Penmann
INNOVATIVE CLIMATIC SOLUTIONS FOR THE FOOD INDUSTRY

NX2 - Y 4 - 8 Compressor

The new NX2-Y units are air cooled chillers with scroll compressors designed for delivering the best efficiencies in industrial process applications.

Product Overview

Cooling Capacity –
398 – 922 kW (R410A) 379 – 872 kW (R454B)

Refrigerant
R410A/R454B

ErP2021 Compliant
All models comply with any applicable ErP2021 regulations

Energy Efficient
Class-leading efficiency levels are achieved thanks to innovative design

Eco Friendly
R454B option offers large GWP reduction compared to R410A/R32 - while its physical properties ensures there is no trade-off in terms of the operating range

Key Features & Benfits

- ErP2021 compliant
- Low noise
- Energy efficient
- Available with lower GWP R454B refrigerant

Still have a question?

Get in touch with one of our expert team today.

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INNOVATIVE CLIMATIC SOLUTIONS FOR THE FOOD INDUSTRY

NX2 - Y 4-8 Compressor

NX2
Air Cooled Chillers with R454B refrigerant
(from 379 to 867kW)

Technical Information

Model		0404	0424	0464	0515	0576	0585	0636
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	379.1	398.9	437.0	488.0	538.9	546.7	597.9
Total Power Output *1	kW	115.6	122.6	136.9	152.1	167.3	168.6	183.8
EER *1	kW/kW	3.279	3.254	3.192	3.208	3.221	3.243	3.253
ESEER *1	kW/kW							
Cooling Only (EN14511 Value)								
Cooling Capacity *1 *2	kW	378.6	398.5	436.5	487.5	538.3	546.2	597.3
EER *1 *2	kW/kW	3.220	3.210	3.140	3.160	3.170	3.200	3.210
ESEER *1 *2	kW/kW	-	-	-	-	-	-	-
Cooling Energy Class		-	-	-	-	-	-	-
Energy Efficiency								
Seasonal Efficiency in Cooling (reg. EU 2016/2281)								
Ambient Refrigeration								
PRATED,C *7	kW	37.9	398	436	488	538	546	597
SEER *7 *8		4.67	4.68	4.65	4.70	4.70	4.76	4.75
Performance ns *7*9	%	184	184	183	185	185	187	187
Exchangers								
Heat Exchangers User Side in Refrigeration								
Water Flow *1	l/s	18.13	19.08	20.90	23.34	25.77	26.14	28.59
Pressure Drop at the Heat Exchanger	kPa	61.8	48.6	58.3	55.1	67.1	42.5	50.9
Refrigerant Circuit								
Compressor NR.	No.	4	4	4	5	6	5	6
Circuits	No.	2	2	2	2	2	2	2
Refrigerant Charge	kg	46.6	51.5	51.7	59.6	64.4	72.0	74.8
Noise Level								
Sound Pressure *3	dB(A)	62	62	62	62	63	63	62
Sound Power Level in Cooling *4 *5	dB(A)	94	94	94	94	95	95	95
Size and Weight								
Width (A) *6	mm	3905	3905	3905	5080	5080	5080	6255
Depth (B) *6	mm	2260	2260	2260	2260	2260	2260	2260
Height (H) *6	mm	2560	2560	2560	2560	2560	2560	2560
Operating Weight *6	kg	2590	2620	2660	3190	3420	3500	3940

1. Plant (side) cooling exchanger water (in/out) 12°C/7°C; Source (side) heat exchanger air (in) 35°C.
2. Values in compliance with EN14511.
3. 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.
4. Sound power on the basis of measurements taken in compliance with ISO 9614.
5. Sound power level in cooling, outdoors.
6. Unit in standard configuration, without optional accessories.
7. Parameter calculated according to [REGULATION (EU) N. 2016/2281].
8. Seasonal energy efficiency ratio.
9. Seasonal space cooling energy efficiency.

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NX2 - Y 4-8 Compressor

NX2
Air Cooled Chillers with R454B refrigerant
(from 379 to 867kW)

Technical Information

Model		0676	0706	0768	0808	0848	0898	0928
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	636.3	656.5	720.5	488.0	538.9	546.7	597.9
Total Power Output *1	kW	198.1	200.3	218.0	152.1	167.3	168.6	183.8
EER *1	kW/kW	3.212	3.278	3.305	3.282	3.256	3.222	3.170
ESEER *1	kW/kW							
Cooling Only (EN14511 Value)								
Cooling Capacity *1 *2	kW	635.7	655.8	719.8	758.8	797.4	834.8	866.3
EER *1 *2	kW/kW	3.170	3.230	3.260	3.230	3.220	3.180	3.130
ESEER *1 *2	kW/kW	-	-	-	-	-	-	-
Cooling Energy Class		-	-	-	-	-	-	-
Energy Efficiency								
Seasonal Efficiency in Cooling (reg. EU 2016/2281) Ambient Refrigeration								
PRATED,C *7	kW	636	656	720	759	797	835	866
SEER *7 *8		4.73	4.77	4.75	4.74	4.75	4.75	4.74
Performance ns *7*9	%	186	188	187	187	187	187	187
Exchangers								
Heat Exchangers User Side in Refrigeration								
Water Flow *1	l/s	30.43	31.39	34.45	36.32	38.17	39.96	41.46
Pressure Drop at the Heat Exchanger	kPa	49.2	52.4	56.9	63.3	47.2	51.7	55.7
Refrigerant Circuit								
Compressor NR.	No.	6	6	8	8	8	8	8
Circuits	No.	3	2	4	4	4	4	4
Refrigerant Charge	kg	75.1	85.6	88.5	95.1	104	106	106
Noise Level								
Sound Pressure *3	dB(A)	62	63	63	63	64	64	64
Sound Power Level in Cooling *4 *5	dB(A)	95	96	96	96	97	97	97
Size and Weight								
Width (A) *6	mm	6255	6255	7430	7430	7430	7430	7430
Depth (B) *6	mm	2260	2260	2260	2260	2260	2260	2260
Height (H) *6	mm	2560	2560	2560	2560	2560	2560	2560
Operating Weight *6	kg	3980	4100	4970	5010	5080	5120	5150

1. Plant (side) cooling exchanger water (in/out) 12°C/7°C; Source (side) heat exchanger air (in) 35°C.
2. Values in compliance with EN14511.
3. 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.
4. Sound power on the basis of measurements taken in compliance with ISO 9614.
5. Sound power level in cooling, outdoors.
6. Unit in standard configuration, without optional accessories.
7. Parameter calculated according to [REGULATION (EU) N. 2016/2281].
8. Seasonal energy efficiency ratio.
9. Seasonal space cooling energy efficiency.

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INNOVATIVE CLIMATIC SOLUTIONS FOR THE FOOD INDUSTRY

NX2 - Y 4-8 Compressor

NX2
Air Cooled Chillers with R454B refrigerant
High Efficiency Version (from 380 to 872kW)

Technical Information

Model		0404	0424	0464	0515	0576	0585	0636
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	380.1	400.0	439.8	490.2	540.8	548.6	599.7
Total Power Output *1	kW	111.3	117.1	129.4	145.0	161.1	161.7	177.4
EER *1	kW/kW	3.415	3.416	3.399	3.381	3.357	3.393	3.380
ESEER *1	kW/kW							
Cooling Only (EN14511 Value)								
Cooling Capacity *1 *2	kW	379.6	399.5	439.2	489.7	540.2	548.1	599.1
EER *1 *2	kW/kW	3.350	3.370	3.340	3.330	3.300	3.350	3.330
ESEER *1 *2	kW/kW	-	-	-	-	-	-	-
Cooling Energy Class		-	-	-	-	-	-	-
Energy Efficiency								
Seasonal Efficiency in Cooling (reg. EU 2016/2281)								
Ambient Refrigeration								
PRATED,C *7	kW	380	400	439	490	540	548	599
SEER *7 *8		4.74	4.77	4.73	4.78	4.72	4.82	4.82
Performance ns *7*9	%	187	188	186	188	186	190	190
Exchangers								
Heat Exchangers User Side in Refrigeration								
Water Flow *1	l/s	18.18	19.13	21.03	23.44	25.86	26.24	28.68
Pressure Drop at the Heat Exchanger	kPa	62.1	48.8	59.0	55.6	67.6	42.8	51.2
Refrigerant Circuit								
Compressor NR.	No.	4	4	4	5	6	5	6
Circuits	No.	2	2	2	2	2	2	2
Refrigerant Charge	kg	56.1	59.9	62.7	76.5	77.9	80.8	88.8
Noise Level								
Sound Pressure *3	dB(A)	63	63	63	62	63	63	63
Sound Power Level in Cooling *4 *5	dB(A)	95	95	95	95	96	96	96
Size and Weight								
Width (A) *6	mm	5080	5080	5080	6255	6255	6255	7430
Depth (B) *6	mm	2260	2260	2260	2260	2260	2260	2260
Height (H) *6	mm	2560	2560	2560	2560	2560	2560	2560
Operating Weight *6	kg	2960	2960	3000	3600	3830	3900	4290

1. Plant (side) cooling exchanger water (in/out) 12°C/7°C; Source (side) heat exchanger air (in) 35°C.
2. Values in compliance with EN14511.
3. 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.
4. Sound power on the basis of measurements taken in compliance with ISO 9614.
5. Sound power level in cooling, outdoors.
6. Unit in standard configuration, without optional accessories.
7. Parameter calculated according to [REGULATION (EU) N. 2016/2281].
8. Seasonal energy efficiency ratio.
9. Seasonal space cooling energy efficiency.

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INNOVATIVE CLIMATIC SOLUTIONS FOR THE FOOD INDUSTRY

NX2 - Y 4-8 Compressor

NX2
Air Cooled Chillers with R454B refrigerant
High Efficiency Version (from 380 to 872kW)

Technical Information

Model		0676	0706	0768	0808	0848	0898	0928
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	639.0	658.6	721.1	762.2	801.1	839.7	872.3
Total Power Output *1	kW	188.0	194.1	211.0	222.5	234.3	246.4	258.3
EER *1	kW/kW	3.399	3.393	3.418	3.426	3.419	3.408	3.377
ESEER *1	kW/kW							
Cooling Only (EN14511 Value)								
Cooling Capacity *1 *2	kW	638.4	658.0	720.5	761.5	800.4	839.0	871.6
EER *1 *2	kW/kW	3.350	3.350	3.370	3.370	3.380	3.360	3.330
ESEER *1 *2	kW/kW	-	-	-	-	-	-	-
Cooling Energy Class		-	-	-	-	-	-	-
Energy Efficiency								
Seasonal Efficiency in Cooling (reg. EU 2016/2281)								
Ambient Refrigeration								
PRATED,C *7	kW	638	658	720	762	800	839	872
SEER *7 *8		4.86	4.83	4.81	4.81	4.83	4.84	4.86
Performance ns *7*9	%	191	190	189	189	190	190	191
Exchangers								
Heat Exchangers User Side in Refrigeration								
Water Flow *1	l/s	30.56	31.50	34.49	36.45	38.31	40.16	41.72
Pressure Drop at the Heat Exchanger	kPa	49.6	52.7	57.0	63.7	47.6	52.2	56.4
Refrigerant Circuit								
Compressor NR.	No.	6	6	8	8	8	8	8
Circuits	No.	3	2	4	4	4	4	4
Refrigerant Charge	kg	94.1	98.8	107	129	129	129	129
Noise Level								
Sound Pressure *3	dB(A)	64	64	64	64	65	65	65
Sound Power Level in Cooling *4 *5	dB(A)	97	97	97	97	98	98	98
Size and Weight								
Width (A) *6	mm	7430	7430	9780	9780	9780	9780	9780
Depth (B) *6	mm	2260	2260	2260	2260	2260	2260	2260
Height (H) *6	mm	2560	2560	2560	2560	2560	2560	2560
Operating Weight *6	kg	4430	4450	5660	5720	5770	5810	5850

1. Plant (side) cooling exchanger water (in/out) 12°C/7°C; Source (side) heat exchanger air (in) 35°C.
2. Values in compliance with EN14511.
3. 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.
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5. Sound power level in cooling, outdoors.
6. Unit in standard configuration, without optional accessories.
7. Parameter calculated according to [REGULATION (EU) N. 2016/2281].
8. Seasonal energy efficiency ratio.
9. Seasonal space cooling energy efficiency.

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INNOVATIVE CLIMATIC SOLUTIONS FOR THE FOOD INDUSTRY

NX2 - Y 4-8 Compressor

NX2
Air Cooled Chillers with R454B refrigerant
High Efficiency & Low Noise Version
(from 379 to 868kW)

Technical Information

Model		0404	0424	0464	0515	0576	0585	0636
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	379.7	399.2	437.6	487.8	538.8	546.4	597.3
Total Power Output *1	kW	111.9	118.6	132.5	148.5	164.5	165.6	181.6
EER *1	kW/kW	3.393	3.366	3.303	3.285	3.275	3.300	3.289
ESEER *1	kW/kW							
Cooling Only (EN14511 Value)								
Cooling Capacity *1 *2	kW	379.2	398.7	437.0	487.3	538.1	545.9	596.7
EER *1 *2	kW/kW	3.330	3.320	3.250	3.240	3.220	3.260	3.240
ESEER *1 *2	kW/kW	-	-	-	-	-	-	-
Cooling Energy Class		-	-	-	-	-	-	-
Energy Efficiency								
Seasonal Efficiency in Cooling (reg. EU 2016/2281)								
Ambient Refrigeration								
PRATED,C *7	kW	379	399	437	487	538	546	597
SEER *7 *8		4.73	4.76	4.72	4.76	4.70	4.81	4.80
Performance ns *7*9	%	186	187	186	188	185	190	189
Exchangers								
Heat Exchangers User Side in Refrigeration								
Water Flow *1	l/s	18.16	19.09	20.92	23.33	25.76	26.13	28.56
Pressure Drop at the Heat Exchanger	kPa	62.0	48.6	58.4	55	67.1	42.5	50.8
Refrigerant Circuit								
Compressor NR.	No.	4	4	4	5	6	5	6
Circuits	No.	2	2	2	2	2	2	2
Refrigerant Charge	kg	56.1	59.9	62.7	76.5	77.9	80.8	88.8
Noise Level								
Sound Pressure *3	dB(A)	54	54	55	54	54	55	55
Sound Power Level in Cooling *4 *5	dB(A)	86	86	87	87	87	88	88
Size and Weight								
Width (A) *6	mm	5080	5080	5080	6255	6255	6255	7430
Depth (B) *6	mm	2260	2260	2260	2260	2260	2260	2260
Height (H) *6	mm	2560	2560	2560	2560	2560	2560	2560
Operating Weight *6	kg	2930	2960	3000	3600	3830	3900	4290

1. Plant (side) cooling exchanger water (in/out) 12°C/7°C; Source (side) heat exchanger air (in) 35°C.
2. Values in compliance with EN14511.
3. 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.
4. Sound power on the basis of measurements taken in compliance with ISO 9614.
5. Sound power level in cooling, outdoors.
6. Unit in standard configuration, without optional accessories.
7. Parameter calculated according to [REGULATION (EU) N. 2016/2281].
8. Seasonal energy efficiency ratio.
9. Seasonal space cooling energy efficiency.

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NX2 - Y 4-8 Compressor

NX2
Air Cooled Chillers with R454B refrigerant
High Efficiency & Low Noise Version
(from 379 to 868kW)

Technical Information

Model		0676	0706	0768	0808	0848	0898	0928
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	636.5	655.3	720.4	760.7	798.7	837.2	868.8
Total Power Output *1	kW	191.7	198.7	210.9	223.9	237.3	250.9	264.5
EER *1	kW/kW	3.320	3.298	3.416	3.397	3.366	3.337	3.285
ESEER *1	kW/kW							
Cooling Only (EN14511 Value)								
Cooling Capacity *1 *2	kW	635.9	654.7	719.8	760.0	798.1	836.5	868.1
EER *1 *2	kW/kW	3.280	3.250	3.370	3.340	3.320	3.290	3.240
ESEER *1 *2	kW/kW	-	-	-	-	-	-	-
Cooling Energy Class		-	-	-	-	-	-	-
Energy Efficiency								
Seasonal Efficiency in Cooling (reg. EU 2016/2281) Ambient Refrigeration								
PRATED,C *7	kW	636	655	720	760	798	836	868
SEER *7 *8		4.85	4.81	4.81	4.81	4.82	4.83	4.85
Performance ns *7*9	%	191	189	189	189	190	190	191
Exchangers								
Heat Exchangers User Side in Refrigeration								
Water Flow *1	l/s	30.44	31.34	34.45	36.38	38.20	40.04	41.55
Pressure Drop at the Heat Exchanger	kPa	49.2	52.2	56.9	63.5	47.3	51.9	55.9
Refrigerant Circuit								
Compressor NR.	No.	6	6	8	8	8	8	8
Circuits	No.	3	2	4	4	4	4	4
Refrigerant Charge	kg	94.1	98.8	107	129	129	129	129
Noise Level								
Sound Pressure *3	dB(A)	55	56	57	57	57	57	57
Sound Power Level in Cooling *4 *5	dB(A)	88	89	90	90	90	90	90
Size and Weight								
Width (A) *6	mm	7430	7430	9780	9780	9780	9780	9780
Depth (B) *6	mm	2260	2260	2260	2260	2260	2260	2260
Height (H) *6	mm	2560	2560	2560	2560	2560	2560	2560
Operating Weight *6	kg	4430	4450	5660	5720	5770	5810	5850

1. Plant (side) cooling exchanger water (in/out) 12°C/7°C; Source (side) heat exchanger air (in) 35°C.
2. Values in compliance with EN14511.
3. 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.
4. Sound power on the basis of measurements taken in compliance with ISO 9614.
5. Sound power level in cooling, outdoors.
6. Unit in standard configuration, without optional accessories.
7. Parameter calculated according to [REGULATION (EU) N. 2016/2281].
8. Seasonal energy efficiency ratio.
9. Seasonal space cooling energy efficiency.