(2)		3,93	3,97	3,98	4,00	3,97	4,04
Seasonal space heating energy efficiency	(1)(2)	%	154	156	156	157	156	159
Seasonal space heating energy efficiency class	(1)(2)		A++	A++	A++	A++	A++	A++

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

2 Tipo di calcolo con portata variabile e temperatura variabile.

Certified data in EUROVENT

i-NX-Q/SL - LOW TEMPERATURE application			0352P	0402P	0502P	0552P
Power supply		(V/ph/Hz)	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50
WEATHER CONDITIONS - WARMER						
Rated heat output at T _{designh}	(1)(2)	kW	78	89	104	121
Bivalent temperature	(1)(2)	°C	2	2	2	2
SCOP	(1)(2)		5,09	5,15	5,13	5,15
Seasonal space heating energy efficiency	(1)(2)	%	201	203	202	203
Seasonal space heating energy efficiency class	(1)(2)		-	-	-	-
WEATHER CONDITIONS - AVERAGE						
Rated heat output at T _{designh}	(1)(2)	kW	74	79	97	115
Bivalent temperature	(1)(2)	°C	-7	-7	-7	-7
SCOP	(1)(2)		4,09	4,01	4,11	4,13
Seasonal space heating energy efficiency	(1)(2)	%	161	158	161	162
Seasonal space heating energy efficiency class	(1)(2)		-	-	-	-
WEATHER CONDITIONS - COLDER						
Rated heat output at T _{designh}	(1)(2)	kW	72	79	101	110
Bivalent temperature	(1)(2)	°C	-15	-15	-15	-15
SCOP	(1)(2)		3,41	3,36	3,45	3,45
Seasonal space heating energy efficiency	(1)(2)	%	133	131	135	135
Seasonal space heating energy efficiency class	(1)(2)		-	-	-	-

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

2 Tipo di calcolo con portata variabile e temperatura variabile.

8.1 TECHNICAL DATA SEASONAL EFFICIENCY IN COOLING (EN14825 VALUE)

[SI System]

ENERGY EFFICIENCY

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

i-NX-Q			0152P	0182P	0202P	0252P	0262P	0302P	0352P	0402P	0502P	0552P
Prated,c	(1)	kW	44,7	51,2	60,8	67,5	79,0	87,8	100,7	114,0	132,9	151,7
SEER	(1) (2)	-	4,28	4,39	4,40	4,36	4,24	4,16	4,41	4,33	4,44	4,47
Performance η_s	(1) (3)	%	168,0	173,0	173,0	171,0	167,0	163,0	173,0	170,0	175,0	176,0

i-NX-Q/SL			0152P	0182P	0202P	0252P	0262P	0302P	0352P	0402P	0502P	0552P
Prated,c	(1)	kW	45,6	52,3	56,3	62,9	70,9	84,0	89,5	105,0	119,9	138,4
SEER	(1) (2)	-	4,41	4,43	4,50	4,39	4,22	4,25	4,33	4,34	4,40	4,45
Performance η_s	(1) (3)	%	174,0	174,0	177,0	173,0	166,0	167,0	170,0	170,0	173,0	175,0

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 R410A [GWP₁₀₀ 2088] fluorinated greenhouse gases.

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