MITSUBISHI ELECTRIC

NX2-N

Air Source Heat Pump

Design for medium to large capacity commercial applications, the Climaveneta NX2-N heat pump range is the ideal solution for LTHW in a wide range of applications.

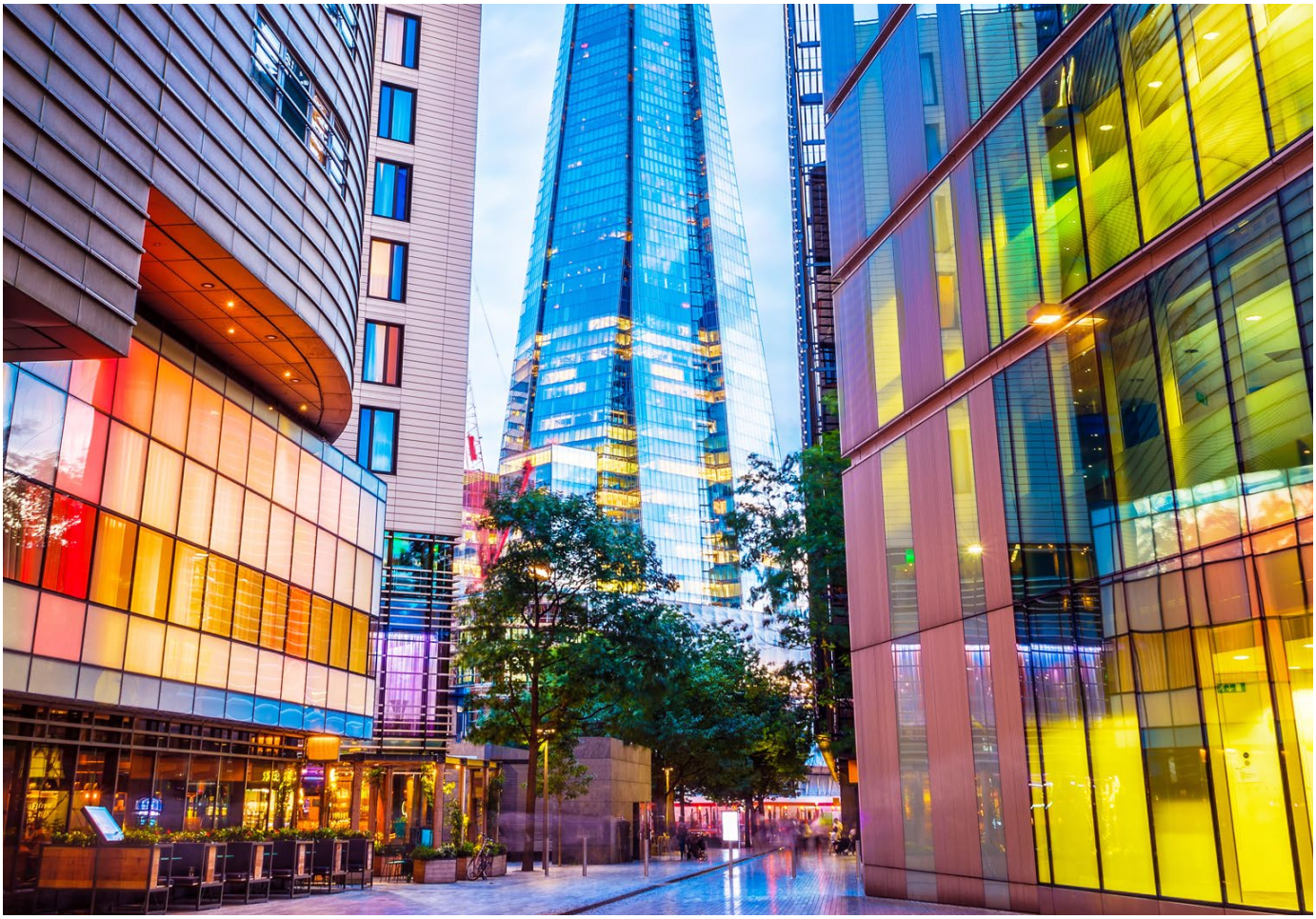
The unit is supplied fully factory tested, with site installation only requiring power and hydraulic connection.

CLIMAVENETA
SUSTAINABLE COMFORT

R454B

Key Features & Benefits:

- Low GWP R454B refrigerant
- Scroll compressors
- Wide capacity range
- Patented fan section layout



NX2-N Air Source Heat Pump

R454B

CLIMAVENETA
SUSTAINABLE COMFORT

MODEL		344	364	404	446	506	526	546
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	334.7	355	382.4	430.6	475.7	516.4	533.6
Total Power Input[*1]	kW	122.8	126.2	141.6	163	175.4	183.7	189.4
EER[*1]	kW/kW	2.73	2.81	3	2.64	2.71	2.81	2.82
COOLING ONLY (EN14511 VALUE)								
Cooling Capacity[*1*2]	kW	334.3	354.7	382	430.2	475.1	515.9	533.1
EER[*1*2]	kW/kW	2.69	2.78	2.67	2.62	2.68	2.78	2.79
SEER[*13]	kW/kW	3.93	4.04	4.07	4.01	3.93	4.07	4.1
Seasonal Space Cooling Energy Efficiency[*13]	%	154	159	160	157	154	160	161
HEATING ONLY (GROSS VALUE)								
Total Heating Capacity[*3]	kW	364.7	386.5	414.9	469.4	512.7	560.2	579.9
Total Power Input[*3]	kW	119.3	124.9	134.8	155.5	168.4	181.7	186.9
COP[*3]	kW/kW	3.06	3.09	3.08	3.02	3.05	3.08	3.10
HEATING ONLY (EN14511 VALUE)								
Total Heating Capacity[*3*2]	kW	365.2	387	415.4	470	513.3	560.7	580.5
COP[*3*2]	kW/kW	3.02	3.06	3.04	2.98	3	3.05	3.07
HEATING ONLY (EN14825 VALUE - AVERAGE CLIMATE)								
Rated Heating Capacity at Tdesign,h[*11*12]	kW	268	294	323	369	388	363	373
Bivalent Temperature[*11*12]	°C	-7	-7	-7	-7	-7	-10	-10
SCOP[*11*12]	kW/kW	3.6	3.7	3.73	3.66	3.53	3.49	3.53
Seasonal Space Heating Energy Efficiency[*11*12]	%	141	145	146	143	138	137	137
EXCHANGERS								
HEAT EXCHANGER USER SIDE IN COOLING								
Water Flow[*1]	l/s	16.01	16.98	18.29	20.59	22.75	24.7	25.52
Pressure Drop[*1]	kPa	48.1	38.5	44.7	43.4	53	43.5	46.4
HEAT EXCHANGER USER SIDE IN HEATING								
Water Flow[*1]	l/s	17.6	18.66	20.03	22.66	24.75	27.04	27.99
Pressure Drop[*1]	kPa	58.2	46.5	53.5	52.6	62.7	52.1	55.9
REFRIGERANT CIRCUIT								
Compressors	No.	4	4	4	6	6	6	6
Number of Capacity Steps	No.	4	4	4	6	6	6	6
No. Circuits	No.	2	2	2	3	3	3	3
Regulation		STEPS	STEPS	STEPS	STEPS	STEPS	STEPS	STEPS
Minimum Capacity Step	%	25	25	25	17	17	17	17
Refrigerant Type		R454B	R454B	R454B	R454B	R454B	R454B	R454B
Refrigerant Charge	kg	64.8	68.4	68.4	83.7	87.3	98.1	113
Oil Charge	kg	25	25	25	39	38	38	38
Rc (ASHRAE)[*5]	kg/kW	0.2	0.19	0.18	0.2	0.19	0.19	0.21
FANS								
Quantity	No.	12	12	12	10	18	18	18
Air Flow	m^3/s	35.95	34.59	34.59	39.52	53.07	51.13	51.88
Fans Power Input	kW	2	2	2	2	2	2	2
NOISE LEVEL								
Sound Pressure[*6]	dB(A)	76	76	76	76	76	76	76
Sound Power Level in Cooling[*7*8]	dB(A)	96	96	96	96	97	97	97
Sound Power Level in Heating[*7*9]	dB(A)	96	96	96	96	97	97	97
DIMENSIONS AND WEIGHT								
L[*10]	mm	3905	3905	3905	4515	5690	5690	5690
W[*10]	mm	2260	2260	2260	2260	2260	2260	2260
H[*10]	mm	2450	2450	2450	2450	2450	2450	2450
Operating Weight[*10]	kg	3030	3110	3150	4040	4400	4530	4600

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. Rated in accordance with AHRI Standard 550/590.
6. 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.
7. Parameter calculated according to [REGULATION (EU) N. 2016/2281].
8. Seasonal energy efficiency ratio.
9. Seasonal space cooling energy efficiency.
10. Sound power on the basis of measurements made in compliance with ISO 9614.
11. Sound power level in cooling, outdoors.
12. Sound power level in heating, outdoors.
13. Unit in standard configuration/execution, without optional accessories.

- Not available

NX2-N Air Source Heat Pump
Low Noise Version

R454B

CLIMAVENETA
SUSTAINABLE COMFORT

MODEL		344	364	404	446	506	526	546
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	316.4	336.8	370.6	409.4	444	486.6	506.1
Total Power Input[*1]	kW	128.4	132.8	144.6	170	184.7	194	199.4
EER[*1]	kW/kW	2.46	2.54	2.56	2.4	2.4	2.51	2.54
COOLING ONLY (EN14511 VALUE)								
Cooling Capacity[*1*2]	kW	316	336.4	370.2	409	443.6	486.1	505.7
EER[*1*2]	kW/kW	2.44	2.51	2.54	2.38	2.38	2.49	2.51
SEER[*13]	kW/kW	4.1	4.13	4.23	4.14	4.1	4.19	4.19
Seasonal Space Cooling Energy Efficiency[*13]	%	161	162	166	162	161	165	165
HEATING ONLY (GROSS VALUE)								
Total Heating Capacity[*3]	kW	362	379.2	420.1	470.8	511.1	552	568.8
Total Power Input[*3]	kW	114.1	120.5	131.1	150.6	162.1	174.2	180.3
COP[*3]	kW/kW	3.17	3.15	3.2	3.13	3.15	3.17	3.16
HEATING ONLY (EN14511 VALUE)								
Total Heating Capacity[*3*2]	kW	362.5	380	420.6	471	511.7	552.6	569.4
COP[*3*2]	kW/kW	3.13	3.11	3.16	3.09	3.11	3.13	3.12
HEATING ONLY (EN14825 VALUE - AVERAGE CLIMATE)								
Rated Heating Capacity at Tdesign,h[*11*12]	kW	227	252	319	294	390	356	378
Bivalent Temperature[*11*12]	°C	-7	-7	-7	-7	-7	-7	-7
SCOP[*11*12]	kW/kW	3.67	3.71	3.78	3.67	3.8	3.73	3.72
Seasonal Space Heating Energy Efficiency[*11*12]	%	144	145	148	144	149	146	146
EXCHANGERS								
HEAT EXCHANGER USER SIDE IN COOLING								
Water Flow[*1]	l/s	15.13	16.11	17.72	19.58	21.23	23.27	24.2
Pressure Drop[*1]	kPa	43	34.6	41.9	39.2	46.2	38.6	41.8
HEAT EXCHANGER USER SIDE IN HEATING								
Water Flow[*1]	l/s	17.47	18.3	20.28	22.73	24.67	26.65	27.46
Pressure Drop[*1]	kPa	57.4	44.7	54.9	52.9	62.3	50.6	53.7
REFRIGERANT CIRCUIT								
Compressors	No.	4	4	4	6	6	6	6
Number of Capacity Steps	No.	4	4	4	6	6	6	6
No. Circuits	No.	2	2	2	3	3	3	3
Regulation		STEPS	STEPS	STEPS	STEPS	STEPS	STEPS	STEPS
Minimum Capacity Step	%	25	25	25	17	17	17	17
Refrigerant Type		R454B	R454B	R454B	R454B	R454B	R454B	R454B
Refrigerant Charge	kg	71.9	74.1	85.2	96.3	106	112	113
Oil Charge	kg	25	25	25	39	38	38	38
Rc (ASHRAE)[*5]	kg/kW	0.23	0.22	0.23	0.24	0.24	0.23	0.23
FANS								
Quantity	No.	10	8	8	18	18	14	12
Air Flow	m^3/s	27.28	30.33	29.48	35.07	33.16	42.86	45.49
Fans Power Input	kW	1	1	1	1	1	1	1
NOISE LEVEL								
Sound Pressure[*6]	dB(A)	68	68	68	68	68	69	69
Sound Power Level in Cooling[*7*8]	dB(A)	88	88	88	89	89	90	90
Sound Power Level in Heating[*7*9]	dB(A)	89	89	89	90	90	91	91
DIMENSIONS AND WEIGHT								
L[*10]	mm	4515	5080	5080	5690	5690	6865	7430
W[*10]	mm	2260	2260	2260	2260	2260	2260	2260
H[*10]	mm	2450	2450	2450	2450	2450	2450	2450
Operating Weight[*10]	kg	3330	3460	3630	4640	4750	5050	5170

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. Rated in accordance with AHRI Standard 550/590.
6. 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.
7. Parameter calculated according to [REGULATION (EU) N. 2016/2281].
8. Seasonal energy efficiency ratio.
9. Seasonal space cooling energy efficiency.
10. Sound power on the basis of measurements made in compliance with ISO 9614.
11. Sound power level in cooling, outdoors.
12. Sound power level in heating, outdoors.
13. Unit in standard configuration/execution, without optional accessories.

- Not available

NX2-N Air Source Heat Pump
High Efficiency Version

R410A

CLIMAVENETA
SUSTAINABLE COMFORT

MODEL		344	364	404	446	506	526	546	606	708	738	768	808
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	400/3/50
PERFORMANCE													
COOLING ONLY (GROSS VALUE)													
Cooling Capacity[1]	kW	345.3	361.5	399.8	446.5	500	525.8	543.5	599.3	696.6	724.8	762	799.2
Total Power Input[1]	kW	116.8	121.4	133.4	152	168.8	177	182.1	196.5	228.7	238.0	248.8	262
EER[1]	kW/kW	2.96	2.98	3	2.94	2.96	2.97	2.99	3.05	3.05	3.05	3.06	3.05
COOLING ONLY (EN14511 VALUE)													
Cooling Capacity[1-2]	kW	344.9	361.1	399.3	446	499.5	525.3	543	598.8	696	724.2	761.4	798.6
EER[1-2]	kW/kW	2.92	2.95	2.96	2.9	2.92	2.94	2.95	3.01	3.01	3.01	3.03	3.02
SEER[1-3]	kW/kW	4.28	4.39	4.44	4.4	4.28	4.37	4.37	4.56	4.56	4.56	4.58	4.56
Seasonal Space Cooling Energy Efficiency[1-3]	%	168	172	175	171	168	172	172	180	179	180	180	179
HEATING ONLY (GROSS VALUE)													
Total Heating Capacity[3]	kW	376.3	397.2	426.7	492.5	531	573.6	596	640	752.7	794.7	825.4	853.3
Total Power Input[3]	kW	116.4	123	131.8	153.1	164.1	177.1	184	193.6	227.6	239.7	250.1	258.1
COP[3]	kW/kW	3.23	3.23	3.24	3.22	3.24	3.24	3.24	3.31	3.31	3.32	3	3.31
HEATING ONLY (EN14511 VALUE)													
Total Heating Capacity[3-2]	kW	376.8	397.7	427.2	493.1	531.6	574.2	596.6	640.6	753.4	795.3	826	854.1
COP[3-2]	kW/kW	3.19	3.19	3.2	3.17	3.19	3.2	3.2	3.26	3.26	3.28	3.26	3.26
HEATING ONLY (EN14825 VALUE - AVERAGE CLIMATE)													
Rated Heating Capacity at Tdesign,h[11-12]	kW	271	296	321	368	386	356	371	-	-	-	-	-
Bivalent Temperature[11-12]	ºC	-7	-7	-7	-7	-7	-10	-10	-	-	-	-	-
SCOP[11-12]	kW/kW	3.76	3.83	3.79	3.9	3.81	3.8	3.83	-	-	-	-	-
Seasonal Space Heating Energy Efficiency[11-12]	%	147	150	149	153	149	149	150	-	-	-	-	-
EXCHANGERS													
HEAT EXCHANGER USER SIDE IN COOLING													
Water Flow[1]	l/s	16.51	17.29	19.12	21.35	23.91	25.14	25.99	28.7	33.3	34.7	36.4	38.2
Pressure Drop[1]	kPa	51.2	39.9	48.8	46.7	58.5	45.1	48.2	51.1	50.3	40.5	44.7	49.2
HEAT EXCHANGER USER SIDE IN HEATING													
Water Flow[1]	l/s	18.17	19.17	20.6	23.77	25.63	27.69	28.77	30.9	36.3	38.4	39.8	41.2
Pressure Drop[1]	kPa	62	49.1	56.6	57.9	67.3	54.6	59	59.4	59.9	49.6	53.5	57.2
REFRIGERANT CIRCUIT													
Compressors	No.	4	4	4	6	6	6	6	6	8	8	8	8
Number of Capacity Steps	No.	4	4	4	6	6	6	6	6	8	8	8	8
No. Circuits	No.	2	2	2	3	3	3	3	3	4	4	4	4
Regulation		STEPS	STEPS	STEPS	STEPS	STEPS	STEPS	STEPS					
Minimum Capacity Step	%	25	25	25	17	17	17	17	17	12.5	12.5	12.5	12.5
Refrigerant Type		R454B	R454B	R454B	R454B	R454B	R454B	R454B	R454B	R454B	R454B	R454B	R454B
Refrigerant Charge	kg	81	86.4	86.9	109	112	124	133	133	162	173	174	176
Oil Charge	kg	25	25	25	39	38	38	38	38	50	50	50	50
Rc (ASHRAE)[5]	kg/kW	0.24	0.24	0.22	0.25	0.23	0.24	0.25	0.22	0.23	0.24	0.23	0.22
FANS													
Quantity	No.	8	8	8	16	12	12	12	12	16	16	16	16
Air Flow	m^3/s	47.93	46.12	46.12	56.58	70.76	68.18	69.18	69.18	95.87	92.24	92.24	92.24
Fans Power Input	kW	2	2	2	2	2	2	2	2	2	2	2	2
NOISE LEVEL													
Sound Pressure[6]	dB(A)	77	77	77	76	77	77	77	78.0	77.0	78.0	78.0	78
Sound Power Level in Cooling[7-8]	dB(A)	97	97	97	97	98	98	98	99.0	99.0	100.0	100	100
Sound Power Level in Heating[7-9]	dB(A)	97	97	97	97	98	98	98	-	-	-	-	-
DIMENSIONS AND WEIGHT													
L[10]	mm	5080	5080	5080	6255	7430	7430	7430	7430	9780	9780	9780	9780
W[10]	mm	2260	2260	2260	2260	2260	2260	2260	2260	2260	2260	2260	2260
H[10]	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
Operating Weight[10]	kg	3350	3440	3480	4650	4900	5060	5140	5200	6580	6760	6800	6840

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. Rated in accordance with AHRI Standard 550/590.
6. 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.
7. Parameter calculated according to [REGULATION (EU) N. 2016/2281].
8. Seasonal energy efficiency ratio.
9. Seasonal space cooling energy efficiency.
10. Sound power on the basis of measurements made in compliance with ISO 9614.
11. Sound power level in cooling, outdoors.
12. Sound power level in heating, outdoors.
13. Unit in standard configuration/execution, without optional accessories.

- Not available

MITSUBISHI ELECTRIC
Changes for the Better

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IRELAND Mitsubishi Electric Europe, Westgate Business Park, Ballymount, Dublin 24, Ireland. Telephone: (01) 419 8800 Fax: (01) 419 8890 International code: (003531)

Note: The fuse rating is for guidance only. Please refer to the relevant databook for detailed specification. It is the responsibility of a qualified electrician/electrical engineer to select the correct cable size and fuse rating based on current regulation and site specific conditions. Mitsubishi Electric's air conditioning equipment and heat pump systems contain a fluorinated greenhouse gas, R410A (GWP:2088), R32 (GWP:675), R407C (GWP:1774), R134a (GWP:1430), R513A (GWP:631), R454B (GWP:466), R1234ze (GWP:7) or R1234yf (GWP:4). *These GWP values are based on Regulation (EU) No 517/2014 from IPCC 4th edition. In case of Regulation (EU) No.626/2011 from IPCC 3rd edition, these are as follows. R410A (GWP:1975), R32 (GWP:550), R407C (GWP:1650) or R134a (GWP:1300).

Effective as of June 2021

Green Gateway greengateway.mitsubishielectric.co.uk