

5.1 GENERAL TECHNICAL DATA

NX-Q

[SI System]

NX-Q		0152P	0182P	0202P	0252P	0262P	0302P	0402P	0502P	0602P	
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	
PERFORMANCE											
COOLING ONLY (GROSS VALUE)											
Cooling capacity	(1)	kW	43,9	50,8	58,1	64,0	71,6	85,5	111	138	169
Total power input	(1)	kW	12,7	14,8	17,6	19,2	22,2	25,6	33,4	42,3	56,5
EER	(1)	kW/kW	3,46	3,43	3,30	3,33	3,23	3,34	3,31	3,26	2,98
ESEER	(1)	kW/kW	4,32	4,25	4,14	4,27	4,08	4,18	4,16	4,09	3,78
COOLING ONLY (EN14511 VALUE)											
Cooling capacity	(1)(2)	kW	43,8	50,6	57,9	63,8	71,4	85,2	110	137	168
EER	(1)(2)	kW/kW	3,41	3,38	3,26	3,28	3,18	3,29	3,27	3,21	2,94
ESEER	(1)(2)	kW/kW	4,17	4,11	4,02	4,15	3,97	4,05	4,03	3,97	3,68
HEATING ONLY (GROSS VALUE)											
Total heating capacity	(3)	kW	46,4	53,2	60,6	67,3	75,2	90,1	115	145	177
Total power input	(3)	kW	13,5	15,3	17,5	19,3	21,4	25,6	32,7	41,3	52,1
COP	(3)	kW/kW	3,44	3,48	3,46	3,49	3,51	3,52	3,52	3,51	3,40
HEATING ONLY (EN14511 VALUE)											
Total heating capacity	(2)(3)	kW	46,6	53,4	60,8	67,6	75,5	90,4	116	145	178
COP	(2)(3)	kW/kW	3,41	3,44	3,43	3,46	3,48	3,49	3,49	3,47	3,37
COOLING WITH TOTAL HEAT RECOVERY											
Cooling capacity	(4)	kW	44,0	51,1	58,9	64,3	73,1	86,9	112	140	176
Total power input	(4)	kW	11,6	13,4	15,7	17,3	19,8	23,4	30,5	39,5	50,7
Recovery heat exchanger capacity	(4)	kW	54,9	63,7	73,7	80,5	91,7	109	141	177	224
TER		kW/kW	8,53	8,57	8,45	8,37	8,32	8,37	8,28	8,01	7,90
SEASONAL EFFICIENCY IN HEATING (Reg. UE 811/2013)											
PDesign	(5)	kW	33,2	38,2	43,6	49,4	55,6	65,8	83,0	106	135
SCOP	(5)		3,59	3,60	3,63	3,75	3,77	3,71	3,69	3,66	3,64
Performance ηs	(5)	%	141	141	142	147	148	145	144	143	143
Seasonal efficiency class	(5)		A+	A+	A+	A+	A+	A+	-	-	-
EXCHANGERS											
HEAT EXCHANGER USER SIDE IN REFRIGERATION											
Water flow	(1)	l/s	2,10	2,43	2,78	3,06	3,42	4,09	5,29	6,59	8,06
Pressure drop	(1)	kPa	14,7	19,7	15,8	19,2	17,1	19,4	22,3	26,2	31,8
HEAT EXCHANGER USER SIDE IN HEATING											
Water flow	(3)	l/s	2,24	2,57	2,93	3,25	3,63	4,35	5,56	6,99	8,56
Pressure drop	(3)	kPa	16,7	21,9	17,5	21,6	19,3	21,9	24,6	29,5	35,9
REFRIGERANT CIRCUIT											
Compressors nr.		N°	2	2	2	2	2	2	2	2	2
Number of capacity steps		N°	2	2	2	2	2	2	2	2	2
No. Circuits		N°	2	2	2	2	2	2	2	2	2
Regulation			STEPS	STEPS	STEPS	STEPS	STEPS	STEPS	STEPS	STEPS	STEPS
Min. capacity step		%	50	50	50	50	50	50	50	50	50
Refrigerant			R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Refrigerant charge		kg	20,8	22,4	22,9	30,2	30,9	37,2	53,2	64,8	66,6
Oil charge		kg	3,50	5,00	5,00	6,50	6,50	6,80	9,30	13,6	12,6
Rc (ASHRAE)	(6)	kg/kW	0,48	0,44	0,40	0,48	0,44	0,44	0,49	0,47	0,40
NOISE LEVEL											
Sound Pressure	(7)	dB(A)	53	53	53	53	53	54	55	56	56
Sound power level in cooling	(8)(9)	dB(A)	85	85	85	85	85	86	87	88	88
Sound power level in heating	(8)(10)	dB(A)	85	85	85	85	85	86	87	88	88
SIZE AND WEIGHT											
A	(11)	mm	2625	2625	2625	2625	2625	3250	3875	4500	4500
B	(11)	mm	1350	1350	1350	1350	1350	1350	1350	1350	1350
H	(11)	mm	2070	2070	2070	2070	2070	2070	2070	2070	2070
Operating weight	(11)	kg	850	870	890	960	970	1130	1430	1670	1730

Notes:

- 1 Plant (side) cooling exchanger water (in/out) 12,0°C/7,0°C; Source (side) heat exchanger air (in) 35,0°C.
 - 2 Values in compliance with EN14511-3:2013.
 - 3 Plant (side) heat exchanger water (in/out) 40,0°C/45,0°C; Source (side) heat exchanger air (in) 7,0°C - 87% R.H.
 - 4 Plant (side) cooling exchanger water (in/out) 12,0°C/7,0°C; Plant (side) heat exchanger water (in/out) 40,0°C/45,0°C.
 - 5 Seasonal space heating energy efficiency class LOW TEMPERATURE in AVERAGE climate conditions [REGULATION (UE) N. 811/2013]
 - 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.
- Not available



GENERAL TECHNICAL DATA

NX-Q /SL

[SI System]

NX-Q /SL		0152P	0182P	0202P	0252P	0262P	0302P	0402P	0502P	
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	
PERFORMANCE										
COOLING ONLY (GROSS VALUE)										
Cooling capacity	(1)	kW	43,2	49,8	58,5	63,2	71,6	84,8	108	131
Total power input	(1)	kW	12,5	14,7	17,3	19,4	22,0	25,5	33,4	44,3
EER	(1)	kW/kW	3,46	3,39	3,38	3,26	3,25	3,33	3,25	2,95
ESEER	(1)	kW/kW	4,39	4,28	4,26	4,19	4,13	4,18	4,10	3,77
COOLING ONLY (EN14511 VALUE)										
Cooling capacity	(1)(2)	kW	43,1	49,6	58,3	63,0	71,4	84,5	108	130
EER	(1)(2)	kW/kW	3,41	3,33	3,34	3,21	3,21	3,28	3,21	2,91
ESEER	(1)(2)	kW/kW	4,24	4,13	4,14	4,07	4,03	4,06	4,00	3,68
HEATING ONLY (GROSS VALUE)										
Total heating capacity	(3)	kW	46,5	53,3	62,2	67,1	76,8	91,1	116	141
Total power input	(3)	kW	12,9	14,7	17,3	19,1	21,3	25,2	32,3	40,0
COP	(3)	kW/kW	3,60	3,63	3,60	3,51	3,61	3,62	3,60	3,53
HEATING ONLY (EN14511 VALUE)										
Total heating capacity	(2)(3)	kW	46,7	53,5	62,4	67,4	77,1	91,4	117	142
COP	(2)(3)	kW/kW	3,57	3,59	3,56	3,48	3,57	3,58	3,57	3,50
COOLING WITH TOTAL HEAT RECOVERY										
Cooling capacity	(4)	kW	44,0	51,1	58,9	64,3	73,1	86,9	112	140
Total power input	(4)	kW	11,6	13,4	15,7	17,3	19,8	23,4	30,5	39,5
Recovery heat exchanger capacity	(4)	kW	54,9	63,7	73,7	80,5	91,7	109	141	177
TER		kW/kW	8,53	8,57	8,45	8,37	8,32	8,37	8,28	8,01
SEASONAL EFFICIENCY IN HEATING (Reg. UE 811/2013)										
PDesign	(5)	kW	33,2	38,6	45,5	48,9	56,4	66,7	84,3	105
SCOP	(5)		3,81	3,81	3,80	3,78	3,88	3,83	3,82	3,75
Performance ηs	(5)	%	150	150	149	148	152	150	150	147
Seasonal efficiency class	(5)		A++	A++	A+	A+	A++	A++	-	-
EXCHANGERS										
HEAT EXCHANGER USER SIDE IN REFRIGERATION										
Water flow	(1)	l/s	2,07	2,38	2,80	3,02	3,42	4,05	5,19	6,25
Pressure drop	(1)	kPa	14,2	18,9	16,0	18,7	17,1	19,0	21,4	23,6
HEAT EXCHANGER USER SIDE IN HEATING										
Water flow	(3)	l/s	2,25	2,57	3,00	3,24	3,71	4,40	5,62	6,82
Pressure drop	(3)	kPa	16,8	22,1	18,4	21,5	20,1	22,4	25,1	28,0
REFRIGERANT CIRCUIT										
Compressors nr.		N°	2	2	2	2	2	2	2	2
Number of capacity steps		N°	2	2	2	2	2	2	2	2
No. Circuits		N°	2	2	2	2	2	2	2	2
Regulation			STEPS	STEPS	STEPS	STEPS	STEPS	STEPS	STEPS	STEPS
Min. capacity step		%	50	50	50	50	50	50	50	50
Refrigerant			R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Refrigerant charge		kg	27,9	29,5	29,7	29,9	42,0	50,4	63,1	64,8
Oil charge		kg	3,50	5,00	5,00	6,50	6,50	6,80	9,30	13,6
Rc (ASHRAE)	(6)	kg/kW	0,65	0,60	0,51	0,48	0,59	0,60	0,59	0,50
NOISE LEVEL										
Sound Pressure	(7)	dB(A)	47	47	48	48	48	49	50	52
Sound power level in cooling	(8)(9)	dB(A)	79	79	80	80	80	81	82	84
Sound power level in heating	(8)(10)	dB(A)	79	79	80	80	80	81	82	84
SIZE AND WEIGHT										
A	(11)	mm	2625	2625	3250	3250	3250	3875	4500	4500
B	(11)	mm	1350	1350	1350	1350	1350	1350	1350	1350
H	(11)	mm	2070	2070	2070	2070	2070	2070	2070	2070
Operating weight	(11)	kg	890	910	1000	1030	1090	1270	1610	1680

Notes:

- 1 Plant (side) cooling exchanger water (in/out) 12,0°C/7,0°C; Source (side) heat exchanger air (in) 35,0°C.
- 2 Values in compliance with EN14511-3:2013.
- 3 Plant (side) heat exchanger water (in/out) 40,0°C/45,0°C; Source (side) heat exchanger air (in) 7,0°C - 87% R.H.
- 4 Plant (side) cooling exchanger water (in/out) 12,0°C/7,0°C; Plant (side) heat exchanger water (in/out) 40,0°C/45,0°C.
- 5 Seasonal space heating energy efficiency class LOW TEMPERATURE in AVERAGE climate conditions [REGULATION (UE) N. 811/2013]
- 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.
- Not available



6.1 TECHNICAL DATA SEASONAL EFFICIENCY IN HEATING (EN14825 VALUE)

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 Tdesignh	(1)(2)	kW	37	42	48	54	60	72
Bivalent temperature	(1)(2)	°C	2	2	2	2	2	2
SCOP	(1)(2)		4,40	4,36	4,41	4,56	4,51	4,48
Seasonal space heating energy efficiency	(1)(2)	%	173	172	174	180	177	176
Seasonal space heating energy efficiency class	(1)(2)		-	-	-	-	-	-
WEATHER CONDITIONS - AVERAGE								
Rated heat output at Tdesignh	(1)(2)	kW	33	38	44	49	56	66
Bivalent temperature	(1)(2)	°C	-7	-7	-7	-7	-7	-7
SCOP	(1)(2)		3,59	3,60	3,63	3,75	3,77	3,71
Seasonal space heating energy efficiency	(1)(2)	%	141	141	142	147	148	145
Seasonal space heating energy efficiency class	(1)(2)		A+	A+	A+	A+	A+	A+

1 Seasonal space heating energy efficiency class LOW TEMPERATURE [REGULATION (UE) N. 811/2013]

2 Type of calculation with fixed flow and variable temperature.

Certified data in EUROVENT

NX-Q - LOW TEMPERATURE application			0402P	0502P	0602P
Power supply		(V/ph/Hz)	400/3+N/50	400/3+N/50	400/3+N/50
WEATHER CONDITIONS - WARMER					
Rated heat output at Tdesignh	(1)(2)	kW	92	115	140
Bivalent temperature	(1)(2)	°C	2	2	2
SCOP	(1)(2)		4,48	4,41	4,31
Seasonal space heating energy efficiency	(1)(2)	%	176	174	170
Seasonal space heating energy efficiency class	(1)(2)		-	-	-
WEATHER CONDITIONS - AVERAGE					
Rated heat output at Tdesignh	(1)(2)	kW	83	106	135
Bivalent temperature	(1)(2)	°C	-7	-7	-7
SCOP	(1)(2)		3,69	3,66	3,64
Seasonal space heating energy efficiency	(1)(2)	%	144	143	143
Seasonal space heating energy efficiency class	(1)(2)		-	-	-

1 Seasonal space heating energy efficiency class LOW TEMPERATURE [REGULATION (UE) N. 811/2013]

2 Type of calculation with fixed flow and variable temperature.



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

NX-Q /SL

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 Tdesignh	(1)(2)	kW	37	42	49	53	61	73
Bivalent temperature	(1)(2)	°C	2	2	2	2	2	2
SCOP	(1)(2)		4,66	4,61	4,60	4,62	4,66	4,63
Seasonal space heating energy efficiency	(1)(2)	%	184	181	181	182	183	182
Seasonal space heating energy efficiency class	(1)(2)		-	-	-	-	-	-
WEATHER CONDITIONS - AVERAGE								
Rated heat output at Tdesignh	(1)(2)	kW	33	39	45	49	56	67
Bivalent temperature	(1)(2)	°C	-7	-7	-7	-7	-7	-7
SCOP	(1)(2)		3,81	3,81	3,80	3,78	3,88	3,83
Seasonal space heating energy efficiency	(1)(2)	%	150	150	149	148	152	150
Seasonal space heating energy efficiency class	(1)(2)		A++	A++	A+	A+	A++	A++

1 Seasonal space heating energy efficiency class LOW TEMPERATURE [REGULATION (UE) N. 811/2013]

2 Type of calculation with fixed flow and variable temperature.

Certified data in EUROVENT

NX-Q /SL - LOW TEMPERATURE application			0402P	0502P
Power supply		(V/ph/Hz)	400/3+N/50	400/3+N/50
WEATHER CONDITIONS - WARMER				
Rated heat output at Tdesignh	(1)(2)	kW	92	112
Bivalent temperature	(1)(2)	°C	2	2
SCOP	(1)(2)		4,61	4,51
Seasonal space heating energy efficiency	(1)(2)	%	181	177
Seasonal space heating energy efficiency class	(1)(2)		-	-
WEATHER CONDITIONS - AVERAGE				
Rated heat output at Tdesignh	(1)(2)	kW	84	105
Bivalent temperature	(1)(2)	°C	-7	-7
SCOP	(1)(2)		3,82	3,75
Seasonal space heating energy efficiency	(1)(2)	%	150	147
Seasonal space heating energy efficiency class	(1)(2)		-	-

1 Seasonal space heating energy efficiency class LOW TEMPERATURE [REGULATION (UE) N. 811/2013]

2 Type of calculation with fixed flow and variable temperature.

