MITSUBISHI ELECTRIC
HYDRONICS & IT COOLING SYSTEMS S.p.A.

COMFORT

CHILLERS HEAT PUMPS

NX-W
NX-W/H
NX-WN

WATER SOURCE CHILLER AND HEAT PUMPS WITH SCROLL COMPRESSORS, FROM 38 kW TO 397 kW

climaveneta.com

CLIMAVENETA®

NX-W
NX-W/H
NX-WN

THE INDOOR WATER COOLED UNIT PERFECT FOR ALL POSSIBLE COMFORT APPLICATIONS

Water source chiller and heat pumps with scroll compressors, from 38 kW to 397 kW

NX-W is the new water cooled range with hermetic rotary scroll compressor dedicated to indoor spaces.
Designed to meet the latest efficiency targets required by modern legislations, NX-W displays very high efficiency levels at full and partial loads and low operating costs.

ErP 2016-2018 COMPLIANT

EUROVENT CERTIFIED PERFORMANCE www.eurovent-certification.com

PERFECT INDOOR COMFORT

In modern buildings such as hotels, commercial buildings, office spaces and sport and leisure centres, perfect cooling and temperature values are of utmost importance for the occupants' wellness.
NX-W is a compact and sturdy water cooled ideal notonly for big buildings but also application with small HVAC rooms available.

COMFORT APPLICATION

- Commercial premises
- Office buldings
- Hotels and resort
- Healthcare facilities
- Retail and department stores
- Sports and leisure installation

REDUCED SOUND POWER LEVEL

Ideal for sound sensitive environments, The NX-W family offers the widest variability in terms of sound levels thanks to a variety of accessories.

EXTREMELY SILENT OPERATION

The NX-W family offers the widest variability in terms of sound levels thanks to a variety of accessories.

-	**Standard unit**	- 2 Compressors unit: external casing provided in standard	**Baseline**
-	**Opt. 2313**	**Integral acoustic enclosure STANDARD:** Available as option only for 4 compressor units (sizes 0604 - 1204)	**-5 dB(A)**
-	**Opt. 2314**	**Integral acoustic enclosure PLUS 30 mm thick fiberform soundproofing insulation on the compressors:** 2 compressor units (sizes 0122 - 0802):	**- 4dB(A)**
		4 compressor units (sizes 0604 - 1204):	**-13 dB(A)**

HEAT RECOVERY CONFIGURATIONS

NX-W	Standard configuration
NX-W/H	Heat pumps unit reversible on hydronic side
NX-WN	Heat pump unit reversible on refrigerant side

NX-W chillers are designed and built to guarantee maximum reliability, total versatility and to optimize and simplify installation procedures.

MAXIMUM CONFIGURABILITY

NX-W is able to satisfy all service systems and installation requirements.
Wide choice of options, accessories and configurations allow the unit operation with all possible kind of circuits, such as total water loss (well, water bed, etc.), dry coolers, cooling towers or geothermal probes.

ErP 2021 COMPLIANT

Total Reliability

Completely reliable refrigerant circuit based on compressors tandem layout designed to achieve best efficiency at partial load and maximum reliability.

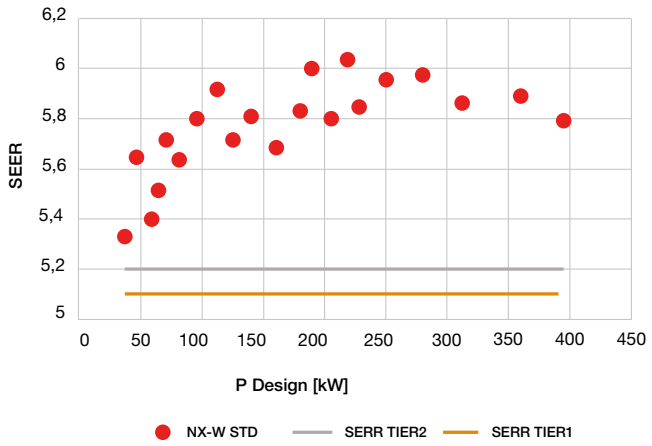
HIGH EFFICIENCY

Very high efficiency at full and partial loads, one of the highest on the market, thanks to the adopted technological solutions. These units ensure low operating costs and therefore a quick payback time.

EER up to 5,24

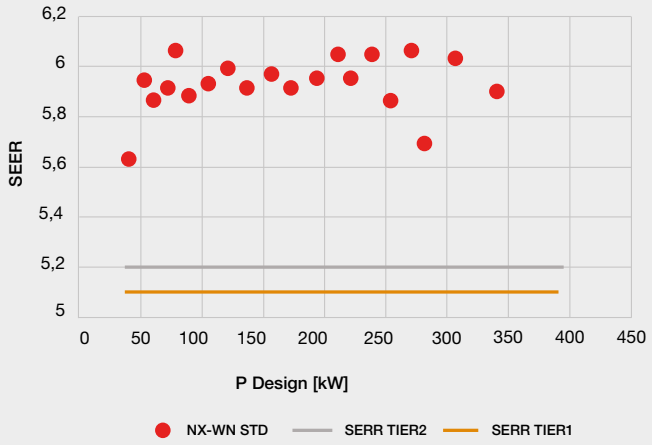
COP up to 4,71

NX-W chillers show efficiency levels that meet and exceedthe minimum seasonal targets for cooling (SEER) established by the latest ErP 2021 energy related productsrequirements.



WIDER OPERATION RANGE

NX-W has been designed with a special focus on maximum unit working envelope.
New extremely wide working limits fit to all possible installation systems and to all possible applications.



EASY ACCESSIBILITY DURING MAINTENANCE

NX-W features a new innovative structure made of sheet steel parts and a selfsupporting frame in order to guarantee maximum accessibility for servicing and maintenance operation.

TECHNOLOGICAL CHOICES

ELECTRICAL BOARD

W3000TE controller with advanced functions and algorithms including self-adaptive control logics **beneficial in low water content systems. Innovative user interface based on Wifi technology.**
As option the W3000TE compact control can be replaced by the KIPlink user interface that allow one to operate the unit directly from smartphone or tablet.

KIPLINK USER INTERFACE

Innovative Wi-Fi interface for an easy and enhanced unit management.
As an option, the direct control over the unit comes through the innovative KIPlink interface. Based on Wi-Fi technology, KIPlink gets rid of the standard keyboard and allows one to operate on the unit directly from a mobile device (smartphone, tablet, notebook) just by scanning the QR code positioned on the side of the unit.

- 4 Communication based on Wi-Fi technology (no internet connection needed)
- 4 User-friendly components monitoring
- 4 Real-time graphs and key trends

Refrigerant Section

The range includes the single-circuit two-compressor versions and the dual circuit four-compressor versions.

Electronic Expansion Valve

It generates considerable energy savings, especially in cases of variable demand at different working conditions. The electronic expansion valve allows you to achieve a more rapid startup of the unit and an extension of its operating limits.

VPF VARIABLE PRIMARY FLOW

The VPF system (Variable Primary Flow) adjusts the pump speeds on the basis of the plant's thermal load and dynamically optimizes the unit's thermoregulation for variable flow operation. This ensures both the highest pump energy savings and chiller stable operation.

HIGHEST ENERGY SAVINGS

The smart adjustment of inverter pump speed according to the actual plant thermal load is a key feature in reducing the unit's running costs.

STABLE OPERATION

Thanks to the logics, the pump speed regulation is performed with little progressive adjustments while continuously monitoring the values on the plant side and the water temperature on the heat exchanger. The absence of abrupt water flow changes prevents fluctuation and guarantee a stable operation in all working condition.

The new NX-W: Trusted reliability, high performance and new exceptional features.

Heat Exchangers

- Brazed plate heat exchangers fitted with a differential pressure switch to monitor the correct water flow when the unit is operating, thus preventing freezing
- Grooved coupling with male threaded counterpipe.

Paneling and Frame

- Hot-galvanised sheet steel casing. All parts are painted with polyester-powder (RAL 7035).
- For 2-compressor units paneling is provided as standard.

Compressor

Hermetic scroll compressors in tandem layout complete with oil sump heater, electronic overheating protection with centralised manual reset and atwo-pole elelctric motor.

ClimaPRO

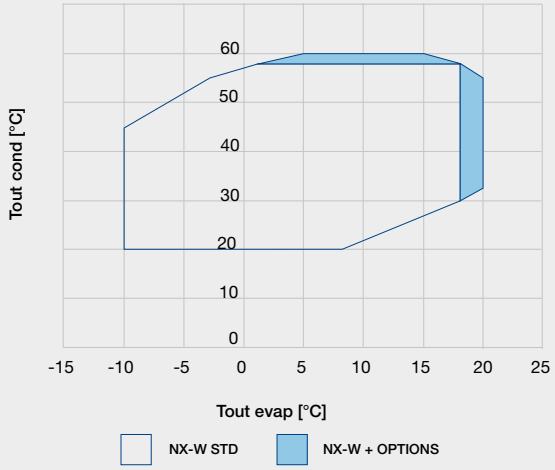
According to the **unit's actual efficiency** curves, ClimaPRO continuously optimizes plant working conditions by promptly **adjusting equipment staging and sequencing**, managing operating set-points and controlling **water flows** throughout the entire system.

ClimaPRO can be natively interfaced with any BMS or it can successfully perform all functions on its own.

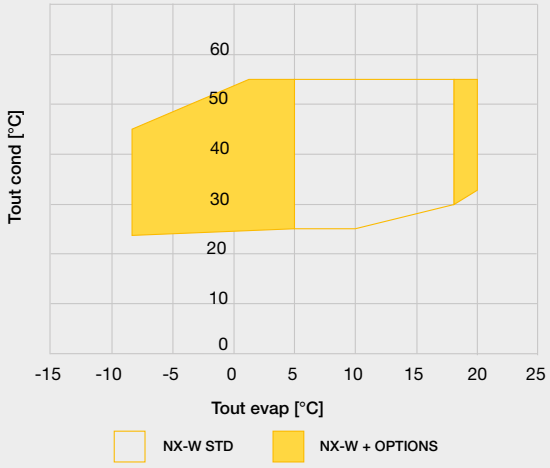
OPERATING LIMITS

NX-W operating field spans from -10°C to 20°C from the evaporator side, from 20° to 60 °C on the condenser side. This makes the product range ideal for all those comfort applications working with low condensation temperatures or applications with low temperature water production.

NX-W LIMITS IN COOLING MODE



NX-W LIMITS IN HEATING MODE



HYDRONIC MODULES

NX-W units can be fitted with the hydronic module on the user and source side. The hydronic module includes the main circuit components, thus optimising the water circuit and the electrical installation space, timing and costs.

It is available as option with single or twin in-line pumps in order to achieve low, head, fixed or variable speed, available for the user side and for the source side.

IN-LINE PUMP IN SINGLE OR TWIN VERSION AT FIXED SPEED

- Centrifugal pumps with in-line suction and delivery flanges, in single or twin versions.
- Pump body and impeller in cast-iron, entirely laser technology welded. Mechanical seal with components in ceramics, carbon and EPDM elastomers.
- The twin-head pumps are designed with two parallel power heads. A non-return flap is opened by the flow of the pumped liquid and prevents backflow of liquid into the idle pump head.
- Three-phase electric motor protected to IP55, insulation class F, suitable for continuous service. IE3 efficiency level
- “Back pull-out” design. Impeller, adapter, and motor can be extracted without disconnecting the pump body from he piping system.

All the flexibility you need to fit the most diverse application requirements.

FURTHER OPTIONS AND ACCESSORIES

Water filter (opt. PF409)
Wire mesh water filter to installed on field.

Soft-starter (Opt.1510)
Electronic device adopted to manage inrush current

Evaporator water flow switch (opt. PF 232)
Flow switch with stainless scoop AISI and IP65 protection suitable for installation in industrial plant pipes.

Phase sequence relay (opt. 2410)
Relay for checking main phase-sequence

On/Off compressor signal
Auxiliary device to provide a voltage-free signal

Antivibration mounting (opt. 2100)

IN-LINE PUMP IN SINGLE OR TWIN VERSION AT VARIABLE SPEED

- The pumps with 2-pole motors are fitted with permanent magnet and electronically speed-controlled featuring efficiency levels that exceeds the IE4 demands. The resulting in energy savings of up to 50% compared to conventional pumps.
- Grundfoss single and twin-head pumps, are single-stage, close-coupled pumps with in-line suction and discharge ports of identical diameter. Motor and pump shafts are connected via a rigid two-part coupling.
- The twin-head pumps are designed with two parallel power heads. A non-return flap is opened by the flow of the pumped liquid and prevents backflow of liquid into the idle pump head.
- Top-pull-out" design. The power head (motor, pump head and impeller) can be removed for maintenance or service while the pump housing remains in the pipework.

NX-W 0122 - 1204

Water source chillers with scroll compressors,
38,1 kW - 398 kW

NX-W			0122	0152	0182	0202	0252	0262	0302	0352
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
PERFORMANCE										
COOLING ONLY (GROSS VALUE)										
Cooling capacity	(1)	kW	38,1	47,7	56,2	65,3	72,3	82,3	96,7	111
Total power input	(1)	kW	7,53	9,31	10,8	12,6	13,8	16,0	18,9	21,7
EER	(1)	kW/kW	5,06	5,12	5,20	5,18	5,24	5,14	5,12	5,13
ESEER	(1)	kW/kW	6,46	6,76	6,42	6,47	6,72	6,41	6,49	6,63
COOLING ONLY (EN14511 VALUE)										
Cooling capacity	(1)(2)	kW	37,9	47,5	55,9	65,1	72,0	82,0	96,4	111
EER	(1)(2)	kW/kW	4,85	4,89	4,96	4,96	5,01	4,96	4,94	4,96
ESEER	(1)(2)	kW/kW	5,89	6,10	5,81	5,93	6,12	5,95	6,04	6,13
Cooling energy class			B	B	B	B	B	B	B	B
ENERGY EFFICIENCY										
SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281)										
Ambient refrigeration										
Prated,c	(7)	kW	37,9	47,5	55,9	65,1	72,0	82,0	96,4	111
SEER	(7)(8)		5,33	5,65	5,41	5,53	5,72	5,66	5,80	5,92
Performance ηs	(7)(9)	%	205	218	208	213	221	218	224	229
EXCHANGERS										
HEAT EXCHANGER USER SIDE IN REFRIGERATION										
Water flow	(1)	l/s	1,82	2,28	2,69	3,12	3,46	3,94	4,62	5,33
Pressure drop	(1)	kPa	21,6	26,6	26,7	21,8	21,6	21,8	22,7	22,9
HEAT EXCHANGER SOURCE SIDE IN REFRIGERATION										
Water flow	(1)	l/s	2,18	2,72	3,19	3,71	4,11	4,68	5,50	6,34
Pressure drop	(1)	kPa	11,8	15,7	18,1	20,6	23,1	13,5	14,2	14,6
REFRIGERANT CIRCUIT										
Compressors nr.		N°	2	2	2	2	2	2	2	2
No. Circuits		N°	1	1	1	1	1	1	1	1
Refrigerant charge		kg	3,80	4,20	5,00	5,50	6,10	8,60	10,0	11,6
NOISE LEVEL										
Sound Pressure	(3)	dB(A)	57	57	58	58	58	59	60	60
Sound power level in cooling	(4)(5)	dB(A)	73	73	74	74	74	75	76	77
SIZE AND WEIGHT										
A	(6)	mm	1225	1225	1225	1225	1225	1225	1225	1570
B	(6)	mm	885	885	885	885	885	885	885	885
H	(6)	mm	1495	1495	1495	1495	1495	1495	1495	1805
Operating weight	(6)	kg	360	360	390	410	440	480	520	660

NX-W			0402	0452	0502	0552	0602	0702	0802	0604
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
PERFORMANCE										
COOLING ONLY (GROSS VALUE)										
Cooling capacity	(1)	kW	126	142	157	181	204	231	254	192
Total power input	(1)	kW	24,5	27,7	30,9	35,2	39,6	45,2	51,2	38,3
EER	(1)	kW/kW	5,15	5,12	5,10	5,14	5,16	5,10	4,97	5,01
ESEER	(1)	kW/kW	6,34	6,47	6,32	6,42	6,42	6,50	6,06	6,60
COOLING ONLY (EN14511 VALUE)										
Cooling capacity	(1)(2)	kW	126	141	157	181	204	230	253	191
EER	(1)(2)	kW/kW	4,98	4,96	4,93	4,98	5,00	4,93	4,79	4,88
ESEER	(1)(2)	kW/kW	5,95	6,04	5,92	6,00	6,01	6,03	5,63	6,14
Cooling energy class			B	B	B	B	B	B	B	B
ENERGY EFFICIENCY										
SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281)										
Ambient refrigeration										
Prated,c	(7)	kW	126	141	157	181	204	230	253	191
SEER	(7)(8)		5,72	5,81	5,69	5,83	5,80	5,86	5,39	6,00
Performance ηs	(7)(9)	%	221	224	220	225	224	226	207	232
EXCHANGERS										
HEAT EXCHANGER USER SIDE IN REFRIGERATION										
Water flow	(1)	l/s	6,03	6,78	7,53	8,66	9,78	11,02	12,16	9,17
Pressure drop	(1)	kPa	23,1	23,8	24,4	24,9	25,5	30,7	37,4	17,1
HEAT EXCHANGER SOURCE SIDE IN REFRIGERATION										
Water flow	(1)	l/s	7,17	8,07	8,97	10,30	11,63	13,14	14,55	10,96
Pressure drop	(1)	kPa	15,4	15,9	18,5	18,3	21,0	23,5	28,8	16,2
REFRIGERANT CIRCUIT										
Compressors nr.		N°	2	2	2	2	2	2	2	4
No. Circuits		N°	1	1	1	1	1	1	1	2
Refrigerant charge		kg	13,1	14,8	15,7	18,8	21,4	22,4	22,4	19,3
NOISE LEVEL										
Sound Pressure	(3)	dB(A)	60	61	61	62	62	65	66	69
Sound power level in cooling	(4)(5)	dB(A)	77	78	78	79	79	82	83	86
SIZE AND WEIGHT										
A	(6)	mm	1570	1570	1570	1570	1570	1570	1570	2210
B	(6)	mm	885	885	885	885	885	885	885	885
H	(6)	mm	1805	1805	1805	1805	1805	1805	1805	1805
Operating weight	(6)	kg	740	790	820	870	920	940	960	870

EUROVENT CERTIFIED PERFORMANCE www.eurovent-certification.com

VPF · HFC R410A · PLATES · EEV · COOLING · SCROLL

NX-W			0704	0804	0904	1004	1104	1204
Power supply		V/Ph/Hz	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	221	250	281	313	72,3	82,3
Total power input	(1)	kW	43,9	49,6	56,1	62,5	71,3	80,0
EER	(1)	kW/kW	5,03	5,04	5,01	5,00	5,04	4,98
ESEER	(1)	kW/kW	6,64	6,58	6,64	6,53	6,61	6,57
COOLING ONLY (EN14511 VALUE)								
Cooling capacity	(1)(2)	kW	220	249	281	312	358	397
EER	(1)(2)	kW/kW	4,91	4,91	4,88	4,86	4,89	4,81
ESEER	(1)(2)	kW/kW	6,16	6,12	6,13	6,02	6,03	5,96
Cooling energy class			B	B	B	B	B	B
ENERGY EFFICIENCY								
SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281)								
Ambient refrigeration								
Prated,c	(7)	kW	220	249	281	312	358	397
SEER	(7)(8)		6,04	5,97	5,98	5,87	5,89	5,79
Performance ηs	(7)(9)	%	233	231	231	227	228	224
EXCHANGERS								
HEAT EXCHANGER USER SIDE IN REFRIGERATION								
Water flow	(1)	l/s	10,57	11,96	13,45	14,95	17,18	19,05
Pressure drop	(1)	kPa	18,1	20,0	21,3	24,9	28,2	34,7
HEAT EXCHANGER SOURCE SIDE IN REFRIGERATION								
Water flow	(1)	l/s	12,62	14,27	16,07	17,87	20,51	22,78
Pressure drop	(1)	kPa	17,4	19,6	22,0	24,8	30,0	36,2
REFRIGERANT CIRCUIT								
Compressors nr.		N°	4	4	4	4	4	4
No. Circuits		N°	2	2	2	2	2	2
Refrigerant charge		kg	22,5	25,3	28,8	41,1	47,0	49,0
NOISE LEVEL								
Sound Pressure	(3)	dB(A)	70	71	72	73	74	74
Sound power level in cooling	(4)(5)	dB(A)	87	88	89	90	91	91
SIZE AND WEIGHT								
A	(6)	mm	2210	2650	2650	2650	2650	2650
B	(6)	mm	885	885	885	885	885	885
H	(6)	mm	1805	1805	1805	1805	1805	1805
Operating weight	(6)	kg	1050	1240	1330	1530	1630	1710

Notes:
1 Plant (side) cooling exchanger water (in/out) 12°C/7°C; Source (side) heat exchanger water (in/out) 30°C/35°C.
2 Values in compliance with EN14511-3:2013.
3 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.
4 Sound power on the basis of measurements made in compliance with ISO 9614.
5 Sound power level in cooling, indoors.
6 Unit in standard configuration/execution, without optional accessories.
7 Seasonal energy efficiency of the cooling environment [REGULATION (EU) N. 2016/2281]
8 Seasonal space heating energy index
9 Seasonal energy efficiency of the space cooling
The units highlighted in this publication contain HFC R410A [GWP_{100} 2088] fluorinated greenhouse gases.

Certified data in EUROVENT

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NX-WN 0122 - 1204

Water source reversible heat pump (reversible on the hydraulic side) with scroll compressors, 37,5 kW - 396 kW

NX-WN			0122	0152	0182	0202	0252	0262	0302	0352
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
PERFORMANCE										
COOLING ONLY (GROSS VALUE)										
Cooling capacity	(1)	kW	37,5	46,7	55,0	63,9	70,8	80,5	94,6	109
Total power input	(1)	kW	7,73	9,52	11,1	12,9	14,1	16,3	19,2	22,1
EER	(1)	kW/kW	4,85	4,91	4,95	4,95	5,02	4,94	4,93	4,92
ESEER	(1)	kW/kW	6,29	6,45	6,18	6,22	6,46	6,16	6,24	6,38
COOLING ONLY (EN14511 VALUE)										
Cooling capacity	(1)(2)	kW	37,4	46,6	54,8	63,7	70,6	80,3	94,4	108
EER	(1)(2)	kW/kW	4,67	4,72	4,78	4,78	4,85	4,77	4,77	4,76
ESEER	(1)(2)	kW/kW	5,80	5,95	5,73	5,78	5,99	5,73	5,83	5,90
Cooling energy class			B	B	B	B	B	B	B	B
HEATING ONLY (GROSS VALUE)										
Total heating capacity	(3)	kW	41,8	52,1	61,2	71,5	78,6	89,5	105	121
Total power input	(3)	kW	9,69	11,9	13,7	16,0	17,7	20,3	23,7	27,2
COP		kW/kW	4,31	4,38	4,47	4,47	4,44	4,41	4,44	4,44
HEATING ONLY (EN14511 VALUE)										
Total heating capacity	(3)(2)	kW	41,9	52,3	61,4	71,7	78,8	89,8	106	121
COP	(3)(2)	kW/kW	4,16	4,22	4,31	4,32	4,29	4,27	4,30	4,31
Cooling energy class			B	B	B	B	B	B	B	B
ENERGY EFFICIENCY										
SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281)										
Ambient refrigeration										
Prated,c	(11)	kW	-	-	-	-	-	-	-	-
SEER	(11)(12)		-	-	-	-	-	-	-	-
Performance ηs	(11)(12)	%	-	-	-	-	-	-	-	-
SEASONAL EFFICIENCY IN HEATING (Reg. EU 813/2013)										
PDesign	(4)	kW	50,4	62,6	73,6	85,6	94,8	108	127	146
SCOP	(4)(14)		5,64	5,95	5,89	5,92	6,07	5,89	5,94	6,00
Performance ηs	(4)(15)	%	218	230	228	229	235	227	230	232
Seasonal efficiency class	(4)		A ++	A ++	A ++	-	-	-	-	-
PDesign	(5)	kW	45,4	56,7	66,4	78,1	85,4	97,0	114	131
SCOP	(5)(14)		4,50	4,58	4,64	4,64	4,67	4,62	4,64	4,69
Performance ηs	(5)(15)	%	172	175	178	178	179	177	178	179
Seasonal efficiency class	(5)		A ++	A ++	A ++	-	-	-	-	-
EXCHANGERS										
HEAT EXCHANGER USER SIDE IN REFRIGERATION										
Water flow	(1)	l/s	1,79	2,23	2,63	3,06	3,39	3,85	4,52	5,20
Pressure drop	(1)	kPa	12,3	13,1	13,3	13,7	14,1	14,6	14,7	15,5
HEAT EXCHANGER USER SIDE IN HEATING										
Water flow	(3)	l/s	2,02	2,52	2,95	3,45	3,79	4,32	5,09	5,83
Pressure drop	(3)	kPa	15,6	16,7	16,8	17,5	17,7	18,4	18,6	19,5
HEAT EXCHANGER SOURCE SIDE IN REFRIGERATION										
Water flow	(1)	l/s	2,15	2,68	3,15	3,66	4,05	4,61	5,42	6,23
Pressure drop	(1)	kPa	17,7	18,9	19,1	19,7	20,1	21,0	21,1	22,2
HEAT EXCHANGER SOURCE SIDE IN HEATING										
Water flow	(3)	l/s	2,61	3,26	3,85	4,50	4,93	5,62	6,62	7,59
Pressure drop	(3)	kPa	26,0	28,0	28,5	29,7	29,9	31,2	31,5	32,9
REFRIGERANT CIRCUIT										
Compressors nr.		N°	2	2	2	2	2	2	2	2
No. Circuits		N°	1	1	1	1	1	1	1	1
Refrigerant charge		kg	3,80	4,20	5,00	5,50	6,10	8,60	10,0	11,6
NOISE LEVEL										
Sound Pressure	(6)	dB(A)	57	57	58	58	58	59	60	60
Sound power level in cooling	(7)(8)	dB(A)	73	73	74	74	74	75	76	77
Sound power level in heating	(7)(9)	dB(A)	74	74	75	75	75	76	77	78
SIZE AND WEIGHT										
A	(10)	mm	1225	1225	1225	1225	1225	1225	1225	1570
B	(10)	mm	885	885	885	885	885	885	885	885
H	(10)	mm	1495	1495	1495	1495	1495	1495	1495	1805
Operating weight	(10)	kg	390	400	430	440	480	500	540	680

Notes:

1 Plant (side) cooling exchanger water (in/out) 12°C/7°C; Source (side) heat exchanger water (in/out) 30°C/35°C.
2 Values in compliance with EN14511-3:2013.
3 Plant (side) heating exchanger water (in/out) 10°C/7°C; Source (side) heat exchanger water (in/out) 40°C/45°C.
4 Seasonal space heating energy efficiency class LOW TEMPERATURE in AVERAGE climate conditions [REGULATION (EU) N. 813/2013].
5 Seasonal space heating energy efficiency class MEDIA TEMPERATURE in AVERAGE climate conditions [REGULATION (EU) N. 813/2013].
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 made in compliance with ISO 9614.
8 Sound power level in cooling, indoors.
9 Sound power level in heating, indoors.
10 Unit in standard configuration/execution, without optional accessories.
11 Seasonal energy efficiency of the cooling environment [REGULATION (EU) N. 2016/2281].
12 Seasonal space heating energy index.
13 Seasonal energy efficiency of the space cooling.
14 Seasonal performance coefficient
15 Seasonal space heating energy efficiency

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VPF · HFC R410A · PLATES · EEV · COOLING · SCROLL

NX-WN			0402	0452	0502	0552	0602	0702	0802	0604
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
PERFORMANCE										
COOLING ONLY (GROSS VALUE)										
Cooling capacity	(1)	kW	123	138	154	177	200	225	252	187
Total power input	(1)	kW	24,9	28,2	31,5	35,9	40,4	46,2	52,1	39,2
EER	(1)	kW/kW	4,95	4,91	4,89	4,93	4,94	4,87	4,83	4,78
ESEER	(1)	kW/kW	6,13	6,23	6,08	6,22	6,18	6,27	5,99	6,35
COOLING ONLY (EN14511 VALUE)										
Cooling capacity	(1)(2)	kW	123	138	154	176	199	224	251	187
EER	(1)(2)	kW/kW	4,79	4,76	4,74	4,78	4,79	4,70	4,66	4,66
ESEER	(1)(2)	kW/kW	5,77	5,81	5,71	5,81	5,79	5,79	5,55	5,91
Cooling energy class			B	B	B	B	B	B	B	B
HEATING ONLY (GROSS VALUE)										
Total heating capacity	(3)	kW	137	154	172	197	222	251	281	208
Total power input	(3)	kW	30,7	34,7	38,8	44,1	49,6	56,4	63,2	47,9
COP		kW/kW	4,45	4,44	4,42	4,46	4,47	4,45	4,45	4,35
HEATING ONLY (EN14511 VALUE)										
Total heating capacity	(3)(2)	kW	137	154	172	197	222	252	282	209
COP	(3)(2)	kW/kW	4,31	4,31	4,29	4,33	4,33	4,29	4,28	4,25
Cooling energy class			B	B	B	B	B	B	B	B
ENERGY EFFICIENCY										
SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281)										
Ambient refrigeration										
Prated,c	(11)	kW	-	-	-	-	-	-	-	-
SEER	(11)(12)		-	-	-	-	-	-	-	-
Performance ηs	(11)(12)	%	-	-	-	-	-	-	-	-
SEASONAL EFFICIENCY IN HEATING (Reg. EU 813/2013)										
PDesign	(4)	kW	165	186	207	237	268	302	337	251
SCOP	(4)(14)		5,93	5,97	5,91	5,95	5,96	5,87	5,70	6,05
Performance ηs	(4)(15)	%	229	231	229	230	230	227	220	234
Seasonal efficiency class	(4)		-	-	-	-	-	-	-	-
PDesign	(5)	kW	148	167	186	213	240	272	306	226
SCOP	(5)(14)		4,67	4,70	4,65	4,72	4,70	4,71	4,60	4,71
Performance ηs	(5)(15)	%	179	180	178	181	180	181	176	180
Seasonal efficiency class	(5)		-	-	-	-	-	-	-	-
EXCHANGERS										
HEAT EXCHANGER USER SIDE IN REFRIGERATION										
Water flow	(1)	l/s	5,89	6,62	7,36	8,46	9,55	10,76	12,04	8,95
Pressure drop	(1)	kPa	15,7	16,2	16,8	17,9	19,6	24,9	28,6	13,4
HEAT EXCHANGER USER SIDE IN HEATING										
Water flow	(3)	l/s	6,59	7,43	8,28	9,49	10,70	12,11	13,58	10,06
Pressure drop	(3)	kPa	19,6	20,4	21,3	22,5	24,6	31,5	36,3	16,9
HEAT EXCHANGER SOURCE SIDE IN REFRIGERATION										
Water flow	(1)	l/s	7,06	7,94	8,83	10,14	11,44	12,91	14,47	10,78
Pressure drop	(1)	kPa	22,5	23,3	24,2	25,7	28,1	35,9	41,3	19,4
HEAT EXCHANGER SOURCE SIDE IN HEATING										
Water flow	(3)	l/s	8,58	9,67	10,76	12,37	13,95	15,77	17,68	13,02
Pressure drop	(3)	kPa	33,3	34,5	36,0	38,2	41,8	53,5	61,6	28,3
REFRIGERANT CIRCUIT										
Compressors nr.		N°	2	2	2	2	2	2	2	4
No. Circuits		N°	1	1	1	1	1	1	1	2
Refrigerant charge		kg	13,1	14,8	15,7	18,8	21,4	22,4	22,4	20,0
NOISE LEVEL										
Sound Pressure	(6)	dB(A)	60	61	61	62	62	65	66	69
Sound power level in cooling	(7)(8)	dB(A)	77	78	78	79	79	82	83	86
Sound power level in heating	(7)(9)	dB(A)	78	79	79	80	80	83	84	87
SIZE AND WEIGHT										
A	(10)	mm	1570	1570	1570	1570	1570	1570	1570	2210
B	(10)	mm	885	885	885	885	885	885	885	885
H	(10)	mm	1805	1805	1805	1805	1805	1805	1805	1805
Operating weight	(10)	kg	760	810	850	890	930	950	970	920

Notes:

1 Plant (side) cooling exchanger water (in/out) 12°C/7°C; Source (side) heat exchanger water (in/out) 30°C/35°C.
2 Values in compliance with EN14511-3:2013.
3 Plant (side) heating exchanger water (in/out) 10°C/7°C; Source (side) heat exchanger water (in/out) 40°C/45°C.
4 Seasonal space heating energy efficiency class LOW TEMPERATURE in AVERAGE climate conditions [REGULATION (EU) N. 813/2013].
5 Seasonal space heating energy efficiency class MEDIA TEMPERATURE in AVERAGE climate conditions [REGULATION (EU) N. 813/2013].
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 made in compliance with ISO 9614.
8 Sound power level in cooling, indoors.
9 Sound power level in heating, indoors.
10 Unit in standard configuration/execution, without optional accessories.
11 Seasonal energy efficiency of the cooling environment [REGULATION (EU) N. 2016/2281].
12 Seasonal space heating energy index.
13 Seasonal energy efficiency of the space cooling.
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NX-WN			0704	0804	0904	1004	1104	1204
Power supply		V/Ph/Hz	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	215	244	275	306	351	396
Total power input	(1)	kW	45,0	50,7	57,2	63,8	72,7	81,9
EER	(1)	kW/kW	4,79	4,81	4,80	4,79	4,83	4,84
ESEER	(1)	kW/kW	6,41	6,33	6,41	6,30	6,39	6,36
COOLING ONLY (EN14511 VALUE)								
Cooling capacity	(1)(2)	kW	215	244	274	305	350	395
EER	(1)(2)	kW/kW	4,67	4,70	4,67	4,65	4,68	4,68
ESEER	(1)(2)	kW/kW	5,95	5,90	5,90	5,81	5,83	5,78
Cooling energy class			B	B	B	B	B	B
HEATING ONLY (GROSS VALUE)								
Total heating capacity	(3)	kW	239	270	305	340	390	439
Total power input	(3)	kW	55,0	62,0	70,1	78,0	88,8	99,9
COP		kW/kW	4,35	4,36	4,35	4,36	4,39	4,40
HEATING ONLY (EN14511 VALUE)								
Total heating capacity	(3)(2)	kW	240	271	306	341	391	440
COP	(3)(2)	kW/kW	4,25	4,26	4,24	4,23	4,25	4,24
Cooling energy class			B	B	B	B	B	B
ENERGY EFFICIENCY								
SEASONAL EFFICIENCY IN COOLING (Reg. EU 813/2013)								
Ambient refrigeration								
Prated,c	(11)	kW	-	-	-	-	350	395
SEER	(11)(12)		-	-	-	-	5,69	5,63
Performance ηs	(11)(13)	%					220	217
SEASONAL EFFICIENCY IN HEATING (Reg. EU 813/2013)								
PDesign	(4)	kW	289	327	368	410	-	-
SCOP	(4)(14)		6,04	6,07	6,02	5,90	-	-
Performance ηs	(4)(15)	%	234	235	233	228	-	-
Seasonal efficiency class	(4)		-	-	-	-	-	-
PDesign	(5)	kW	259	293	331	369		
SCOP	(5)(14)		4,69	4,76	4,78	4,72		
Performance ηs	(5)(15)	%	180	182	183	181		
Seasonal efficiency class	(5)		-	-	-	-	-	-
EXCHANGERS								
HEAT EXCHANGER USER SIDE IN REFRIGERATION								
Water flow	(1)	l/s	10,30	11,67	13,14	14,62	16,80	18,94
Pressure drop	(1)	kPa	14,4	15,4	18,9	21,7	24,6	28,8
HEAT EXCHANGER USER SIDE IN HEATING								
Water flow	(3)	l/s	11,55	13,05	14,73	16,42	18,82	21,20
Pressure drop	(3)	kPa	18,2	19,3	23,8	27,4	30,8	36,0
HEAT EXCHANGER SOURCE SIDE IN REFRIGERATION								
Water flow	(1)	l/s	12,40	14,03	15,80	17,59	20,19	22,76
Pressure drop	(1)	kPa	20,9	22,3	27,4	31,4	35,5	41,6
HEAT EXCHANGER SOURCE SIDE IN HEATING								
Water flow	(3)	l/s	14,95	16,90	19,06	21,25	24,41	27,50
Pressure drop	(3)	kPa	30,4	32,4	39,9	45,9	51,9	60,7
REFRIGERANT CIRCUIT								
Compressors nr.		N°	4	4	4	4	4	4
No. Circuits		N°	2	2	2	2	2	2
Refrigerant charge		kg	23,5	27,5	33,3	36,2	42,1	48,0
NOISE LEVEL								
Sound Pressure	(6)	dB(A)	70	71	72	73	74	74
Sound power level in cooling	(7)(8)	dB(A)	87	88	88	90	91	91
Sound power level in heating	(7)(9)	dB(A)	88	89	90	91	92	92
SIZE AND WEIGHT								
A	(10)	mm	2210	2650	2650	2650	2650	2650
B	(10)	mm	885	885	885	885	885	885
H	(10)	mm	1805	1805	1805	1805	1805	1805
Operating weight	(10)	kg	1100	1300	1450	1530	1630	1740

NOTES:
1 Plant (side) cooling exchanger water (in/out) 12°C/7°C; Source (side) heat exchanger water (in/out) 30°C/35°C.
2 Values in compliance with EN14511-3:2013.
3 Plant (side) heating exchanger water (in/out) 10°C/7°C; Source (side) heat exchanger water (in/out) 40°C/45°C
4 Seasonal space heating energy efficiency class LOW TEMPERATURE in AVERAGE climate conditions [REGULATION (EU) N. 813/2013]
5 Seasonal space heating energy efficiency class MEDIA TEMPERATURE in AVERAGE climate conditions [REGULATION (EU) N. 813/2013]
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 made in compliance with ISO 9614.
8 Sound power level in cooling, indoors.
9 Sound power level in heating, indoors.
10 Unit in standard configuration/execution, without optional accessories.
11 Seasonal energy efficiency of the cooling environment [REGULATION (EU) N. 2016/2281]
12 Seasonal space heating energy index
13 Seasonal energy efficiency of the space cooling
14 Seasonal performance coefficient
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COOLING VPF R HFC R410A PLATES EEV HEATING SCROLL

NX-W/H			0122	0152	0182	0202	0252	0262	0302	0352
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
PERFORMANCE										
COOLING ONLY (GROSS VALUE)										
Cooling capacity	(1)	kW	38,1	47,7	56,2	65,3	72,3	82,3	96,7	111
Total power input	(1)	kW	7,73	9,31	10,8	12,6	13,8	16,0	18,9	21,7
EER	(1)	kW/kW	5,06	5,12	5,20	5,18	5,24	5,14	5,12	5,13
ESEER	(1)	kW/kW	6,46	6,76	6,42	6,47	6,72	6,41	6,49	6,63
COOLING ONLY (EN14511 VALUE)										
Cooling capacity	(1)(2)	kW	37,9	47,5	55,9	65,1	72,0	82,0	96,4	111
EER	(1)(2)	kW/kW	4,85	4,89	4,96	4,96	5,01	4,96	4,94	4,96
ESEER	(1)(2)	kW/kW	5,89	6,10	5,81	5,93	6,12	5,95	6,04	6,13
Cooling energy class			B	B	B	B	B	B	B	B
HEATING ONLY (GROSS VALUE)										
Total heating capacity	(3)	kW	42,4	53,0	62,6	72,6	80,1	91,0	107	123
Total power input	(3)	kW	9,44	11,5	13,3	15,6	17,2	19,6	23,1	26,5
COP		kW/kW	4,49	4,61	4,71	4,65	4,66	4,64	4,64	4,65
HEATING ONLY (EN14511 VALUE)										
Total heating capacity	(3)(2)	kW	42,5	53,2	62,8	72,8	80,4	91,2	107	123
COP	(3)(2)	kW/kW	4,28	4,37	4,46	4,45	4,45	4,46	4,46	4,47
Cooling energy class			B	B	B	B	B	B	B	B
ENERGY EFFICIENCY										
SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281)										
Ambient refrigeration										
Prated,c	(11)	kW	-	-	-	-	-	-	-	-
SEER	(11)(12)		-	-	-	-	-	-	-	-
Performance ηs	(11)(13)	%	-	-	-	-	-	-	-	-
SEASONAL EFFICIENCY IN HEATING (Reg. EU 813/2013)										
PDesign	(4)	kW	51,0	63,7	75,5	87,2	96,9	110	129	149
SCOP	(4)(14)		5,89	5,99	5,87	6,02	6,14	6,07	6,09	6,16
Performance ηs	(4)(15)	%	228	232	227	233	238	235	236	238
Seasonal efficiency class	(4)		A ++	A ++	A ++	-	-	-	-	-
PDesign	(5)	kW	46,1	57,5	67,8	79,1	86,9	98,5	116	133
SCOP	(5)(14)		4,62	4,68	4,73	4,78	4,80	4,79	4,80	4,85
Performance ηs	(5)(15)	%	177	179	181	183	184	184	184	186
Seasonal efficiency class	(5)		A ++	A ++	A ++	-	-	-	-	-
EXCHANGERS										
HEAT EXCHANGER USER SIDE IN REFRIGERATION										
Water flow	(1)	l/s	1,82	2,28	2,69	3,12	3,46	3,94	4,62	5,33
Pressure drop	(1)	kPa	21,6	26,6	26,7	21,8	21,6	21,8	22,7	22,9
HEAT EXCHANGER USER SIDE IN HEATING										
Water flow	(3)	l/s	2,67	3,35	3,99	4,62	5,09	5,78	6,81	7,82
Pressure drop	(3)	kPa	46,4	57,4	59,0	47,8	46,9	47,1	49,3	49,4
HEAT EXCHANGER SOURCE SIDE IN REFRIGERATION										
Water flow	(1)	l/s	2,18	2,72	3,19	3,71	4,11	4,68	5,50	6,34
Pressure drop	(1)	kPa	11,8	15,7	18,1	20,6	23,1	13,5	14,2	14,6
HEAT EXCHANGER SOURCE SIDE IN HEATING										
Water flow	(3)	l/s	2,05	2,56	3,02	3,50	3,87	4,39	5,17	5,94
Pressure drop	(3)	kPa	10,4	13,9	16,2	18,3	20,5	11,9	12,5	12,8
REFRIGERANT CIRCUIT										
Compressors nr.		N°	2	2	2	2	2	2	2	2
No. Circuits		N°	1	1	1	1	1	1	1	1
Refrigerant charge		kg	3,80	4,20	5,00	5,50	6,10	8,60	10,0	11,6
NOISE LEVEL										
Sound Pressure	(6)	dB(A)	57	57	58	58	58	59	60	60
Sound power level in cooling	(7)(8)	dB(A)	73	73	74	74	74	75	76	77
Sound power level in heating	(7)(9)	dB(A)	74	74	75	75	75	76	77	78
SIZE AND WEIGHT										
A	(10)	mm	1225	1225	1225	1225	1225	1225	1225	1570
B	(10)	mm	885	885	885	885	885	885	885	885
H	(10)	mm	1495	1495	1495	1495	1495	1495	1495	1805
Operating weight	(10)	kg	360	360	390	410	440	480	520	660

NOTES:
1 Plant (side) cooling exchanger water (in/out) 12°C/7°C; Source (side) heat exchanger water (in/out) 30°C/35°C.
2 Values in compliance with EN14511-3:2013.
3 Plant (side) heating exchanger water (in/out) 40°C/45°C; Source (side) heat exchanger water (in/out) 10°C/7°C
4 Seasonal space heating energy efficiency class LOW TEMPERATURE in AVERAGE climate conditions [REGULATION (EU) N. 813/2013]
5 Seasonal space heating energy efficiency class MEDIA TEMPERATURE in AVERAGE climate conditions [REGULATION (EU) N. 813/2013]
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 made in compliance with ISO 9614.
8 Sound power level in cooling, indoors.
9 Sound power level in heating, indoors.
10 Unit in standard configuration/execution, without optional accessories.
11 Seasonal energy efficiency of the cooling environment [REGULATION (EU) N. 2016/2281]
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NX-W/H 0122 - 1204

Water source reversible heat pump (reversible on the refrigerant side)
with scroll compressors 38,1 kW - 398 kW

NX-W/H			0402	0452	0502	0552	0602	0702	0802	0604
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
PERFORMANCE										
COOLING ONLY (GROSS VALUE)										
Cooling capacity	(1)	kW	126	142	157	181	204	231	254	192
Total power input	(1)	kW	24,5	27,7	30,9	35,2	39,6	45,2	51,2	38,3
EER	(1)	kW/kW	5,15	5,12	5,10	5,14	5,16	5,10	4,97	5,01
ESEER	(1)	kW/kW	6,34	6,47	6,32	6,42	6,42	6,50	6,06	6,60
COOLING ONLY (EN14511 VALUE)										
Cooling capacity	(1)(2)	kW	126	141	157	181	204	230	253	191
EER	(1)(2)	kW/kW	4,98	4,96	4,93	4,98	5,00	4,93	4,79	4,88
ESEER	(1)(2)	kW/kW	5,95	6,04	5,92	6,00	6,01	6,03	5,63	6,14
Cooling energy class			B	B	B	B	B	B	B	B
HEATING ONLY (GROSS VALUE)										
Total heating capacity	(3)	kW	139	157	175	200	226	255	283	212
Total power input	(3)	kW	29,9	33,9	37,8	43,0	48,3	54,6	61,5	46,9
COP		kW/kW	4,65	4,63	4,62	4,66	4,67	4,68	4,61	4,51
HEATING ONLY (EN14511 VALUE)										
Total heating capacity	(3)(2)	kW	139	157	175	201	226	256	284	212
COP	(3)(2)	kW/kW	4,48	4,47	4,46	4,49	4,51	4,49	4,40	4,40
Cooling energy class			A	A	A	A	A	A	B	B
ENERGY EFFICIENCY										
SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281)										
Ambient refrigeration										
Prated,c	(11)	kW	-	-	-	-	-	-	-	-
SEER	(11)(12)		-	-	-	-	-	-	-	-
Performance ηs	(11)(13)	%	-	-	-	-	-	-	-	-
SEASONAL EFFICIENCY IN HEATING (Reg. EU 813/2013)										
PDesign	(4)	kW	169	190	211	242	273	308	339	255
SCOP	(4)(14)		6,07	6,10	6,01	6,10	6,11	6,07	5,82	6,18
Performance ηs	(4)(15)	%	235	236	232	236	236	235	225	239
Seasonal efficiency class	(4)		-	-	-	-	-	-	-	-
PDesign	(5)	kW	150	170	189	217	244	277	308	229
SCOP	(5)(14)		4,81	4,85	4,80	4,87	4,86	4,90	4,72	4,81
Performance ηs	(5)(15)	%	184	186	184	187	186	188	181	184
Seasonal efficiency class	(5)		-	-	-	-	-	-	-	-
EXCHANGERS										
HEAT EXCHANGER USER SIDE IN REFRIGERATION										
Water flow	(1)	l/s	6,03	6,78	7,53	8,66	9,78	11,02	12,16	9,17
Pressure drop	(1)	kPa	23,1	23,8	24,4	24,9	25,5	30,7	37,4	17,1
HEAT EXCHANGER USER SIDE IN HEATING										
Water flow	(3)	l/s	8,83	9,96	11,09	12,73	14,36	16,25	17,97	13,36
Pressure drop	(3)	kPa	49,6	51,4	52,9	53,8	55,1	66,7	81,6	36,3
HEAT EXCHANGER SOURCE SIDE IN REFRIGERATION										
Water flow	(1)	l/s	7,17	8,07	8,97	10,30	11,63	13,14	14,55	10,96
Pressure drop	(1)	kPa	15,4	15,9	18,5	18,3	21,0	23,5	28,8	16,2
HEAT EXCHANGER SOURCE SIDE IN HEATING										
Water flow	(3)	l/s	6,71	7,57	8,43	9,67	10,90	12,32	13,68	10,22
Pressure drop	(3)	kPa	13,5	14,0	16,3	16,1	18,5	20,7	25,4	14,1
REFRIGERANT CIRCUIT										
Compressors nr.		N°	2	2	2	2	2	2	2	4
No. Circuits		N°	1	1	1	1	1	1	1	2
Refrigerant charge		kg	13,1	14,8	15,7	18,8	21,4	22,4	22,4	19,3
NOISE LEVEL										
Sound Pressure	(6)	dB(A)	60	61	61	62	62	65	66	69
Sound power level in cooling	(7)(8)	dB(A)	77	78	78	79	79	82	83	86
Sound power level in heating	(7)(9)	dB(A)	78	79	79	80	80	83	84	87
SIZE AND WEIGHT										
A	(10)	mm	1570	1570	1570	1570	1570	1570	1570	2210
B	(10)	mm	885	885	885	885	885	885	885	885
H	(10)	mm	1805	1805	1805	1805	1805	1805	1805	1805
Operating weight	(10)	kg	740	790	820	870	920	940	960	870

NOTES:
1 Plant (side) cooling exchanger water (in/out) 12°C/7°C; Source (side) heat exchanger water (in/out) 30°C/35°C.
2 Values in compliance with EN14511-3:2013.
3 Plant (side) heating exchanger water (in/out) 40°C/45°C; Source (side) heat exchanger water (in/out) 10°C/7°C
4 Seasonal space heating energy efficiency class LOW TEMPERATURE in AVERAGE climate conditions [REGULATION (EU) N. 813/2013]
5 Seasonal space heating energy efficiency class MEDIA TEMPERATURE in AVERAGE climate conditions [REGULATION (EU) N. 813/2013]
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 made in compliance with ISO 9614.
8 Sound power level in cooling, indoors.
9 Sound power level in heating, indoors.
10 Unit in standard configuration/execution, without optional accessories.
11 Seasonal energy efficiency of the cooling environment [REGULATION (EU) N. 2016/2281]
12 Seasonal space heating energy index
13 Seasonal energy efficiency of the space cooling
14 Seasonal performance coefficient
15 Seasonal space heating energy efficiency.

The units highlighted in this publication contain HFC R410A [GWP_{100} 2088] fluorinated greenhouse gases.

EUROVENT CERTIFIED PERFORMANCE www.eurovent-certification.com

COOLING VPF R HFC R410A PLATES EEV HEATING SCROLL

NX-W/H			0704	0804	0904	1004	1104	1204
Power supply		V/Ph/Hz	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	221	250	281	313	359	398
Total power input	(1)	kW	43,9	49,6	56,1	62,5	71,3	80,0
EER	(1)	kW/kW	5,03	5,04	5,01	5,00	5,04	4,98
ESEER	(1)	kW/kW	6,64	6,58	6,64	6,53	6,61	6,57
COOLING ONLY (EN14511 VALUE)								
Cooling capacity	(1)(2)	kW	220	249	281	312	358	397
EER	(1)(2)	kW/kW	4,91	4,91	4,88	4,86	4,89	4,81
ESEER	(1)(2)	kW/kW	6,16	6,12	6,13	6,02	6,03	5,96
Cooling energy class			B	B	B	B	B	B
HEATING ONLY (GROSS VALUE)								
Total heating capacity	(3)	kW	243	274	309	345	396	440
Total power input	(3)	kW	53,8	60,6	68,2	76,5	87,1	98,1
COP		kW/kW	4,52	4,53	4,54	4,51	4,54	4,49
HEATING ONLY (EN14511 VALUE)								
Total heating capacity	(3)(2)	kW	244	275	310	346	396	442
COP	(3)(2)	kW/kW	4,40	4,41	4,41	4,37	4,38	4,31
Cooling energy class			B	B	B	B	B	B
ENERGY EFFICIENCY								
SEASONAL EFFICIENCY IN COOLING (Reg. EU 813/2013)								
Ambient refrigeration								
Prated,c	(11)	kW	-	-	-	-	358	397
SEER	(11)(12)		-	-	-	-	5,89	5,79
Performance ηs	(11)(13)	%	-	-	-	-	228	224
SEASONAL EFFICIENCY IN HEATING (Reg. EU 813/2013)								
PDesign	(4)	kW	294	332	371	416	-	-
SCOP	(4)(14)		6,17	6,17	6,27	6,05	-	-
Performance ηs	(4)(15)	%	239	239	243	234	-	-
Seasonal efficiency class	(4)		-	-	-	-	-	-
PDesign	(5)	kW	263	297	335	374	-	-
SCOP	(5)(14)		4,83	4,90	4,93	4,85	-	-
Performance ηs	(5)(15)	%	185	188	189	186	-	-
Seasonal efficiency class	(5)		-	-	-	-	-	-
EXCHANGERS								
HEAT EXCHANGER USER SIDE IN REFRIGERATION								
Water flow	(1)	l/s	10,57	11,96	13,45	14,95	17,18	19,05
Pressure drop	(1)	kPa	18,1	20,0	21,3	24,9	28,2	34,7
HEAT EXCHANGER USER SIDE IN HEATING								
Water flow	(3)	l/s	15,34	17,33	19,54	21,77	24,99	27,73
Pressure drop	(3)	kPa	38,1	42,0	45,0	52,7	59,7	73,6
HEAT EXCHANGER SOURCE SIDE IN REFRIGERATION								
Water flow	(1)	l/s	12,62	14,27	16,07	17,87	20,51	22,78
Pressure drop	(1)	kPa	17,4	19,6	22,0	24,8	30,0	36,2
HEAT EXCHANGER SOURCE SIDE IN HEATING								
Water flow	(3)	l/s	11,73	13,25	14,93	16,66	19,09	21,25
Pressure drop	(3)	kPa	15,1	16,9	19,0	21,6	26,0	31,5
REFRIGERANT CIRCUIT								
Compressors nr.		N°	4	4	4	4	4	4
No. Circuits		N°	2	2	2	2	2	2
Refrigerant charge		kg	22,5	25,3	28,8	41,1	47,0	49,0
NOISE LEVEL								
Sound Pressure	(6)	dB(A)	70	71	72	73	74	74
Sound power level in cooling	(7)(8)	dB(A)	87	88	89	90	91	91
Sound power level in heating	(7)(9)	dB(A)	88	89	90	91	92	92
SIZE AND WEIGHT								
A	(10)	mm	2210	2650	2650	2650	2650	2650
B	(10)	mm	885	885	885	885	885	885
H	(10)	mm	1805	1805	1805	1805	1805	1805
Operating weight	(10)	kg	1050	1240	1330	1530	1630	1710

NOTES:
1 Plant (side) cooling exchanger water (in/out) 12°C/7°C; Source (side) heat exchanger water (in/out) 30°C/35°C.
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Certified data in EUROVENT

Vardshuset Ikea Hotel & Restaurant

2018 Almhult – Sweden

Applications:
Hotel and resorts

Plant type:
Hydronic System

Cooling capacity:
285 kW

Installed units:
1x NX-W water cooled chiller with scroll compressors

PROJECT

The Ikea hotel is located in Almhult, Ikea's historical headquarters, and results from the refurbishment of an existing building. The hotel fully reflects Ikeas's corporate mantra "Creating a better life at home" both in the furniture, entirely based on Ikea items, as well as on the services it offers: a lounge on each floor where guests can gather to socialize, play games, read or watch movies, an inviting garden, gym and sauna.

CHALLENGE

The renewal of the hotel included also a brand new HVAC system. In fact the experience in IKEA hotel had to be perfectly in line with those in its shops, thus ensuring perfect comfort in terms of control of temperature, humidity level and low noise emissions to the guests.

SOLUTION

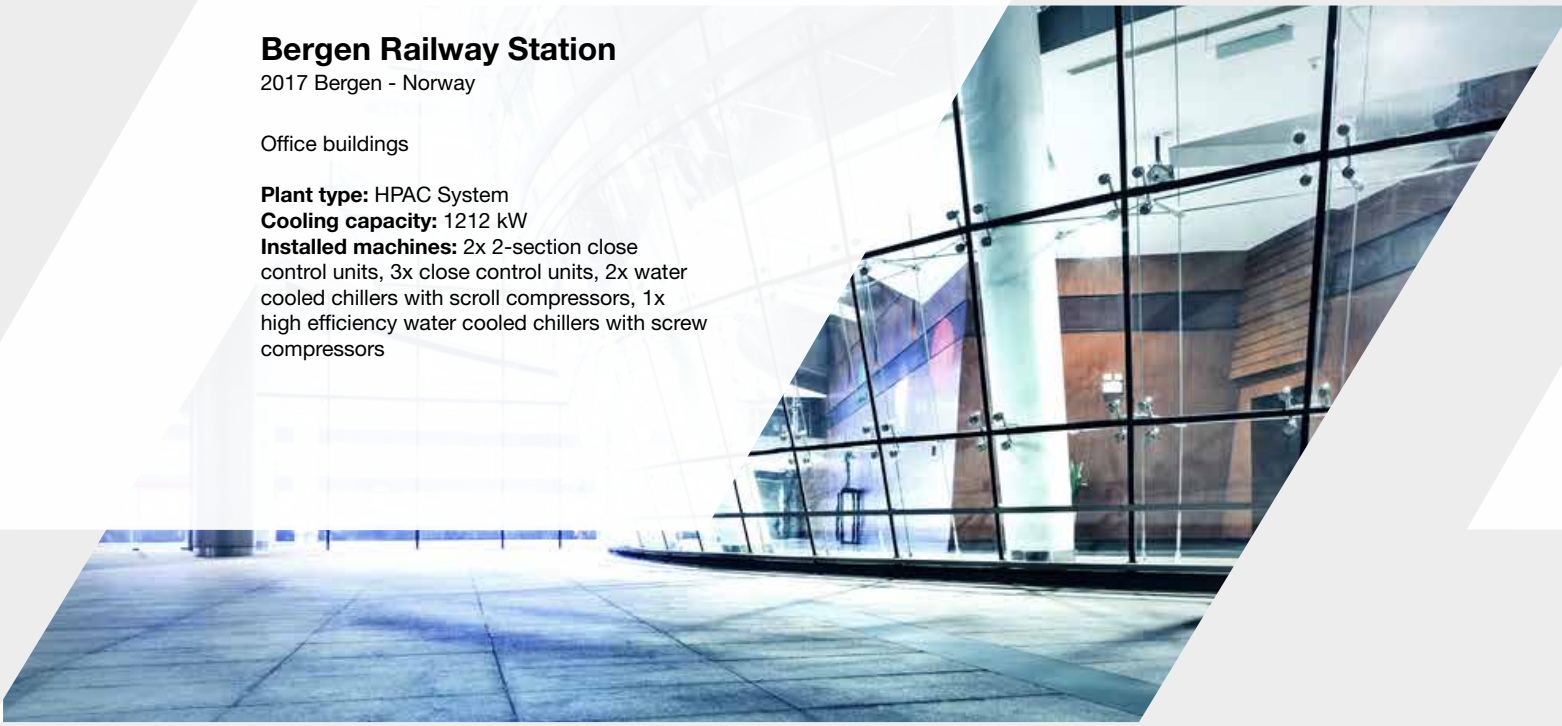
For the cooling demand, Ikea installed a Climaveneta water cooled chiller NX-W. This unit ensures premium efficiency and reliable operation in every working conditions and in particular at partial loads, where it reaches an ESEER as high as 6.01.

Bergen Railway Station

2017 Bergen - Norway

Office buildings

Plant type: HPAC System
Cooling capacity: 1212 kW
Installed machines: 2x 2-section close control units, 3x close control units, 2x water cooled chillers with scroll compressors, 1x high efficiency water cooled chillers with screw compressors



Kristall Muenster

2012 Germany

Office Building

Application: Office buildings
Plant type: Hydronic System
Cooling capacity: 950 kW
Heating capacity: 720 kW
Installed machines: 1x water cooled chiller, 3x water source heat pumps with scroll compressors

United Hospitals

2015 South Padua - Italy

Industrial process

Application: Industrial process
Plant type: Air to Air System
Heating capacity: 2300 kW
Air flow: 900000 M!/h
Installed machines: 132x air handling units, 11x water source heat pumps with scroll compressors, 1x water cooled chiller

BNP Unicity

2016 Levvalois - Perret - France

Office Building

Plant type: Hydronic System
Cooling capacity: 1921 kW
Installed machines: 2x water cooled chiller with screw compressors, 3x water cooled chillers with scroll compressors

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Eco Changes is the Mitsubishi Electric Group's environmental statement, and expresses the Group's stance on environmental management. Through a wide range of businesses, we are helping contribute to the realization of a sustainable society.

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