

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

PROCESS

CHILLERS

HEAT PUMPS

NX-G06-Y

NX-N-G06-Y

AIR SOURCE CHILLERS AND HEAT  
PUMPS FOR OUTDOOR INSTALLATION,  
FROM 49,6 TO 338 kW

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R454B



# NX-G06-Y

# NX-N-G06-Y

**THE ECO-FRIENDLY SOLUTION  
FOR YOUR PERFECT COMFORT**



**Air source chillers and heat pumps with scroll compressors and low GWP refrigerant. From 49,6 to 338 kW**



NX-G06-Y and NX-N-G06-Y are air source chiller and heat pump ranges with scroll compressors designed for delivering the best efficiencies in comfort applications.

Reduced refrigerant charge and low GWP refrigerant ensure the lowest CO<sub>2</sub>eq tons, for an environmental-friendly approach.

Available in three different acoustical versions, NX-G06-Y and NX-N-G06-Y feature extremely low sound emissions, with zero compromises in efficiency.

The new ranges are brilliantly engineered to integrate all the main hydraulic and mechanic components inside the unit, providing installers the ideal plug & play solution for the HVAC plant.

## PROCESS APPLICATIONS

- ✓ Food industry
- ✓ Chemical
- ✓ Pharmaceutical
- ✓ Printing industry
- ✓ Plastics
- ✓ Winery

## PREMIUM EFFICIENCIES IN HEATING AND COOLING

<b>COOLING</b>		NX-G06-Y Air cooled chillers				<b>UP TO</b>
EER	SEPR HT	EER	SEPR HT			
<b>CA</b>	<b>3,26</b>	<b>5,90</b>	<b>K</b>	<b>2,89</b>	<b>5,46</b>	
CA ▶ Very high efficiency		K ▶ Key efficiency				

<b>HEATING</b>		NX-N-G06-Y Air source heat pumps				<b>UP TO</b>
COP	SCOP	COP	SCOP			
<b>CA</b>	<b>3,34</b>	<b>4,17</b>	<b>K</b>	<b>3,18</b>	<b>3,90</b>	
CA ▶ Very high efficiency		K ▶ Key efficiency				

## OPERATING RANGE



## OPERATING RANGE



Average values (EN14511) / SEPR HT: Regulation (EU) N. 2016/2281 / SCOP: Regulation (EU) N. 813/2013

## 3 ACOUSTIC VERSIONS

<b>-</b>	<b>Standard</b>	Standard soundproofing equipment.	<b>Baseline</b>
<b>LN</b>	<b>Low noise</b>	Increased acoustic insulation, slower fan speed, larger heat exchange surface.	up to <b>-6 dB(A)</b>
<b>SL</b>	<b>Super low noise</b>	The highest level of noise reduction. NO COMPROMISES IN EFFICIENCY!	up to <b>-9 dB(A)</b>

## HEAT RECOVERY CONFIGURATIONS

<b>-</b>	<b>Standard unit</b>	Unit without heat recovery.	-
<b>D</b>	<b>Partial heat recovery</b>	A desuperheater on the compressor discharge line recovers approximately 20% of the unit's capacity.  Suitable for DHW production or other secondary uses, such as the integration of an existing boiler.	<b>60°C</b>

## NEW GENERATION GREEN REFRIGERANT

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**R454B**

Fully committed to support the creation of a greener tomorrow, Mitsubishi Electric Hydronics & IT Cooling Systems presents the G06-Y series, chillers and heat pumps with reduced environmental impact.

Thanks to the new generation refrigerant R454B, the environmental impact of NX-G06-Y and NX-N-G06-Y is greatly reduced. Combining reduced refrigerant charge with a low GWP refrigerant, these units boast the lowest amount of CO<sub>2</sub>eq in the scroll unit market, thus resulting as the perfect choice for any new forward looking installation.

### R454B REFRIGERANT

High density, low **GWP refrigerant**. Its physical properties are **similar to R410A**, so the same type of equipment / components can be used.

#### REDUCED ENVIRONMENTAL IMPACT

- ▶ Low GWP, only 466
- ▶ Reduced refrigerant charge (-10% vs R410A)



#### RELIABILITY

- ▶ Use of **well-known components**
- ▶ Refrigerant circuit **reliability** is maintained

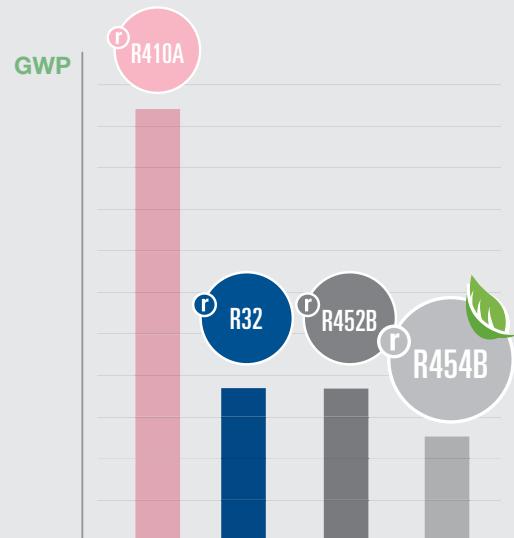


#### PERFORMANCE & ENVELOPE

- ▶ Same operating limits of R410A both in **cooling and heating**
- ▶ Higher efficiency (full load +3,5%, seasonal +2% vs R410A)

**GWP: 466**

-76% vs R410A  
-31% vs R32



### W3000+ CONTROL SOFTWARE

Fast adaptive responses and functional options, developed fully in-house. For the customer's complete peace of mind.

#### NIGHT MODE



The advanced control system is engineered to maintain optimal comfort conditions according to occupancy needs and variations.

Thanks to the night mode function, the unit lowers its sound emissions (-3 dB(A) with factory settings) leveraging on a reduced usage of its resources. Offering excellent comfort during low load periods.

#### SMART DEFROST



Thanks to the extensive know-how in heat pump technology, a series of smart proprietary auto adaptive algorithms have been developed to manage the defrosting cycles in the smartest way.

- ▶ Reduction in defrosting time
- ▶ Minimum impact on leaving water temperature
- ▶ Reduction of energy required for defrosting
- ▶ Increase of COP

**+10%**

NET HEATING CAPACITY  
compared to units with traditional defrost cycles.

#### PACKAGED SOLUTION



NX-G06-Y and NX-N-G06-Y are all-in-one solutions, ready to be installed. The integrated hydronic modules includes the pumps, the buffer tanks and the main hydraulic components, allowing simplified installation and time-saving commissioning.

#### SILENT OPERATION AND NO COMPROMISES IN EFFICIENCY



NX-G06-Y and NX-N-G06-Y ranges have been designed for the perfect environmental well-being. Thanks to a specific design, the SL versions (super low noise) achieve the minimum sound level while maintaining the same performance as the standard acoustical version.

# TECHNOLOGICAL CHOICES

## W3000+ CONTROL

### Management software developed fully in-house

- ▶ Proprietary settings for faster adaptive responses to different dynamics
- ▶ Enhanced diagnostics thanks to the black box function
- ▶ Connectivity with the most commonly used BMS protocols and M-Net Mitsubishi Electric proprietary protocol (Opt.)

### Compact keyboard



- ▶ Large LCD display and functional keys
- ▶ Quick and easy parameter consultation and adjustment by means of a multi-level menu
- ▶ KIPlink, the innovative Wi-Fi interface, is available as an option.

### Highly resistant finned coils

#### Copper and aluminum tube & fins coils for reversible heat pumps

- ▶ Ideally designed to optimize airflow and heat transfer
- ▶ Protective coating available for harsh industrial and marine environments (Opt.)

#### New generation full aluminum micro-channel coils for cooling only chillers

- ▶ Long Life Alloy (LLA) for higher corrosion resistance and longer life cycle
- ▶ Up to 30% of refrigerant charge reduction vs. traditional solutions



### Scroll compressors

New generation scroll compressors, developed for the use of high density A2L refrigerants (Fluid Group 1 of PED Directive).

- ▶ Tandem or trio configuration to benefit from higher seasonal efficiency
- ▶ Specific oil management solution for enhanced reliability



### R454B Refrigerant

High density, low GWP refrigerant

GWP: 466

-76% vs R410A  
-31% vs R32

- ▶ Composition: 69% R32 + 31% R1234yf
- ▶ Global Warming Potential: 466 (IPCC AR5)
- ▶ Safety classification:
  - A2L mildly flammable (ISO 817)
  - Fluid Group 1 (PED)

## NX-G06 and NX-N-G06 ranges: the ideal solutions for forward-looking cooling systems.

### FANS

#### High performing, axial fans:

- ▶ Different sizes and speeds to perfectly fit the requirements of each unit model
- ▶ Speed control (DVV) based on refrigerant pressure.

#### UP TO + 8% MORE SEASONAL EFFICIENCY



EC AXIAL

#### EC fans (opt. For 2 cmpr units, available for CA versions)

- ▶ Continuous regulation of the air flow
- ▶ Reduced power consumption and increased efficiencies at partial loads



### Shell&Tube heat exchanger

Dry expansion, single pass S&T evaporator, fully in-house developed. (4 compressors units)

- ▶ Internally grooved copper tubes
- ▶ Possibility of inspection and tubes cleaning
- ▶ Low pressure drops



### Plate heat exchanger

Compact and robust, made of AISI 316 steel plates, copper-brazed.

- ▶ Low pressure drops
- ▶ Fully protected against ice formation
- ▶ Closed-cell neoprene external lining



### HYDRONIC MODULES

The **fully integrated hydronic module** (opt.) includes the pumps, the buffer tank, and all the main hydraulic components, for the best **optimization of the installation space, time and costs**.

#### Pumps

- ▶ End-suction configuration
- ▶ 2-pole motor
- ▶ Single or twin pumps
- ▶ Low or high head (approx. 100 or 200 kPa).

#### Pumps+Inverter

- (Available for 4 cmpr. units)
- ▶ External inverter to adjust the waterflow
- ▶ Reduced energy consumption through speed regulation

#### Pumps + Buffer tank

- ▶ Up to 500 liter l buffer tank
- ▶ 20mm insulation lining
- ▶ Including: expansion vessel, safety valve, manometer.

#### Only terminals

- ▶ On/off control
- ▶ 1 or 2 external pumps

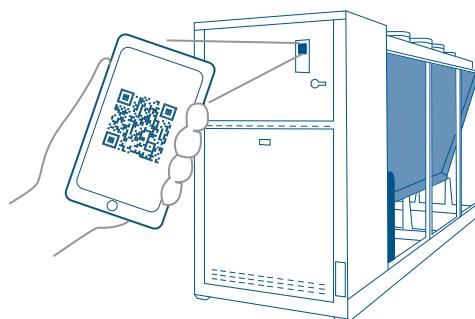
# ACCESSORIES AND FURTHER OPTIONS

## KIPLink user interface



An exclusive product of  
Mitsubishi Electric Hydronics & IT Cooling Systems.

Based on Wi-Fi technology, KIPLink is an option that allows one to operate on the unit directly from a mobile device (smartphone, tablet, or notebook) by simply scanning the QR code positioned on the unit.



## MAIN FEATURES



### Easier on-site operation

Monitor each component while moving around the unit for maintenance operations. View and change all parameters with easy-to-understand screenshots and dedicated tooltips. Get devoted “help” messages / for alarm reset and trouble shooting.



### Real-time graphs and trends

Monitor the immediate labor status of the compressors, heat exchangers, cooling circuits, and pumps. View the real-time graphs of the key operating variable trends.



### Data logger function

View history of events and use the filter for a simple search. Enhance diagnostics with data and graphs of 10 minutes before and after each alarm. Download all the data for detailed analysis.

## FURTHER OPTIONS

### Set-point adjustment

- 4-20 mA:** Enables remote set-point adjustments (analog input).
- Double set-point:** Enables the remote switch between 2 set-points (digital input).
- Set-point compensation:** Automatic adjustment of the set-point on the basis of the outdoor temperature.

### Control functions

- Night mode:** Limits the unit sound level reducing the usage of the resources. Sound power reduction (with factory settings): -3 dB(A).
- U.L.C. User Limit Control:** Controls a mixing valve (not included) to ensure a safe start-up and operation of the unit even in critical conditions.
- Remote probe:** Controls the unit's and pump's activation on the base of the water temperature of the buffer tank or hydraulic decoupler.
- Demand limit:** Limits the unit's power absorption for safety reasons or in temporary situations (digital input).

### Electrical

- Compressor rephasing:** The capacitors on the compressors' line increase the unit's power factor.
- Soft-starter:** Manages the inrush current enabling lower motor windings' mechanical wear, avoidance of mains voltage fluctuations during starting and favorable sizing for the electrical system.

### Connectivity

- Serial card interface module to allow integration with BMS protocols:  
**Modbus / LonWorks / BACnet MS/TP / BACnet over IP / Konnex / Modbus TCP/IP / SNMP**
- M-Net interface kit:** Interface module to allow the integration of the unit with Mitsubishi Electric proprietary communication protocol M-Net.

### Energy Meter

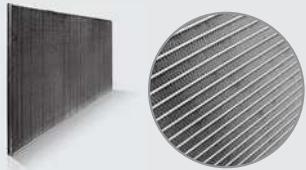
- Energy meter for BMS:** Acquires electrical data and the power absorbed by the unit and sends them to the BMS for energy metering (Modbus RS485).
- Energy meter for W3000:** The electrical data acquired is available directly on the unit's control.

All the flexibility you need for the most diverse application requirements

## COILS AND COATINGS

### MICROCHANNEL COILS

#### Al - Regular (std for NX-G06-Y)

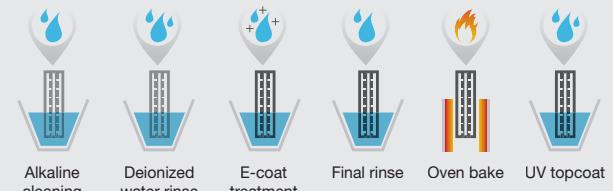


#### Al - E-coating



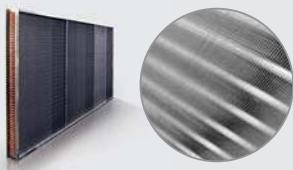
- ✓ Excellent resistance to UV rays.

#### E-coating process



## TUBE & FINS COILS

#### Cu/Al - Regular (std for NX-N-G06-Y)



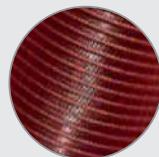
#### Cu/Al - Pre-painted fins

- Fins treated with protective polyester resin paint.
- 1000 h of salt spray protection as per ASTM B117.
- Excellent resistance to UV rays.

#### Cu/Al - Fin Guard Silver SB

- Polyurethane paint with metallic emulsion.
- 3000 h of salt spray protection as per ASTM B117.
- Excellent resistance to UV rays.

#### Cu/Cu - Tube & fin coil



### Refrigerant circuit

**Compressor suction and discharge valves:** Installed for each compressor tandem or trio, the valves simplify maintenance activities. The user can work on the isolated valve for periodic maintenance or replacement, without removing the refrigerant from the circuit.

**Dual pressure relief valves with switch:** One valve is isolated from the refrigerant circuit while the other is in service. The user can work on the isolated valve for periodic maintenance or replacement, without removing the refrigerant from the circuit.

### Refrigerant leak detector

**Leak detector:** Factory installed device. In case of a gas leak detection it raises an alarm.

**Leak detector + compressor off:** Factory installed device. In case of a gas leak detection it raises an alarm and stops the units.

### Hydraulic

**Water flow switch:** Designed to protect the unit when the water flow across the evaporator is not sufficient and falls outside of the operating parameters.

**Water filter:** Filters the water before the unit's inlet.

### Structure

**Anti-intrusion grilles:** Perimeter metal grilles to protect against the intrusion of solid bodies into the unit structure.

**Spring or rubber type anti-vibration mountings:** Reduce vibrations, keeping noise transmission to a minimum.

### Packing

**Standard or nylon packing:** The unit is provided with plastic supports, with or without a protective nylon layer.

**Container slides or packing:** The unit is provided with metal slides to load it in a container, with or without a protective nylon layer.

**Wooden cage packing:** The unit is provided with a robust wooden cage, with or without a protective nylon layer.

**NX-G06-Y**

Chiller with 2 compressors, air cooled for outdoor installation 49,6 to 218 kW.

<b>NX-G06-Y/CA</b>		<b>0202P</b>	<b>0252P</b>	<b>0262P</b>	<b>0302P</b>	<b>0352P</b>	<b>0402P</b>
Power supply	V/ph/Hz	400/3+N/50	400/3+N/50	400/3+N/50	400/3/50	400/3/50	400/3/50
<b>PERFORMANCE</b>							
<b>COOLING ONLY (GROSS VALUE)</b>							
Cooling capacity	(1) kW	52,80	59,95	66,81	81,64	92,73	103,6
Total power input	(1) kW	15,59	17,95	20,27	24,80	28,22	31,39
EER	(1) kW/kW	3,385	3,352	3,291	3,290	3,287	3,299
ESEER	(1) kW/kW						
<b>COOLING ONLY (EN14511 VALUE)</b>							
Cooling capacity	(1)(2) kW	52,70	59,80	66,70	81,40	92,40	103,3
EER	(1)(2) kW/kW	3,330	3,290	3,240	3,240	3,200	3,230
<b>ENERGY EFFICIENCY</b>							
<b>SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281)</b>							
<b>Process refrigeration at high temperature</b>							
Prated,c	(7) kW	52,70	59,80	66,70	81,40	92,40	103,3
SEPR	(7)(9)	5,66	5,58	5,62	5,36	5,30	5,42
<b>SEASONAL EFFICIENCY IN COOLING (Reg. EU 2015/1095)</b>							
<b>Process refrigeration at medium temperature</b>							
Prated,c	(8) kW	27,80	31,70	36,40	44,10	49,60	55,10
SEPR	(8)(9)	3,58	3,58	3,75	3,37	3,39	3,48
<b>EXCHANGERS</b>							
<b>HEAT EXCHANGER USER SIDE IN REFRIGERATION</b>							
Water flow	(1) l/s	2,525	2,867	3,195	3,904	4,435	4,956
Pressure drop	(1) kPa	37,5	34,6	35,1	37,5	59,4	51,6
<b>REFRIGERANT CIRCUIT</b>							
Compressors nr.	N°	2	2	2	2	2	2
No. Circuits	N°	1	1	1	1	1	1
Refrigerant charge	kg	7,30	7,90	8,00	9,30	12,4	12,5
<b>NOISE LEVEL</b>							
Sound Pressure	(3) dB(A)	53	53	54	56	56	58
Sound power level in cooling	(4)(5) dB(A)	85	85	86	88	88	90
<b>SIZE AND WEIGHT</b>							
A	(6) mm	2395	2395	2395	2825	3360	3360
B	(6) mm	1195	1195	1195	1195	1195	1195
H	(6) mm	1865	1865	1865	1980	1980	1980
Operating weight	(6) kg	580	590	600	710	780	830

**Notes:**

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 made in compliance with ISO 9614.

5 Sound power level in cooling, outdoors.

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

7 Seasonal energy efficiency of high temperature process cooling [REGULATION (EU) N. 2016/2281]

8 Seasonal Energy Efficiency of Process Cooling at Medium Temperature [REGULATION (EU) N. 2015/1095]

9 Seasonal energy efficiency ratio

The units highlighted in this publication contain R454B [GWP<sub>100</sub> 466] fluorinated greenhouse gases.

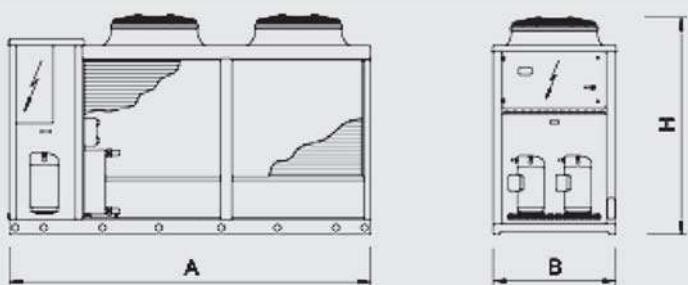
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COOLING    SCROLL  
 P PLATES    AXIAL

r R454B

NX-G06-Y/CA		0452P	0502P	0562P	0612P	0712P	0812P
Power supply	V/ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
<b>PERFORMANCE</b>							
<b>COOLING ONLY (GROSS VALUE)</b>							
Cooling capacity	(1) kW	117,0	132,3	153,9	171,3	193,2	218,0
Total power input	(1) kW	35,66	39,89	45,80	51,88	59,31	65,98
EER	(1) kW/kW	3,277	3,316	3,360	3,301	3,258	3,303
ESEER	(1) kW/kW						
<b>COOLING ONLY (EN14511 VALUE)</b>							
Cooling capacity	(1)(2) kW	116,8	132,0	153,6	171,0	192,8	217,6
EER	(1)(2) kW/kW	3,210	3,250	3,290	3,240	3,200	3,240
<b>ENERGY EFFICIENCY</b>							
<b>SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281)</b>							
<b>Process refrigeration at high temperature</b>							
Prated,c	(7) kW	116,8	132,0	153,6	171,0	192,8	217,6
SEPR	(7)(9)	5,45	5,31	5,22	5,31	5,22	4,93
<b>SEASONAL EFFICIENCY IN COOLING (Reg. EU 2015/1095)</b>							
<b>Process refrigeration at medium temperature</b>							
Prated,c	(8) kW	63,20	71,20	82,10	91,40	105,3	120,0
SEPR	(8)(9)	3,51	3,27	3,22	3,40	3,33	3,08
<b>EXCHANGERS</b>							
<b>HEAT EXCHANGER USER SIDE IN REFRIGERATION</b>							
Water flow	(1) l/s	5,597	6,326	7,361	8,191	9,237	10,43
Pressure drop	(1) kPa	53,6	52,9	59,3	52,7	51,8	65,9
<b>REFRIGERANT CIRCUIT</b>							
Compressors nr.	N°	2	2	2	2	2	2
No. Circuits	N°	1	1	1	1	1	1
Refrigerant charge	kg	12,9	17,5	19,8	20,3	20,8	23,0
<b>NOISE LEVEL</b>							
Sound Pressure	(3) dB(A)	58	58	59	59	60	61
Sound power level in cooling	(4)(5) dB(A)	90	90	91	91	92	93
<b>SIZE AND WEIGHT</b>							
A	(6) mm	3360	3980	3160	3160	3160	4335
B	(6) mm	1195	1195	2250	2250	2250	2250
H	(6) mm	1980	1980	2170	2170	2170	2170
Operating weight	(6) kg	920	1060	1460	1480	1490	1750



**NX-G06-Y**

Chiller with 2 compressors, air cooled for outdoor installation 49,6 to 218 kW.

NX-G06-Y/SL-CA		0202P	0252P	0262P	0302P	0352P	0402P
Power supply	V/ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
<b>PERFORMANCE</b>							
<b>COOLING ONLY (GROSS VALUE)</b>							
Cooling capacity	(1) kW	53,11	59,72	66,44	78,67	90,71	101,8
Total power input	(1) kW	15,93	17,65	19,87	23,73	27,54	30,10
EER	(1) kW/kW	3,340	3,373	3,337	3,321	3,298	3,382
ESEER	(1) kW/kW						
<b>COOLING ONLY (EN14511 VALUE)</b>							
Cooling capacity	(1)(2) kW	53,00	59,60	66,30	78,50	90,40	101,5
EER	(1)(2) kW/kW	3,280	3,330	3,290	3,260	3,220	3,310
<b>ENERGY EFFICIENCY</b>							
<b>SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281)</b>							
<b>Process refrigeration at high temperature</b>							
Prated,c	(7) kW	53,00	59,60	66,30	78,50	90,40	101,5
SEPR	(7)(9)	5,72	5,56	5,60	5,75	5,50	5,61
<b>SEASONAL EFFICIENCY IN COOLING (Reg. EU 2015/1095)</b>							
<b>Process refrigeration at medium temperature</b>							
Prated,c	(8) kW	28,00	31,50	36,00	42,80	48,90	54,20
SEPR	(8)(9)	3,66	3,54	3,69	3,72	3,58	3,61
<b>EXCHANGERS</b>							
<b>HEAT EXCHANGER USER SIDE IN REFRIGERATION</b>							
Water flow	(1) l/s	2,540	2,856	3,177	3,762	4,338	4,867
Pressure drop	(1) kPa	38,0	34,4	34,7	34,9	56,8	49,7
<b>REFRIGERANT CIRCUIT</b>							
Compressors nr.	N°	2	2	2	2	2	2
No. Circuits	N°	1	1	1	1	1	1
Refrigerant charge	kg	7,70	9,00	9,70	9,80	11,7	14,2
<b>NOISE LEVEL</b>							
Sound Pressure	(3) dB(A)	46	47	47	47	48	49
Sound power level in cooling	(4)(5) dB(A)	78	79	79	79	80	81
<b>SIZE AND WEIGHT</b>							
A	(6) mm	2825	3360	3360	3360	3980	3160
B	(6) mm	1195	1195	1195	1195	1195	2250
H	(6) mm	1980	1980	1980	1980	1980	2170
Operating weight	(6) kg	700	790	800	810	890	1280

**Notes:**

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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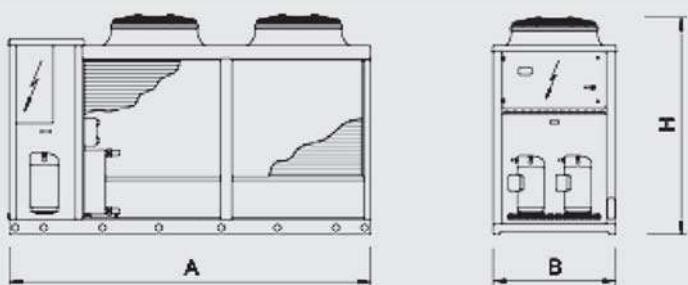
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COOLING    SCROLL  
 P PLATES    AXIAL

r R454B

NX-G06-Y/SL-CA		0452P	0502P	0562P	0612P	0712P	0812P
Power supply	V/ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
<b>PERFORMANCE</b>							
<b>COOLING ONLY (GROSS VALUE)</b>							
Cooling capacity	(1) kW	113,9	127,7	145,6	165,4	187,1	208,9
Total power input	(1) kW	34,29	38,87	43,94	49,10	57,20	63,36
EER	(1) kW/kW	3,321	3,283	3,317	3,369	3,271	3,295
ESEER	(1) kW/kW						
<b>COOLING ONLY (EN14511 VALUE)</b>							
Cooling capacity	(1)(2) kW	113,5	127,4	145,3	165,1	186,7	208,5
EER	(1)(2) kW/kW	3,250	3,220	3,250	3,310	3,220	3,230
<b>ENERGY EFFICIENCY</b>							
<b>SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281)</b>							
<b>Process refrigeration at high temperature</b>							
Prated,c	(7) kW	113,5	127,4	145,3	165,1	186,7	208,5
SEPR	(7)(9)	5,60	5,73	5,63	5,73	5,61	5,30
<b>SEASONAL EFFICIENCY IN COOLING (Reg. EU 2015/1095)</b>							
<b>Process refrigeration at medium temperature</b>							
Prated,c	(8) kW	61,60	69,80	79,00	89,10	103,0	116,2
SEPR	(8)(9)	3,63	3,67	3,63	3,76	3,66	3,38
<b>EXCHANGERS</b>							
<b>HEAT EXCHANGER USER SIDE IN REFRIGERATION</b>							
Water flow	(1) l/s	5,447	6,106	6,962	7,911	8,945	9,989
Pressure drop	(1) kPa	50,8	49,3	53,1	49,1	48,5	60,5
<b>REFRIGERANT CIRCUIT</b>							
Compressors nr.	N°	2	2	2	2	2	2
No. Circuits	N°	1	1	1	1	1	1
Refrigerant charge	kg	14,9	17,4	21,6	23,5	23,6	27,0
<b>NOISE LEVEL</b>							
Sound Pressure	(3) dB(A)	50	50	51	52	53	54
Sound power level in cooling	(4)(5) dB(A)	82	82	83	84	85	86
<b>SIZE AND WEIGHT</b>							
A	(6) mm	3160	3160	4335	4335	4335	5510
B	(6) mm	2250	2250	2250	2250	2250	2250
H	(6) mm	2170	2170	2170	2170	2170	2170
Operating weight	(6) kg	1370	1440	1690	1750	1770	2070



**NX-G06-Y**

Chiller with 4 compressors, air cooled for outdoor installation 153 to 338 kW.

NX-G06-Y/CA			0614T	0714T	0814T	0914T	1014T	1114T	1214T
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
<b>PERFORMANCE</b>									
<b>COOLING ONLY (GROSS VALUE)</b>									
Cooling capacity	(1)	kW	167,1	197,0	226,0	255,8	289,8	316,8	337,9
Total power input	(1)	kW	51,13	61,29	68,61	79,06	89,89	96,72	104,4
EER	(1)	kW/kW	3,270	3,214	3,294	3,234	3,224	3,276	3,237
ESEER	(1)	kW/kW							
<b>COOLING ONLY (EN14511 VALUE)</b>									
Cooling capacity	(1)(2)	kW	166,9	196,7	225,6	255,4	289,5	316,4	337,5
EER	(1)(2)	kW/kW	3,240	3,170	3,240	3,190	3,190	3,230	3,190
ESEER	(1)(2)	kW/kW	-	-	-	-	-	-	-
Cooling energy class			-	-	-	-	-	-	-
<b>ENERGY EFFICIENCY</b>									
<b>SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281)</b>									
<b>Process refrigeration at high temperature</b>									
Prated,c	(7)	kW	166,9	196,7	225,6	255,4	289,5	316,4	337,5
SEPR	(7)(9)		5,21	5,07	5,31	5,28	5,32	5,15	5,24
<b>SEASONAL EFFICIENCY IN COOLING (Reg. EU 2015/1095)</b>									
<b>Process refrigeration at medium temperature</b>									
Prated,c (8)		kW	89,80	103,6	119,5	136,0	154,7	168,6	181,0
SEPR	(8)(9)		3,25	3,04	3,25	3,23	3,23	3,08	3,17
<b>EXCHANGERS</b>									
<b>HEAT EXCHANGER USER SIDE IN REFRIGERATION</b>									
Water flow	(1)	l/s	7,993	9,422	10,81	12,23	13,86	15,15	16,16
Pressure drop	(1)	kPa	24,0	33,4	54,8	48,3	33,6	40,2	45,7
<b>REFRIGERANT CIRCUIT</b>									
Compressors nr.		N°	4	4	4	4	4	4	4
No. Circuits		N°	2	2	2	2	2	2	2
Refrigerant charge		kg	21,9	27,9	33,1	35,7	35,8	40,1	41,5
<b>NOISE LEVEL</b>									
Sound Pressure	(3)	dB(A)	60	61	62	63	63	64	65
Sound power level in cooling	(4)(5)	dB(A)	92	93	94	95	95	96	97
<b>SIZE AND WEIGHT</b>									
A	(6)	mm	3160	4335	4335	4335	4335	5510	5510
B	(6)	mm	2250	2250	2250	2250	2250	2250	2250
H	(6)	mm	2170	2170	2170	2170	2170	2170	2170
Operating weight	(6)	kg	1740	2030	2030	2200	2500	2860	2870

**Notes:**

- 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 made in compliance with ISO 9614.
- 5 Sound power level in cooling, outdoors.
- 6 Unit in standard configuration/execution, without optional accessories.

7 Seasonal energy efficiency of high temperature process cooling [REGULATION (EU) N. 2016/2281]

8 Seasonal Energy Efficiency of Process Cooling at Medium Temperature [REGULATION (EU) N. 2015/1095]

9 Seasonal energy efficiency ratio

The units highlighted in this publication contain R454B [GWP<sub>100</sub> 466] fluorinated greenhouse gases.

Certified data in EUROVENT



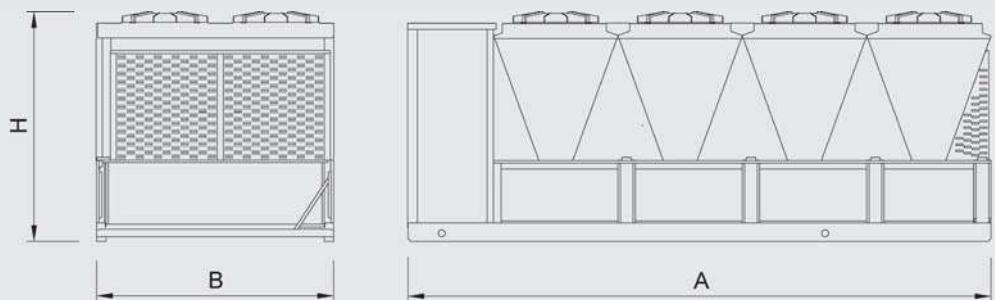
COOLING    SCROLL

SHELL & TUBES

AXIAL

R454B

NX-G06-Y/SL-CA		0614T	0714T	0814T	0914T	1014T	1114T	1214T
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
<b>PERFORMANCE</b>								
<b>COOLING ONLY (GROSS VALUE)</b>								
Cooling capacity	(1) kW	160,6	187,1	215,3	249,0	280,1	303,9	329,9
Total power input	(1) kW	48,84	57,05	65,39	76,66	86,53	93,09	101,6
EER	(1) kW/kW	3,291	3,277	3,292	3,246	3,238	3,264	3,247
ESEER	(1) kW/kW							
<b>COOLING ONLY (EN14511 VALUE)</b>								
Cooling capacity	(1)(2) kW	160,4	186,8	214,9	248,6	279,8	303,6	329,5
EER	(1)(2) kW/kW	3,260	3,240	3,240	3,200	3,200	3,230	3,200
ESEER	(1)(2) kW/kW	-	-	-	-	-	-	-
Cooling energy class		-	-	-	-	-	-	-
<b>ENERGY EFFICIENCY</b>								
<b>SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281)</b>								
<b>Process refrigeration at high temperature</b>								
Prated,c	(7) kW	160,4	186,8	214,9	248,6	279,8	303,6	329,5
SEPR	(7)(9)	5,76	5,91	5,79	5,82	5,75	5,71	5,83
<b>SEASONAL EFFICIENCY IN COOLING (Reg. EU 2015/1095)</b>								
<b>Process refrigeration at medium temperature</b>								
Prated,c	(8) kW	87,30	99,20	114,6	133,5	150,5	163,5	178,8
SEPR	(8)(9)	3,75	3,68	3,64	3,67	3,57	3,53	3,65
<b>EXCHANGERS</b>								
<b>HEAT EXCHANGER USER SIDE IN REFRIGERATION</b>								
Water flow	(1) l/s	7,680	8,949	10,29	11,91	13,39	14,53	15,78
Pressure drop	(1) kPa	22,2	30,1	49,7	45,7	31,4	37,0	43,5
<b>REFRIGERANT CIRCUIT</b>								
Compressors nr.	N°	4	4	4	4	4	4	4
No. Circuits	N°	2	2	2	2	2	2	2
Refrigerant charge	kg	26,8	29,3	34,8	37,5	38,7	42,1	43,6
<b>NOISE LEVEL</b>								
Sound Pressure	(3) dB(A)	51	51	52	53	54	55	55
Sound power level in cooling	(4)(5) dB(A)	83	83	84	85	86	87	87
<b>SIZE AND WEIGHT</b>								
A	(6) mm	4335	4335	5510	5510	5510	5510	5510
B	(6) mm	2250	2250	2250	2250	2250	2250	2250
H	(6) mm	2170	2170	2170	2170	2170	2170	2170
Operating weight	(6) kg	2010	2030	2360	2530	2830	2840	2850



**NX-N-G06-Y**

Heat pump with 2 compressors, air source  
for outdoor installation, from 49,6 to 218.

NX-N-G06-Y/CA		V/ph/Hz	0202P	0252P	0262P	0302P	0352P	0402P
Power supply		400/3+N/50	400/3+N/50	400/3+N/50	400/3/50	400/3/50	400/3/50	400/3/50
<b>PERFORMANCE</b>								
<b>COOLING ONLY (GROSS VALUE)</b>								
Cooling capacity	(1)	kW	49,19	57,23	64,17	77,67	88,29	98,07
Total power input	(1)	kW	16,76	18,54	20,90	25,29	28,80	32,07
EER	(1)	kW/kW	2,929	3,092	3,072	3,071	3,066	3,056
ESEER	(1)	kW/kW						
<b>COOLING ONLY (EN14511 VALUE)</b>								
Cooling capacity	(1)(2)	kW	49,10	57,10	64,00	77,50	88,00	97,80
EER	(1)(2)	kW/kW	2,890	3,040	3,030	3,030	3,000	3,000
<b>HEATING ONLY (GROSS VALUE)</b>								
Total heating capacity	(3)	kW	56,66	66,73	71,55	83,30	96,89	106,0
Total power input	(3)	kW	16,84	19,88	21,32	24,83	28,16	31,50
COP	(3)	kW/kW	3,375	3,352	3,362	3,359	3,436	3,365
<b>HEATING ONLY (EN14511 VALUE)</b>								
Total heating capacity	(2)(3)	kW	56,80	66,90	71,70	83,50	97,20	106,3
COP	(2)(3)	kW/kW	3,330	3,310	3,320	3,320	3,360	3,310
<b>ENERGY EFFICIENCY</b>								
<b>SEASONAL EFFICIENCY IN HEATING (Reg. EU 813/2013)</b>								
PDesign	(7)	kW	41,9	49,1	53,1	62,0	71,3	77,3
SCOP	(7)(8)		4,01	3,85	3,84	3,61	3,63	3,62
Performance $\eta_s$	(7)(9)	%	157	151	151	142	142	142
Seasonal efficiency class	(7)		A++	A++	A++	A+	-	-
<b>EXCHANGERS</b>								
<b>HEAT EXCHANGER USER SIDE IN REFRIGERATION</b>								
Water flow	(1)	l/s	2,352	2,737	3,069	3,714	4,222	4,690
Pressure drop	(1)	kPa	32,6	31,5	32,3	34,0	53,8	46,2
<b>HEAT EXCHANGER USER SIDE IN HEATING</b>								
Water flow	(3)	l/s	2,735	3,221	3,454	4,021	4,677	5,115
Pressure drop	(3)	kPa	44,0	43,7	41,0	39,8	66,0	54,9
<b>REFRIGERANT CIRCUIT</b>								
Compressors nr.		N°	2	2	2	2	2	2
No. Circuits		N°	1	1	1	1	1	1
Refrigerant charge		kg	13,5	14,9	15,2	18,0	24,8	28,2
<b>NOISE LEVEL</b>								
Sound Pressure	(10)	dB(A)	66	67	67	70	70	71
Sound power level in cooling	(11)(12)	dB(A)	84	85	85	88	88	89
Sound power level in heating	(11)(13)	dB(A)	84	85	85	88	88	89
<b>SIZE AND WEIGHT</b>								
A	(14)	mm	2395	2395	2395	2825	3360	3360
B	(14)	mm	1195	1195	1195	1195	1195	1195
H	(14)	mm	1865	1865	1865	1980	1980	1980
Operating weight	(14)	kg	670	700	700	830	940	990

**Notes:**

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

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

5 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.

6 Sound power on the basis of measurements made in compliance with ISO 9614.

7 Sound power level in cooling, outdoors.

8 Sound power level in heating, outdoors.

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

10 Parameter calculated according to [REGULATION (EU) N. 2016/2281]

11 Seasonal energy efficiency ratio

12 Seasonal space cooling energy efficiency

13 Seasonal coefficient of performance

14 Seasonal space heating energy efficiency

15 Energy efficiency class referred to LOW-TEMPERATURE application in AVERAGE climate conditions according to [REGULATION (EU) N. 811/2013]

The units highlighted in this publication contain R454B [GWP<sub>100</sub> 466] fluorinated greenhouse gases.

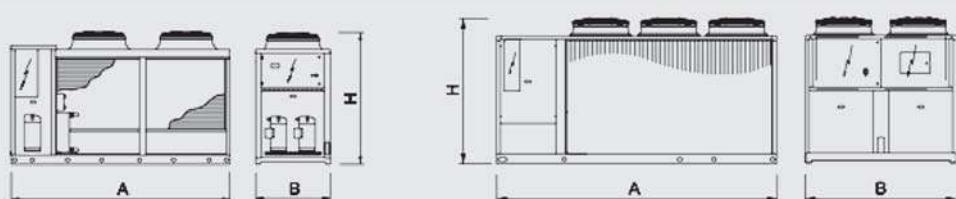
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HEATING COOLING SCROLL  
PLATES AXIAL

r R454B

NX-N-G06-Y/CA		0452P	0502P	0562P	0612P	0712P	0812P
Power supply	V/ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
<b>PERFORMANCE</b>							
<b>COOLING ONLY (GROSS VALUE)</b>							
Cooling capacity	(1) kW	111,6	125,7	146,4	162,9	189,8	210,7
Total power input	(1) kW	36,45	40,71	48,05	52,84	62,38	67,71
EER	(1) kW/kW	3,058	3,088	3,044	3,085	3,042	3,112
ESEER	(1) kW/kW						
<b>COOLING ONLY (EN14511 VALUE)</b>							
Cooling capacity	(1)(2) kW	111,2	125,3	146,1	162,6	189,4	210,3
EER	(1)(2) kW/kW	3,000	3,030	2,990	3,030	2,990	3,060
<b>HEATING ONLY (GROSS VALUE)</b>							
Total heating capacity	(3) kW	117,3	132,6	154,9	173,4	200,9	222,9
Total power input	(3) kW	34,96	39,46	46,27	51,75	60,06	66,34
COP	(3) kW/kW	3,351	3,357	3,346	3,354	3,343	3,362
<b>HEATING ONLY (EN14511 VALUE)</b>							
Total heating capacity	(2)(3) kW	117,6	133,0	155,3	173,7	201,2	223,4
COP	(2)(3) kW/kW	3,290	3,300	3,290	3,300	3,290	3,300
<b>ENERGY EFFICIENCY</b>							
<b>SEASONAL EFFICIENCY IN HEATING (Reg. EU 813/2013)</b>							
PDesign	(7) kW	88,1	99,1	109	128	147	170
SCOP	(7)(8)	3,71	3,60	3,47	3,59	3,42	3,38
Performance $\eta_S$	(7)(9) %	145	141	136	140	134	132
Seasonal efficiency class	(7)	-	-	-	-	-	-
<b>EXCHANGERS</b>							
<b>HEAT EXCHANGER USER SIDE IN REFRIGERATION</b>							
Water flow	(1) l/s	5,336	6,009	7,003	7,792	9,075	10,08
Pressure drop	(1) kPa	48,7	47,7	53,7	47,7	50,0	61,6
<b>HEAT EXCHANGER USER SIDE IN HEATING</b>							
Water flow	(3) l/s	5,662	6,403	7,479	8,370	9,696	10,76
Pressure drop	(3) kPa	54,8	54,2	61,3	55,0	57,0	70,2
<b>REFRIGERANT CIRCUIT</b>							
Compressors nr.	N°	2	2	2	2	2	2
No. Circuits	N°	1	1	1	1	1	1
Refrigerant charge	kg	30,2	34,7	41,7	48,7	54,3	63,8
<b>NOISE LEVEL</b>							
Sound Pressure	(10) dB(A)	71	71	71	71	72	73
Sound power level in cooling	(11)(12) dB(A)	89	90	91	91	92	93
Sound power level in heating	(11)(13) dB(A)	89	90	91	91	92	93
<b>SIZE AND WEIGHT</b>							
A	(14)	mm	3360	3980	4110	4110	5110
B	(14)	mm	1195	1195	2220	2220	2220
H	(14)	mm	1980	1980	2150	2150	2150
Operating weight	(14)	kg	1090	1270	1740	1840	2070



**NX-N-G06-Y**

Heat pump with 4 compressors, air source for outdoor installation, from 142 to 322 kW

NX-N-G06-Y/CA		V/ph/Hz	0604T	0704T	0804T	0904T	1004T	1104T	1204T
Power supply		400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
<b>PERFORMANCE</b>									
<b>COOLING ONLY (GROSS VALUE)</b>									
Cooling capacity	(1)	kW	157,5	183,1	213,5	243,2	271,8	297,7	321,9
Total power input	(1)	kW	52,37	60,61	69,50	80,19	90,09	98,55	106,5
EER	(1)	kW/kW	3,006	3,021	3,072	3,032	3,017	3,022	3,023
ESEER	(1)	kW/kW							
<b>COOLING ONLY (EN14511 VALUE)</b>									
Cooling capacity	(1)(2)	kW	157,3	182,8	213,1	242,9	271,5	297,4	321,5
EER	(1)(2)	kW/kW	2,980	2,990	3,020	2,990	2,990	2,990	2,990
ESEER	(1)(2)	kW/kW	-	-	-	-	-	-	-
Cooling energy class			-	-	-	-	-	-	-
<b>HEATING ONLY (GROSS VALUE)</b>									
Total heating capacity	(3)	kW	161,2	187,1	223,3	249,8	275,3	309,3	328,7
Total power input	(3)	kW	48,62	56,41	67,17	75,23	83,09	93,24	99,13
COP	(3)	kW/kW	3,317	3,317	3,323	3,322	3,313	3,319	3,317
<b>HEATING ONLY (EN14511 VALUE)</b>									
Total heating capacity	(2)(3)	kW	161,4	187,4	223,7	250,2	275,6	309,7	329,1
COP	(2)(3)	kW/kW	3,290	3,290	3,280	3,280	3,280	3,280	3,280
Cooling energy class			-	-	-	-	-	-	-
<b>ENERGY EFFICIENCY</b>									
<b>SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281)</b>									
Process refrigeration at high temperature									
Prated,c	(4)	kW	-	-	-	-	-	-	-
SEPR	(4)(6)	-	-	-	-	-	-	-	-
<b>SEASONAL EFFICIENCY IN COOLING (Reg. EU 2015/1095)</b>									
Process refrigeration at medium temperature									
Prated,c	(5)	kW	-	-	-	-	-	-	-
SEPR	(5)(6)	-	-	-	-	-	-	-	-
<b>SEASONAL EFFICIENCY IN HEATING (Reg. EU 813/2013)</b>									
PDesign	(7)	kW	115	142	167	189	211	233	250
SCOP	(7)(8)	-	3,80	4,02	3,96	4,02	3,94	3,87	3,91
Performance $\eta_s$	(7)(9)	%	149	158	155	158	154	152	154
Seasonal efficiency class	(7)	-	-	-	-	-	-	-	-
<b>EXCHANGERS</b>									
<b>HEAT EXCHANGER USER SIDE IN REFRIGERATION</b>									
Water flow	(1)	l/s	7,534	8,757	10,21	11,63	13,00	14,24	15,39
Pressure drop	(1)	kPa	21,3	28,8	48,9	43,6	29,6	35,5	41,5
<b>HEAT EXCHANGER USER SIDE IN HEATING</b>									
Water flow	(3)	l/s	7,780	9,031	10,78	12,06	13,29	14,93	15,87
Pressure drop	(3)	kPa	22,7	30,7	54,5	46,9	30,9	39,0	44,1
<b>REFRIGERANT CIRCUIT</b>									
Compressors nr.		N°	4	4	4	4	4	4	4
No. Circuits		N°	2	2	2	2	2	2	2
Refrigerant charge		kg	40,5	62,8	81,4	81,5	81,5	104	104
<b>NOISE LEVEL</b>									
Sound Pressure	(10)	dB(A)	72	72	74	74	75	77	77
Sound power level in cooling	(11)(12)	dB(A)	92	92	94	94	95	97	97
Sound power level in heating	(11)(13)	dB(A)	92	92	94	94	95	97	97
<b>SIZE AND WEIGHT</b>									
Operating weight	(14)	kg	2100	2240	2630	2790	3100	3580	3580
A	(14)	mm	4110	4110	5110	5110	5110	6110	6110
B	(14)	mm	2220	2220	2220	2220	2220	2220	2220
H	(14)	mm	2150	2150	2150	2150	2150	2150	2150

**Notes:**

- Plant (side) cooling exchanger water (in/out) 12°C/7°C; Source (side) heat exchanger air (in) 35°C.
- Values in compliance with EN14511
- Plant (side) heat exchanger water (in/out) 40°C/45°C; Source (side) heat exchanger air (in) 7°C - 87% R.H.
- Seasonal energy efficiency of high temperature process cooling [REGULATION (EU) N. 2016/2281]
- Seasonal Energy Efficiency of Process Cooling at Medium Temperature [REGULATION (EU) N. 2015/1095]
- Seasonal energy efficiency ratio
- Parameter calculated for LOW-TEMPERATURE application in AVERAGE climate conditions according to [REGULATION (EU) N. 813/2013]

8 Seasonal coefficient of performance

9 Seasonal space heating energy efficiency

10 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.

11 Sound power on the basis of measurements made in compliance with ISO 9614.

12 Sound power level in cooling, outdoors.

13 Sound power level in heating, outdoors.

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

The units highlighted in this publication contain R454B [GWP<sub>100</sub> 466] fluorinated greenhouse gases.

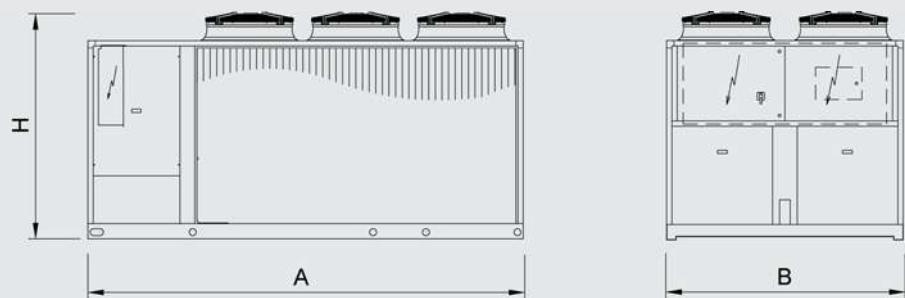
Certified data in EUROVENT



HEATING / COOLING / SCROLL  
SHELL & TUBES / AXIAL

r R454B

NX-N-G06-Y/SL-CA			0604T	0704T	0804T	0904T	1004T	1104T	1204T
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
<b>PERFORMANCE</b>									
<b>COOLING ONLY (GROSS VALUE)</b>									
Cooling capacity	(1)	kW	151,4	178,1	206,9	234,9	263,8	286,7	311,2
Total power input	(1)	kW	49,98	58,78	66,45	77,27	86,73	94,35	102,6
EER	(1)	kW/kW	3,028	3,029	3,116	3,039	3,043	3,040	3,033
ESEER	(1)	kW/kW							
<b>COOLING ONLY (EN14511 VALUE)</b>									
Cooling capacity	(1)(2)	kW	151,2	177,8	206,6	234,6	263,5	286,3	310,9
EER	(1)(2)	kW/kW	3,000	3,000	3,070	3,000	3,010	3,010	3,000
ESEER	(1)(2)	kW/kW	-	-	-	-	-	-	-
Cooling energy class			-	-	-	-	-	-	-
<b>HEATING ONLY (GROSS VALUE)</b>									
Total heating capacity	(3)	kW	159,1	190,7	223,4	252,2	281,5	305,6	334,6
Total power input	(3)	kW	46,87	57,35	67,12	75,77	84,34	92,15	100,5
COP	(3)	kW/kW	3,392	3,328	3,329	3,327	3,339	3,318	3,329
<b>HEATING ONLY (EN14511 VALUE)</b>									
Total heating capacity	(2)(3)	kW	159,3	191,0	223,8	252,5	281,9	306,0	335,0
COP	(2)(3)	kW/kW	3,370	3,300	3,280	3,290	3,310	3,280	3,290
Cooling energy class			-	-	-	-	-	-	-
<b>ENERGY EFFICIENCY</b>									
<b>SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281)</b>									
Process refrigeration at high temperature									
Prated,c	(4)	kW	-	-	-	-	-	-	-
SEPR	(4)(6)	-	-	-	-	-	-	-	-
<b>SEASONAL EFFICIENCY IN COOLING (Reg. EU 2015/1095)</b>									
Process refrigeration at medium temperature									
Prated,c	(5)	kW	-	-	-	-	-	-	-
SEPR	(5)(6)	-	-	-	-	-	-	-	-
<b>SEASONAL EFFICIENCY IN HEATING (Reg. EU 813/2013)</b>									
PDesign	(7)	kW	112	144	167	190	212	231	252
SCOP	(7)(8)	-	3,92	4,10	4,08	4,15	4,03	4,06	4,05
Performance $\otimes s$	(7)(9)	%	154	161	160	163	158	159	159
Seasonal efficiency class	(7)	-	-	-	-	-	-	-	-
<b>EXCHANGERS</b>									
<b>HEAT EXCHANGER USER SIDE IN REFRIGERATION</b>									
Water flow	(1)	l/s	7,239	8,516	9,896	11,23	12,62	13,71	14,88
Pressure drop	(1)	kPa	19,7	27,3	45,9	40,7	27,8	32,9	38,8
<b>HEAT EXCHANGER USER SIDE IN HEATING</b>									
Water flow	(3)	l/s	7,680	9,204	10,79	12,17	13,59	14,75	16,15
Pressure drop	(3)	kPa	22,2	31,8	54,6	47,8	32,3	38,1	45,6
<b>REFRIGERANT CIRCUIT</b>									
Compressors nr.		N°	4	4	4	4	4	4	4
No. Circuits		N°	2	2	2	2	2	2	2
Refrigerant charge		kg	40,5	62,8	81,4	81,5	95,4	104	104
<b>NOISE LEVEL</b>									
Sound Pressure	(10)	dB(A)	63	63	64	65	66	67	68
Sound power level in cooling	(11)(12)	dB(A)	83	83	84	85	86	87	88
Sound power level in heating	(11)(13)	dB(A)	84	84	85	86	87	88	89
<b>SIZE AND WEIGHT</b>									
Operating weight	(14)	kg	2180	2320	2730	2890	3500	3550	3660
A	(14)	mm	4110	4110	5110	5110	6110	6110	6110
B	(14)	mm	2220	2220	2220	2220	2220	2220	2220
H	(14)	mm	2150	2150	2150	2150	2150	2150	2150



# “BY FAR THE BEST PROOF IS EXPERIENCE”

Sir Francis Bacon

British Philosopher (1561 - 1626)

Every project is characterised by different needs and system specifications for various climates. All these projects share high energy efficiency, maximum integration, and total reliability resulting from the Climaveneta brand experience.

## ATOMIC CENTRE CONSTITUYENTES (CAC) BUENOS AIRES - ARGENTINA

**Period:** 2015-2016

**Application:** Energy applications

**Cooling capacity:** 117 kW

**Installed machines:**

2x NX-K air cooled chillers with scroll compressors,  
2x WIZARD air handling units



## FORST BOLZANO - ITALY

**Period:** 2017

**Application:** Food & Drink

**Installed machines:**

1x NX/CA high efficiency chiller with scroll compressors,  
1x i-FX-W (1+l) water cooled chiller with screw compressors,  
2x 2 NECS-WQ water cooled chiller with scroll compressors,



## FARAN ATHENS - GREECE

**Period:** 2016

**Cooling capacity:** 273 kW

**Heating capacity:** 301 kW

**Installed machines:** 1x NX-N K 1004P



# BARBERINI SPA

2018 Pescara - Italy

(Città Sant'Angelo, Pescara)

**Cooling capacity:**

2700 kW

**Heating capacity:**

1166 kW

**Installed machines:**

1x NX/K chiller with scroll compressors,  
2x FOCS-N/CA heat pumps with screw  
compressors, 2x FOCS chillers with  
screw compressors



## PROJECT

A world leader in the production of glass lenses for sunglasses, Barberini Spa has opened a new production plant in Città Sant'Angelo (PE). Between this and the other Italian plant in Silvi (TE) the company employs 450 people and ended 2017 with a turnover of about 80 million euros and 10 million pairs of lenses produced.

## CHALLENGE

The building has a total surface area of 25,000 m<sup>2</sup> and is highly sustainable. Its structure is in laminated wood and the use of cement is reduced to the minimum necessary. The large windows allow a considerable contribution of natural light and the mechanical and electrical systems are highly efficient and do not produce CO<sub>2</sub> emissions.

## SOLUTION

The HVAC system is based on a plant room composed of two heat pumps with partial heat recovery FOCS-N / D / LN-CA / S 4822, two chillers with partial heat recovery FOCS / D / CA / S 6603 and one air condensed chiller NX / K / S 0714P, all with Climaveneta brand.

# CARBON FACTORY BREMBO CURNO - ITALY

**Period:** 2018

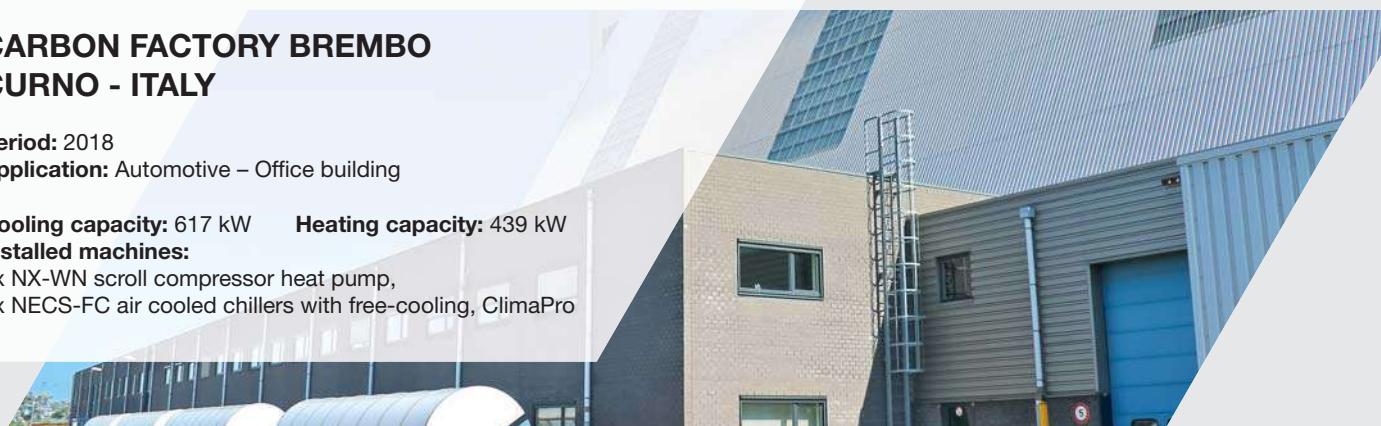
**Application:** Automotive – Office building

**Cooling capacity:** 617 kW

**Heating capacity:** 439 kW

**Installed machines:**

1x NX-WN scroll compressor heat pump,  
1x NECS-FC air cooled chillers with free-cooling, ClimaPro



# ALGER PORT ALGER - ALGERIA

**Period:** 2016

**Application:** Naval

**Cooling capacity:** 1940 kW

**Heating capacity:** 2234 kW

**Installed machines:**

4X scroll compressor heat pumps NECS-N/SL 1816,  
1x NX-N/K key version scroll compressor heat pump





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

Head Office: Via Caduti di Cefalonia 1 - 36061 Bassano del Grappa (VI) - Italy  
Tel (+39) 0424 509 500 - Fax (+39) 0424 509 509

[www.climaveneta.com](http://www.climaveneta.com)

[www.melcohit.com](http://www.melcohit.com)



for a greener tomorrow



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.

