

**Data Book**



NX-CN 0072 - 1104\_202012\_EN R410A  
ELCA\_Engine ver.4.5.0.0

# NX-CN 0072 - 1104

**18,0-265 kW**

Reversible unit, air source for indoor installation



(The photo of the unit is indicative and may vary depending on the model)

- ✓ HIGH EFFICIENCY
- ✓ ErP READY
- ✓ PLUG FUN WITH EC MOTOR

- ✓ TOTAL VERSATILITY
- ✓ INTEGRATED HYDRONIC MODULE

## CERTIFICATIONS

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### Product certifications



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### Voluntary product certifications

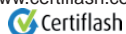


Check ongoing validity of certificate:

[www.eurovent-certification.com](http://www.eurovent-certification.com)

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### System certifications



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

Quality System complying with the requirements of UNI EN ISO 9001:2008 regulation  
Environmental Management System complying with the requirements of UNI EN ISO 14001:2004 regulation  
Occupational Health and Safety Management System complying with the requirements of BS OHSAS 18001:2007

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The units highlighted in this publication contain R410A [GWP<sub>100</sub> 2088] fluorinated greenhouse gases.

**Functions**

 COOLING Cooling

 HEATING Heating

**Refrigerant**

 HFC R-410A R-410A

**Compressors**

 SCROLL Scroll compressor

**Fan**

 PLUG FAN Plug fan

**Exchangers**

 PLATES Plates heat exchanger

**Other features**

 Eurovent

## 1.1 PRODUCT PRESENTATION

### GREEN CERTIFICATION RELEVANT

Mitsubishi Electric Hydronics & IT Cooling Systems S.p.A., as a major player in the world HVAC market and a leading manufacturer of energy efficient, sustainable HVAC solutions, recognizes and supports the diffusion of green certification systems, as an effective way to deliver high performance buildings and improve the quality and the sustainability of the built environment.

Since the first certification system was introduced at the beginning of the 1990s, the demand for certified buildings has grown considerably, as well as the number of standards, rating and certification programs. Operating worldwide Mitsubishi Electric Hydronics & IT Cooling Systems S.p.A., has extensive experience with many of them and is active member of Green Building Council Italy.

Mitsubishi Electric Hydronics & IT Cooling Systems S.p.A., commitment to develop responsible and sustainable HVAC solutions, is reflected by a full range of premium efficiency products and systems, designed with special care to improve building energy performance ratings, according to major certification protocols, including LEED, BREAM, GREENSTAR, BCA, NABERS, DNGB, HQE and BEAM.

To find out more about how our products contribute to enhanced green certification rating and energy performance of a building, please refer to:

[https://www.melcohit.com/EN/Environment/green\\_certifications/](https://www.melcohit.com/EN/Environment/green_certifications/)



## PRODUCT PRESENTATION

Heat pump for indoor installation to produce chilled/hot water with hermetic rotary Scroll compressors, centrifugal plug fans with EC motor, braze-welded plate-type exchanger and thermal expansion valve.

Structure and the external paneling made from hot-galvanised metal plate and painted with epoxy powder coat RAL 7035. The panels are easy to remove for quick and easy access to internal components from either side of the unit.

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

### 1.3 HIGH EFFICIENCY

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

### 1.4 ErP READY

The highest level of efficiency at part loads can meet and exceed the minimum seasonal efficiency for heating, SCOP according with the eco-sustainable design requirements for all products using energy.

### 1.5 PLUG FUN WITH EC MOTOR

More air flow with a smaller diameter.

Energy cost savings with the highest efficiency at the operating point.

Fans are directly coupled with the motor, no energy lost due to transmission (belts and pulleys). External rotor fitted with permanent magnets. Outstanding efficiency even at partial loads, due to the lack of brushes and lower consumption in every working condition in order to achieve a better seasonal efficiency in accordance with the ErP Directive.

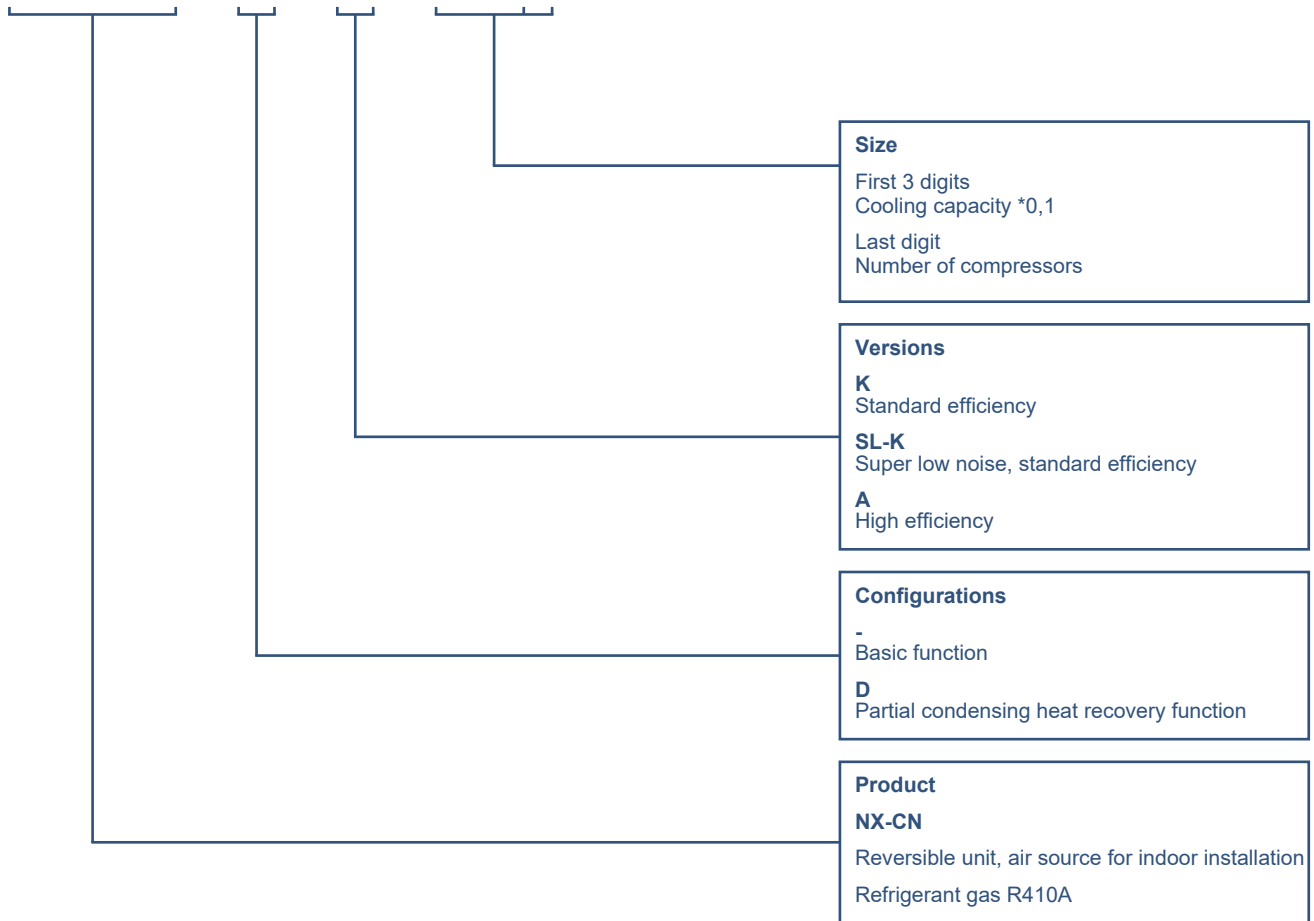
### 1.6 TOTAL VERSATILITY

Horizontal or vertical air flow.

### 1.7 INTEGRATED HYDRONIC MODULE

The built-in hydronic module already contains the main water circuit components; it is available as option with single or twin in-line pumps, for achieving low or high head, with fixed or variable speed.

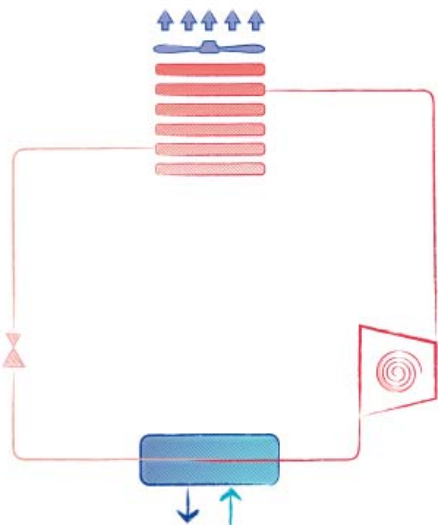
# NX-CN / D / A / 1004



### 3.1 UNIT STANDARD COMPOSITION

#### CONFIGURATIONS

- , standard unit

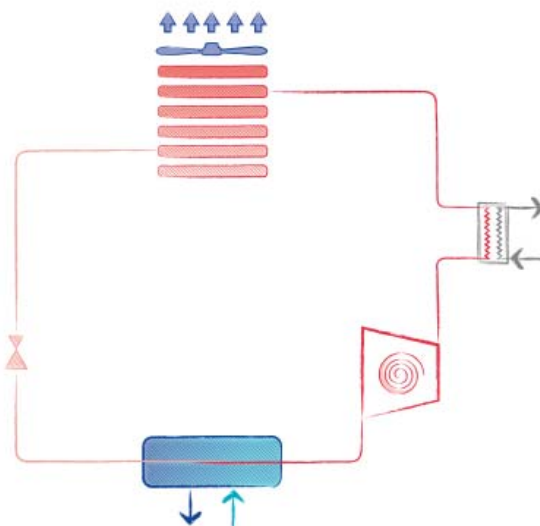
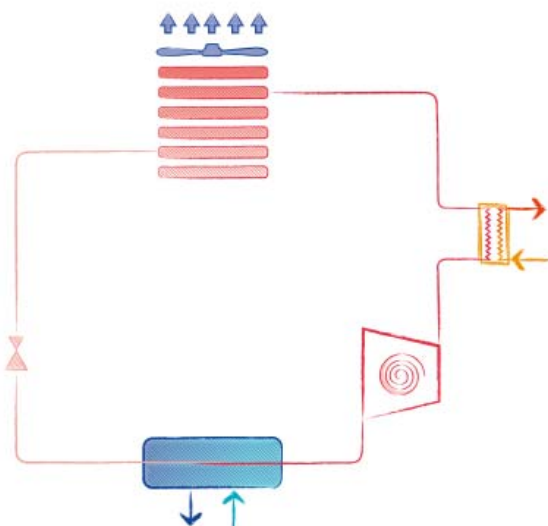


No heat recovery is possible.

#### /D, unit with partial heat recovery

Heat recovery: ON

Heat recovery: OFF (water flow stopped)



Each refrigerant circuit is fitted with a desuperheater.

The superheating heat recovery is only possible when the temperature of the hot water circuit is lower than the compressor discharge temperature. The heat recovery and its amount depends on the unit's operating conditions, in particular the outdoor air temperature and the load percentage. It is advised to interrupt the water flow to the desuperheater when the conditions for an actual heat recovery are not met.

The smart management of the desuperheater pump(s) is possible with the option 3371 D – RELAY 1 PUMP (ON/OFF), further information is available in the bulletin section dedicated to accessories.

Partial heat recovery operating limits:

	MIN temperature	MAX temperature
Inlet water	25°C (77°F)	56°C (132,8°F)
Outlet water	30°C (86°F)	60°C (140°F)



## UNIT STANDARD COMPOSITION

### 3.2 Reversible unit, air source for indoor installation

Heat pump for indoor installation to produce chilled/hot water with hermetic rotary Scroll compressors, centrifugal plug fans with EC motor, braze-welded plate-type exchanger and thermal expansion valve.

Structure and the external paneling made from hot-galvanised metal plate and painted with epoxy powder coat RAL 7035. The panels are easy to remove for quick and easy access to internal components from either side of the unit.

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

- The unit is supplied fully refrigerant charged and factory tested. On site installation only requires power and hydraulic connection.

### 3.3 Structure

Structure in hot-galvanised shaped sheet steel with a suitable thickness. All parts polyester-powder painted RAL 7035. The self-supporting frame is built to guarantee maximum accessibility for servicing and maintenance operations.

### 3.4 Panelling

The external paneling made from hot galvanised metal plate and painted with epoxy powder coat RAL 7035. The panels are easy to remove for quick and easy access to the inside components from either side of the unit.

### 3.5 Constant-speed compressor

Hermetic scroll compressors complete with an oil sump heater, electronic overheating protection with centralised manual reset and a two-pole electric motor.

### 3.6 Refrigerant circuit

Main components of the cooling circuit:

- R410A refrigerant
- mechanical thermostatic expansion valves
- High and low pressure safety valve
- High pressure switches
- Liquid line solenoid valve
- crankcase heater on each compressor
- refrigerant line sight glass with humidity indicator
- high and low pressure transducers
- Filter Drier
- antifreeze electric heater for plate heat exchanger
- Liquid receivers
- Liquid separators

### 3.7 Plant side heat exchanger

Braze welded AISI 316 steel plate heat exchanger. The heat exchangers are lined on the outside with closed-cell neoprene lagging. When the unit is not operating, these are protected against formation of ice on the inside by an electric heater with thermostat, while when the unit is operating protection is ensured by a flow switch on the water side. The unit can also operate with non-freezing mixes, down to heat exchanger outlet temperatures of -8°C.

### 3.8 Source side heat exchanger

Air-refrigerant heat exchanger, working as a condenser or an evaporator depending to the specific operating mode. Made with copper tubes and aluminium fins. The aluminium fins are spaced to guarantee the best heat exchange efficiency.

### 3.9 Fan section source side

The unit is fitted with centrifugal fans with backward-curved blades. The impeller is produced in a single piece without joints and made of fibreglass-reinforced plastic that minimises the noise level and decreases power requirements significantly. EC motors guarantees up to 50% less energy consumption in comparison with AC solutions thanks to the continuous speed control with a 0-10V signal, especially at part loads.

Air delivery is vertical in standard unit configuration. In the field, the panels can be removed and re-positioned to configure a horizontal air supply.

### 3.10 Electrical and control panel

Electrical and control panel built in accordance with EN60204-1 standard, complete with:

- Electronic control W3000TE
- automatic circuit breakers on electric loads (2 compressor units)
- numbered cables (2 compressor units)
- control circuit transformer
- general door lock isolator
- terminals for cumulative alarm block
- remote ON/OFF terminals
- relays for remote pump(s) activation for both circuits (only for units without hydronic pumps)

- remote demand limit contact (2 compressors unit)

### 3.11 Certification and applicable directives

The unit complies with the following directives and relative amendments:

- EUROVENT Certification program
- CE Declaration of conformity certificate for the European Union
- Machine directive 2006/42/EC
- PED Directive 2014/68/EC
- ErP Directive 2009/125/EC
- F-Gas Regulation 517/2014/EC
- 811/2013/EC and 813/2103/EC EcoLabelling Regulations
- 2014/30/EC EMC Directive
- 2014/35/EC Low Voltage Directive
- ISO 9001 Company Quality Management System certification
- ISO 14001 Company Environmental Management System certification

### 3.12 Tests

Tests performed throughout the production process, as indicated in ISO9001.

Performance or noise tests can be performed by highly qualified staff in the presence of customers.

Performance tests comprise the measurement of:

- electrical data
- water flow rates
- working temperatures
- power input
- power output
- pressure drops on the water-side exchanger both at full load (at the conditions of selection and at the most critical conditions for the condenser) and at part load conditions.

During performance testing it is also possible to simulate the main alarm states.

Noise tests are performed to check noise emissions according to ISO9614.

### 3.13 Electronic control W3000TE

The brand new W3000TE controller offers advanced functions and algorithms.

The keypad W3000 Compact, as standard equipment, features function controls and a complete LCD display for viewing data and activating the unit, via a multilevel menu, with settable display language.

The controller provides water temperature control for the heating systems, cooling systems (only for reversible units), as well as for domestic hot water (only for reversible units). These different temperatures are managed automatically based on the different conditions in which the system operates, with the possibility to assign specific levels of priority to domestic hot water production, depending on the needs of the application.

The regulation is based on the exclusive QuickMind algorithm, including self-adaptive control logics, beneficial in low water content systems. As alternatives the proportional- or proportional- integral regulations are also available.

Diagnostics include complete alarm management, with "blackbox" functions (via PC) and alarm log (display or PC) for best analysis of unit behaviour. For systems made up of multiple units, differentiated device management means just a certain portion of the capacity installed can be dedicated to domestic water production, in this way ensuring more efficient energy distribution and, at the same time, guaranteeing simultaneous water delivery to the different distribution systems. The built-in clock can be used to create an operating profile containing up to 4 typical days and 10 time bands, essential for efficient programming of energy production and fundamental for managing the Legionella prevention cycles. Available time bands also for DHW production.

Supervision is available with different options, using proprietary devices or by integration into third party systems using ModBus, BACnet, BACnet-over-IP and Echelon LonWorks protocols.

A dedicated wall-mounted keypad can be used for remote control of all the functions.

Optionally (VPF package), capacity modulation can be integrated with hydraulic flow modulation, thanks to inverter-driven pumps and to specific resources for the hydraulic circuit.

## UNIT STANDARD COMPOSITION



### 3.14 Versions

#### **/A - High efficiency**

High efficiency units with minimum investment payback time. High performing heat exchangers and generous heat exchanger surfaces.

#### **/K - Key efficiency**

Key efficiency units grant the best cooling capacity/footprint ratio.

#### **/SL - Super Low noise**

This configuration features a reduced fan speed and an oversized condensing section.

The fan speed is automatically increased in case of particularly tough environmental conditions.

## 4.1 OPTIONS

OPTIONS	DESCRIPTIONS	BENEFITS	AVAILABLE FOR MODELS
<b>PF409 WATER FILTER</b>			
C7420821 Filter 1" 1/2	Wire mesh water filter, to be installed on field. For the correct match between unit model and water filter please refer to the price list		ALL
C7420831 Filter 2"	Wire mesh water filter, to be installed on field. For the correct match between unit model and water filter please refer to the price list		ALL
C7420841 Filter 2" 1/2	Wire mesh water filter, to be installed on field. For the correct match between unit model and water filter please refer to the price list		ALL
C7420851 Filter 3"	Wire mesh water filter, to be installed on field. For the correct match between unit model and water filter please refer to the price list		ALL
C7420861 Filter 4"	Wire mesh water filter, to be installed on field. For the correct match between unit model and water filter please refer to the price list		ALL
<b>380 NUMBERED WIRING</b>			
381 NUMBERED WIRING ON EL. BOARD	Electrical board wires are identified by numbered labels. The reference numbers are indicated in the unit's wiring scheme.	Facilitate maintenance interventions to the electrical board connections.	ALL
<b>2410 PHASE SEQUENCE RELAY</b>			
2411 WITH EXTERNAL PHASE SEQUENCE RELAY	Relay for checking mains phase-sequence	Protects loads against faults due to incorrect connection of mains	ALL
2412 PHASE SEQU. RELAY + OVER/UNDER VOLT. MONIT.	Relay for checking mains phase-sequence and voltage	The monitoring relay protects loads against faults due to incorrect connection of mains, and it monitors whether it exceeds or falls below a specified voltage in a three-phase network.	ALL
<b>3410 AUTOMATIC CIRCUIT BREAKERS</b>			
3412 AUTOM. CIRCUIT BREAK. ON LOADS	Over-current switch on the major electrical loads.	In case of overcurrent allows resetting of the switch without the replacement of relative fuses.	ALL
<b>3600 COMPRESSOR RUN STATUS SIGNAL</b>			
3601 COMPRESSOR OPERATION SIGNAL	Auxiliary contacts providing a voltage-free signal.	Allows remote signalling of compressor's activation or remote control of any auxiliary loads.	ALL
<b>4180 REMOTE CONNECTION ARRANGEMENT</b>			
4181 SERIAL CARD MODBUS	Interface module for ModBUS protocols.	Allows integration with BMS operating with ModBUS protocol.	ALL
4182 SERIAL CARD FOR LONWORKS	Interface module for Echelon systems.	Allows integration with BMS operating with LonWorks protocols	ALL
4184 SERIAL CARD BACNET MS/TP RS485	Interface module for BACnet protocols.	Allows integration with BMS operating with BACnet protocol.	ALL
4185 SERIAL CARD FOR BACNET OVER IP	Interface module for BACnet OVER-IP protocols.	Allows to interconnect BACnet devices over Internet Protocol within wide-area networks.	ALL
<b>6160 AUXILIARY INPUT</b>			
6161 AUXILIARY SIGNAL 4-20mA	4-20 mA analog input	Allows to change the operating set-point according to the value of current applied to the analogue input.	ALL

## OPTIONS

OPTIONS	DESCRIPTIONS	BENEFITS	AVAILABLE FOR MODELS
6162 REMOTE SIGNAL DOUBLE SP	Allows to activate the Energy Saving set-point.	Allows to change the operating set-point according to a remote switch	ALL
<b>6170 DEMAND LIMIT</b>			
6171 INPUT REMOTE DEMAND LIMIT	Digital input (voltage free)	It permits to limit the unit's power absorption for safety reasons or in temporary situation.	ALL
<b>1510 SOFT-STARTER</b>			
1511 UNIT WITH SOFT-START	Electronic device adopted to manage the inrush current. The device controls 2 phases.	Break down of the inrush current compared to the direct motor start, lower motor windings' mechanical wear, avoidance of mains voltage fluctuations during starting, favourable sizing for the electrical system.	ALL
<b>3300 COMPRESSOR REPHASING</b>			
3301 COMPR.POWER FACTOR CORR.	Capacitors on the compressors' power inlet line.	The unit's average cos(phi) increases.	ALL
<b>1440 USER INTERFACE</b>			
1441 KIPlink + COMPACT KEYBOARD	In addition to KIPlink, the innovative user interface based on WiFi technology, the unit is equipped with the Compact keyboard with LCD display and buttons.		ALL
6192 COMPACT KEYBOARD	Keyboard with LCD display	Features a multi-language menu (with the W3000 software there are 3 languages available). Allows the connection of the remote keyboard. When equipped with a real time clock (optional), enables the alarm history display function.	ALL
6196 KIPlink	The unit is equipped with KIPlink, the innovative user interface based on WiFi technology		ALL
<b>5940 SETP. COMPENSATION OUT. TEMP.</b>			
5941 WITH SETPOINT COMPENSATION	This option includes an outside air sensor to be installed outside the building and enable the climatic curve function.	An outside air temperature probe, available as option, controls the system water temperature set point based on heating and cooling (reversible units) climatic curves. Delivering water at different temperatures to the terminals based on the outside air temperature achieves high seasonal efficiency ratios and provides considerable savings in running costs.	ALL
<b>4160 WINTER/SUMMER SWITCHOVER</b>			
4161 REMOTE SUMMER/WINTER SWITCH	Digital input (voltage free)	Allows to change the operating mode (Cooling/Heating) according to a remote switch	ALL

## OPTIONS

OPTIONS	DESCRIPTIONS	BENEFITS	AVAILABLE FOR MODELS
<b>5920 MANAGEMENT &amp; CONTROL SYSTEMS</b>			
5922 ClimaPRO ModBUS RS485 - MID	This option includes the following devices on-board the unit panel: - MID certified network analyzer operating on ModBUS over RS-485 - Current transformers - Software release LA09 or later version.	This accessory allows to acquire the electrical data and the power absorbed by the unit and communicate with ClimaPRO via high level communication interface based on ModBUS over EIA RS-485. More specifically, the data collected are: power supply, current, frequency, power factor ( $\cos\phi$ ), electrical power consumption, energy consumption. This specific energy meter model is MID certified and can therefore be used for billing applications. This option also ensures the compatibility between the units and ClimaPRO, thus allowing ClimaPRO to acquire all the main unit's operating variables and status by means of a high level communication interface to the controller installed onboard the unit panel.	ALL
5923 ClimaPRO BacNET over IP	This option includes the following devices on-board the unit panel: - network analyzer operating on BACnet over IP - Current transformers - Software release LA09 or later version.	This accessory allows to acquire the electrical data and the power absorbed by the unit and communicate with ClimaPRO via high level communication interface based on BACnet over IP. More specifically, the data collected are: power supply, current, frequency, power factor ( $\cos\phi$ ), electrical power consumption, energy consumption. This network analyzer is not MID certified and cannot therefore be used for billing applications. This option also ensures the compatibility between the units and ClimaPRO, thus allowing ClimaPRO to acquire all the main unit's operating variables and status by means of a high level communication interface to the controller installed onboard the unit panel.	ALL
5924 ENERGY METER FOR BMS	This option includes the following devices on-board the unit panel: - network analyzer with display operating on ModBUS protocol over RS-485 (without certification MID) - current transformers.	This accessory allows to acquire the electrical data and the power absorbed by the unit and send them via RS-485 bus to the BMS for energy metering.	ALL
<b>1400 HP AND LP GAUGES</b>			
1401 HP AND LP GAUGES	High and low pressure gauges	Allows immediate reading of the pressure values on both low and high pressure circuits	ALL
<b>1960 PRESSURE RELIEF VALVES</b>			
1961 DUAL RELIEF VALVES WITH SWITCH	Dual relief valve with switch	Allows to unselect a relief valve in order to service the unit avoiding medium or long inoperative periods	ALL
<b>5040 COMPRESSOR SUCTION AND DISCHARGE VALVE</b>			
5042 COMPRESSOR SUCTION AND DISCHARGE VALVE	Shut-off valve on compressor's suction and discharge circuit.	Simplifies maintenance activities	ALL
<b>870 OPERATION RANGE UNIT</b>			
874 EVAPORATOR OUTLET WATER TEMPERATURE <5°C	The option includes an expansion valve optimized for outlet water temperature <5°C up to according the operating limits of the unit. The glycol is mandatory.	Dedicated components to the application to allow always the best performances in all working conditions.	ALL

**OPTIONS**

OPTIONS	DESCRIPTIONS	BENEFITS	AVAILABLE FOR MODELS
<b>1940 EXPANSION VALVE</b>			
1941 ELECTRONIC EXPANSION VALVE	Electronic expansion valve	Electronic lamination device with step motor. It is designed for the continuous and precise control of refrigerant flow entering in the evaporator. This solution permits extremely short times for reaction to variation in load, optimising power consumption.	ALL
<b>990 CONDENSING COIL</b>			
879 COPPER/ALUMINIUM COILS	Finned coil heat exchanger made from suitably-spaced copper tubes and aluminum fins designed to ensure maximum heat exchange efficiency.	Provide a good resistance against corrosion. For further information please refer to the Guidelines "Finned coil heat exchangers and protection against corrosion", available in the download section of the website <a href="http://www.melcohit.com/EN/Download/Corporate/">www.melcohit.com/EN/Download/Corporate/</a> or contact our sales department.	ALL  GUIDELINES
881 Cu/Cu EXTERNAL COIL	Finned coil heat exchanger made from suitably-spaced copper tubes and fins designed to ensure maximum heat exchange efficiency.	This type of coil is not subject to galvanic corrosion, being made from just one material. For further information please refer to the Guidelines "Finned coil heat exchangers and protection against corrosion", available in the download section of the website <a href="http://www.melcohit.com/EN/Download/Corporate/">www.melcohit.com/EN/Download/Corporate/</a> or contact our sales department.	ALL  GUIDELINES
894 Cu PIPES/PREPAINTED ALL. FINIS	Finned coil heat exchanger made from copper tubes and aluminum fins with chemical cleaning treatment to remove impurities, and then coated with protective paint with the following characteristics: - fins treated with protective polyester resin paint; - over 1000 hours of salt spray protection as per ASTM B117 (fins without cross and protected edges); - excellent resistance to UV rays.	Provide a good resistance against corrosion. For further information please refer to the Guidelines "Finned coil heat exchangers and protection against corrosion", available in the download section of the website <a href="http://www.melcohit.com/EN/Download/Corporate/">www.melcohit.com/EN/Download/Corporate/</a> or contact our sales department.	ALL  GUIDELINES
895 FIN GUARD SILVER TREATM	Copper-aluminum heat exchanger coils with polyurethane paint Fin Guard Silver SB. Coil completely coated by a protective layer of polyurethane paint with the following characteristics: - polyurethane paint with metallic emulsion; - over 3000 hours of salt spray protection as per ASTM B117; - excellent resistance to UV rays; - high-pressure spray painting system.	Provides a very high resistance against corrosion, also in very aggressive environments. For further information please refer to the Guidelines "Finned coil heat exchangers and protection against corrosion", available in the download section of the website <a href="http://www.melcohit.com/EN/Download/Corporate/">www.melcohit.com/EN/Download/Corporate/</a> or contact our sales department.	ALL  GUIDELINES
<b>4730 U - HYDRONIC MODULE</b>			
4732 U - RELAY 1 PUMP (ON/OFF)	User side heat exchanger hydronic module, compatible with constant flow control. The unit is provided with 1 relay to control the activation of 1 external pump via single ON/OFF signal.	The hydronic module controls the external pumps with the unit controller logic.	ALL
4733 U - RELAY 2 PUMPS (ON/OFF)	User side heat exchanger hydronic module, compatible with constant flow control. The unit is provided with 2 relays to control the activation of 2 external pumps via double ON/OFF signal. The pumps are controlled in duty/standby, with running hours equalization and changeover on device failure.	The hydronic module controls the external pumps with the unit controller logic.	ALL



## OPTIONS

OPTIONS	DESCRIPTIONS	BENEFITS	AVAILABLE FOR MODELS
4736 U - 1 PUMP 2P LH (FIX SPEED)	User side heat exchanger hydronic module, compatible with constant flow control. The unit is provided with 1 fixed speed pump, with 2-pole motor. Residual head of 100 kPa approximately. Specifications and characteristic curves are available in the dedicated bulletin section.	The hydronic module includes the pumps and the main water circuit components, thus optimizing hydraulic and electrical installation space, time and costs.	ALL
4737 U - 1 PUMP 2P HH (FIX SPEED)	User side heat exchanger hydronic module, compatible with constant flow control. The unit is provided with 1 fixed speed pump, with 2-pole motor. Residual head of 200 kPa approximately. Specifications and characteristic curves are available in the dedicated bulletin section.	The hydronic module includes the pumps and the main water circuit components, thus optimizing hydraulic and electrical installation space, time and costs.	ALL
4741 U - 2 PUMPS 2P LH (FIX SPEED)	User side heat exchanger hydronic module, compatible with constant flow control. The unit is provided with 2 fixed speed pumps, with 2-pole motor. Residual head of 100 kPa approximately. The pumps are controlled in duty/standby, with running hours equalization and changeover on device failure. Specifications and characteristic curves are available in the dedicated bulletin section.	The hydronic module includes the pumps and the main water circuit components, thus optimizing hydraulic and electrical installation space, time and costs.	ALL
4742 U - 2 PUMPS 2P HH (FIX SPEED)	User side heat exchanger hydronic module, compatible with constant flow control. The unit is provided with 2 fixed speed pumps, with 2-pole motor. Residual head of 200 kPa approximately. The pumps are controlled in duty/standby, with running hours equalization and changeover on device failure. Specifications and characteristic curves are available in the dedicated bulletin section.	The hydronic module includes the pumps and the main water circuit components, thus optimizing hydraulic and electrical installation space, time and costs.	ALL
4743 U - RELAY 1 PUMP + 0-10V SIG	User side heat exchanger hydronic module, compatible with constant or variable flow control. The unit is provided with 1 relay and a 0-10V signal terminal to control the activation and the speed of 1 external variable speed pump.	The hydronic module controls the external pumps with the unit controller logic.	ALL
4744 U - RELAY 2 PUMPS + 0-10V SIG	User side heat exchanger hydronic module, compatible with constant or variable flow control. The unit is provided with 2 relays and a 0-10V signal terminal to control the activation and the speed of 2 external variable speed pump. The pumps are controlled in duty/standby, with running hours equalization and changeover on device failure.	The hydronic module controls the external pumps with the unit controller logic.	ALL
4747 U - 1 PUMP 2P LH (VAR SPEED)	User side heat exchanger hydronic module, compatible with constant or variable flow control. The unit is provided with 1 variable speed pump, with 2-pole motor. Residual head of 100 kPa approximately. Specifications and characteristic curves are available in the dedicated bulletin section.	The hydronic module includes the pumps and the main water circuit components, thus optimizing hydraulic and electrical installation space, time and costs.	ALL

**OPTIONS**

OPTIONS	DESCRIPTIONS	BENEFITS	AVAILABLE FOR MODELS
4752 U - 2 PUMPS 2P LH (VAR SPEED)	User side heat exchanger hydronic module, compatible with constant or variable flow control. The unit is provided with 2 variable speed pumps, with 2-pole motor. Residual head of 100 kPa approximately. The pumps are controlled in duty/standby, with running hours equalization and changeover on device failure. Specifications and characteristic curves are available in the dedicated bulletin section.	The hydronic module includes the pumps and the main water circuit components, thus optimizing hydraulic and electrical installation space, time and costs.	ALL
<b>4870</b> <b>U - PRIMARY FLOW CONTROL</b>			
4871 U - CONSTANT FLOW	User side heat exchanger water flow control (plant primary circuit): constant flow. Compatible with hydronic modules without regulation devices (no pumps, no contacts), with ON/OFF regulation devices (relays) or with fixed speed pumps (codes: 4731, 4732, 4733, 4734, 4735, 4736, 4737, 4738, 4739, 4741, 4742 - hydronic modules availability depends on unit model).	The unit is set up to operate with a constant water flow in the heat exchanger (plant primary circuit). This is the only option available in case of unit without any water flow regulation devices (no pumps, no contacts), which means with water flow control provided by others. In case of unit with ON/OFF regulation devices or fixed speed pumps, the unit controller manages the pump activation to reduce pump consumption.	ALL
4872 U - CONSTANT FLOW (PARAMETER)	User side heat exchanger water flow control (plant primary circuit): constant flow (parameter set). Compatible with hydronic modules with modulating regulation devices (0-10V signal) or with variable speed pumps (codes: 4743, 4744, 4745, 4746, 4747, 4748, 4749, 4751, 4752, 4753 - hydronic modules availability depends on unit model).	The unit is set up to operate with a constant water flow in the heat exchanger (plant primary circuit). The unit controller manages the pump activation to reduce pump consumption. The pump speed is adjusted via 0-10V signal. The option provides the possibility to set the pump speed with a controller parameter. Once set, the speed pump remains constant until the next parameter adjustment. The parameter set constant flow control is useful during the unit installation and commissioning, to adjust water flow and pressure head according to the real plant characteristics.	ALL
4874 U - VPF (plant DP trans excl)	User side heat exchanger water flow control (plant primary circuit): variable flow (delta P control). Only for single unit systems. Compatible with hydronic modules with modulating regulation devices (0-10V signal) or with variable speed pumps (codes: 4743, 4744, 4745, 4746, 4747, 4748, 4749, 4751, 4752, 4753 - hydronic modules availability depends on unit model). The option includes: differential pressure transducer on the unit's heat exchanger and related controller expansion board, controller expansion board to read the plant side differential pressure transducer (4-20mA signal) and manage the hydraulic by-pass valve opening (0-10V signal). Compulsory equipment, supplied by others: plant side differential pressure transducer, plant side hydraulic by-pass valve.	The unit is set up to operate with a variable water flow in the heat exchanger (plant primary circuit). The unit controller manages the pump activation to reduce pump consumption. The pump speed is adjusted via 0-10V signal. The option provides a pump speed management based on the VPF (Variable Primary Flow) function. It keeps the delta P constant on the plant side (primary circuit), thus bringing significant pump consumption reduction during part load operation. The VPF function is applicable in systems with only the primary circuit. Further information available in the dedicated bulletin section.	ALL



**OPTIONS**

OPTIONS	DESCRIPTIONS	BENEFITS	AVAILABLE FOR MODELS
<p>4875 U - VPF (plant DP trans incl)</p>	<p>User side heat exchanger water flow control (plant primary circuit): variable flow (delta P control). Only for single unit systems. Compatible with hydronic modules with modulating regulation devices (0-10V signal) or with variable speed pumps (codes: 4743, 4744, 4745, 4746, 4747, 4748, 4749, 4751, 4752, 4753 - hydronic modules availability depends on unit model). The option includes: differential pressure transducer on the unit's heat exchanger and related controller expansion board, plant side differential pressure transducer (installation by others), controller expansion board to read the plant side differential pressure transducer (4-20mA signal) and manage the hydraulic by-pass valve opening (0-10V signal). Compulsory equipment, supplied by others: plant side hydraulic by-pass valve.</p>	<p>The unit is set up to operate with a variable water flow in the heat exchanger (plant primary circuit). The unit controller manages the pump activation to reduce pump consumption. The pump speed is adjusted via 0-10V signal. The option provides a pump speed management based on the VPF (Variable Primary Flow) function. It keeps the delta P constant on the plant side (primary circuit), thus bringing significant pump consumption reduction during part load operation. The VPF function is applicable in systems with only the primary circuit. Further information available in the dedicated bulletin section.</p>	<p>ALL</p>
<p>4876 U - VPF MULTI-UNIT SYSTEM</p>	<p>User side heat exchanger water flow control (plant primary circuit): variable flow (delta P control). Only for multi-unit systems. Compatible with hydronic modules with modulating regulation devices (0-10V signal) or with variable speed pumps (codes: 4743, 4744, 4745, 4746, 4747, 4748, 4749, 4751, 4752, 4753 - hydronic modules availability depends on unit model). The option includes: differential pressure transducer on the unit's heat exchanger and related controller expansion board. It shall be the customer responsibility to configure the multi-unit control system (Manager3000 or ClimaPRO) with option VPF.</p>	<p>The unit is set up to operate with a variable water flow in the heat exchanger (plant primary circuit). The unit controller manages the pump activation to reduce pump consumption. The pump speed is adjusted via 0-10V signal. The option provides a pump speed management based on the VPF (Variable Primary Flow) function. It keeps the delta P constant on the plant side (primary circuit), thus bringing significant pump consumption reduction during part load operation. The VPF function is applicable in systems with only the primary circuit. Further information available in the dedicated bulletin section.</p>	<p>ALL</p>
<p>4877 U - VPF.D</p>	<p>User side heat exchanger water flow control (plant primary circuit): variable flow (delta T control). Only for single unit systems. Compatible with hydronic modules with modulating regulation devices (0-10V signal) or with variable speed pumps (codes: 4743, 4744, 4745, 4746, 4747, 4748, 4749, 4751, 4752, 4753 - hydronic modules availability depends on unit model). The option includes: 2 plant side NTC temperature sensors (installation by others).</p>	<p>The unit is set up to operate with a variable water flow in the heat exchanger (plant primary circuit). The unit controller manages the pump activation to reduce pump consumption. The pump speed is adjusted via 0-10V signal. The option provides a pump speed management based on the VPF.D (Variable Primary Flow with Decoupler) function. It keeps the delta T constant on the plant side (primary circuit), thus bringing significant pump consumption reduction during part load operation. The VPF.D function is applicable in systems with the primary and secondary circuits separated by a hydraulic decoupler. Further information available in the dedicated bulletin section.</p>	<p>ALL</p>

## OPTIONS

OPTIONS	DESCRIPTIONS	BENEFITS	AVAILABLE FOR MODELS
4878 U - VPF.D MULTI-UNIT SYSTEM	<p>User side heat exchanger water flow control (plant primary circuit): variable flow (delta T control). Only for multi-unit systems.</p> <p>Compatible with hydronic modules with modulating regulation devices (0-10V signal) or with variable speed pumps (codes: 4743, 4744, 4745, 4746, 4747, 4748, 4749, 4751, 4752, 4753 - hydronic modules availability depends on unit model).</p> <p>It shall be the customer responsibility to configure the multi-unit control system (Manager3000 or ClimaPRO) with option VPF.D.</p>	<p>The unit is set up to operate with a variable water flow in the heat exchanger (plant primary circuit).</p> <p>The unit controller manages the pump activation to reduce pump consumption. The pump speed is adjusted via 0-10V signal.</p> <p>The option provides a pump speed management based on the VPF.D (Variable Primary Flow with Decoupler) function. It keeps the delta T constant on the plant side (primary circuit), thus bringing significant pump consumption reduction during part load operation.</p> <p>The VPF.D function is applicable in systems with the primary and secondary circuits separated by a hydraulic decoupler.</p> <p>Further information available in the dedicated bulletin section.</p>	ALL
<b>2430 PIPING KIT ANTIFREEZE HEATER</b>			
2432 ANTIFREEZE PIPING, PUMPS	Electrical heaters on pipes and other hydraulic unit's components. This option is mandatory if the unit is supposed to work with outdoor temperature below 0°C. Only for units provided with on-board pumps.	It protects the unit against ice formation on its hydraulic components.	ALL
<b>9970 PACKING</b>			
9968 NYLON, SUPP., COIL PROT. PACK.	Unit provided plastic supports, with polypropylene panels for coils protection and covered with nylon		ALL
9969 NYLON + WOODEN CRATE PACKING	Unit provided with wooden cage and covered with nylon		ALL
9972 WOODEN BOX PACKING	Unit provided with wooden box		ALL
9973 WOODEN CAGE PACKING	Unit provided with wooden cage		ALL
9974 MARINE PACKING	Unit provided with barrier bag and wooden cage		ALL
9979 CONTAINER PACKING	Unit provided with container slides and covered with nylon		ALL
9996 CONTAINER SLIDES	Unit provided with container slides		ALL

## OPTIONS

### **Additional information - IMPORTANT -**

#### **381 – Numbered wiring on electrical**

Standard feature (taglie 0072 - 0702)

#### **3412 – Automatic circuit breakers**

Standard feature (taglie 0072 - 0702)

#### **3301 – Compressor power factor correction**

##### **1511 – Soft starter**

There is a mutual exclusion rule between the compressor rephrasing condensers and the soft start device.

When both accessories are required together, a feasibility analysis is needed.

If the configuration is available as a special execution, an extra-price may be quoted.

## OPTIONS

### Chiller Plant Control with Active Optimization System

#### ClimaPRO System Manager

ClimaPRO System Manager represents the state-of-the-art platform for chiller plant management and control.

ClimaPRO ensures to actively optimize the entire chiller plant by managing and adjusting each component directly involved in the production and the distribution of the heating and the cooling energies, therefore involving chillers and heat pumps, pumping groups as well as the source-side devices like, for example, the cooling towers.

In particular, ClimaPRO measures in real-time all the operating variables from the field, for each individual device and each of the main system branches, by using serial communication lines as well as dedicated analogue signals.

The acquired data are then compared with the design data of each single unit at any different working conditions, thus allowing to implement control strategies based on dynamic algorithms which take into account the real operating conditions.

On the basis of these values, an advanced diagnostic module also allows to assess the level of efficiency for each individual unit, translating data into easy-to-read information in order to simplify and optimize the maintenance activities.

The "Chart Builder" software module allows to display the trends of the main operating variables. The "Reporting" module allows to send reports to selected users, including data and system's status of the main devices as well as to perform calculation of the energy indexes for each single unit and for the entire chiller plant.

The accessibility to ClimaPRO System Manager is ensured by an integrated web server that makes it visible from any computer equipped with a web browser, either locally or remotely.



5.1 GENERAL TECHNICAL DATA

NX-CN /K

[ SI System ]

NX-CN /K		0072	0092	0102	0122	0152	0182	0202	0232	0272	0302	
Power supply		V/ph/Hz 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50										
<b>PERFORMANCE</b>												
<b>COOLING ONLY (GROSS VALUE)</b>												
Cooling capacity	(1)	kW	18,37	22,60	25,76	30,34	37,95	44,87	51,74	57,71	66,12	74,94
Total power input	(1)	kW	6,460	8,540	9,050	10,78	13,33	15,22	18,06	20,75	22,83	27,09
EER	(1)	kW/kW	2,848	2,646	2,851	2,806	2,857	2,954	2,856	2,774	2,899	2,764
<b>COOLING ONLY (EN14511 VALUE)</b>												
Cooling capacity	(1)(2)	kW	18,30	22,60	25,70	30,30	37,90	44,80	51,70	57,60	66,00	74,90
EER	(1)(2)	kW/kW	3,040	2,810	3,090	3,010	3,060	3,190	3,060	2,950	3,110	2,950
<b>HEATING ONLY (GROSS VALUE)</b>												
Total heating capacity	(3)	kW	19,16	23,87	28,02	31,79	41,48	48,41	55,64	61,74	70,72	79,49
Total power input	(3)	kW	7,059	9,064	9,870	11,27	14,30	16,37	18,97	21,50	23,32	27,81
COP	(3)	kW/kW	2,720	2,638	2,837	2,814	2,902	2,951	2,926	2,870	3,034	2,860
<b>HEATING ONLY (EN14511 VALUE)</b>												
Total heating capacity	(3)(2)	kW	19,20	23,90	28,10	31,90	41,60	48,50	55,70	61,80	70,80	79,60
COP	(3)(2)	kW/kW	2,900	2,800	3,060	3,010	3,110	3,180	3,120	3,040	3,260	3,050
<b>COOLING WITH PARTIAL RECOVERY</b>												
Cooling capacity	(4)	kW	19,06	23,45	26,73	31,48	39,37	46,55	53,68	59,87	68,60	77,75
Total power input	(4)	kW	6,263	8,286	8,765	10,44	12,93	14,76	17,51	20,11	22,11	26,26
Desuperheater heating capacity	(4)	kW	5,017	6,472	7,275	8,748	10,22	11,73	14,05	16,20	18,25	21,26
<b>EXCHANGERS</b>												
<b>HEAT EXCHANGER USER SIDE IN COOLING</b>												
Water flow	(1)	l/s	0,878	1,081	1,232	1,451	1,815	2,146	2,474	2,760	3,162	3,584
Pressure drop at the heat exchanger	(1)	kPa	16,7	18,2	16,6	18,3	19,1	16,6	17,3	17,1	12,9	12,6
<b>HEAT EXCHANGER USER SIDE IN HEATING</b>												
Water flow	(3)	l/s	0,925	1,152	1,352	1,535	2,002	2,337	2,686	2,980	3,414	3,837
Pressure drop at the heat exchanger	(3)	kPa	18,6	20,7	20,1	20,4	23,2	19,6	20,4	19,9	15,1	14,4
<b>PARTIAL RECOVERY USER SIDE IN REFRIGERATION</b>												
Water flow	(4)	l/s	0,242	0,312	0,351	0,422	0,493	0,566	0,678	0,782	0,881	1,026
Pressure drop at the heat exchanger	(4)	kPa	2,88	4,80	6,06	8,76	4,37	5,76	8,26	11,0	8,36	11,3
<b>REFRIGERANT CIRCUIT</b>												
Compressors nr.		N°	2	2	2	2	2	2	2	2	2	2
Number of capacity steps		N°	2	2	2	2	2	2	2	2	2	2
No. Circuits		N°	1	1	1	1	1	1	1	1	1	1
Regulation			STEPS	STEPS	STEPS	STEPS	STEPS	STEPS	STEPS	STEPS	STEPS	STEPS
Min. capacity step		%	50	50	50	50	50	50	50	50	50	50
Refrigerant			R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Refrigerant charge		kg	8,20	8,50	8,90	9,10	19,0	20,2	21,1	21,5	27,1	23,6
Oil charge		kg	2,70	2,70	2,70	3,30	3,90	5,50	5,50	6,30	7,30	7,40
Rc (ASHRAE)	(5)	kg/kW	0,45	0,38	0,35	0,30	0,51	0,45	0,41	0,38	0,41	0,32
<b>FANS</b>												
Quantity		N°	1	1	1	1	2	2	2	2	2	3
Air flow		m³/s	2,08	2,50	3,33	3,47	4,44	5,42	5,69	5,97	7,50	8,06
Available static pressure		Pa	120	120	120	120	120	120	120	120	120	120
Fans power input		kW	0,84	1,29	0,90	0,98	0,94	1,04	1,16	1,30	1,19	1,09
<b>NOISE LEVEL</b>												
Sound power level in cooling	(6)(7)	dB(A)	83	88	78	79	88	85	86	87	83	87
Sound power level in heating	(6)(8)	dB(A)	70	70	70	70	80	80	80	80	80	80
Sound power level in heating	(6)(9)	dB(A)	83	88	78	79	88	85	86	87	83	87
<b>SIZE AND WEIGHT</b>												
A	(10)	mm	1500	1500	1500	1500	2480	2480	2480	2480	2480	2480
B	(10)	mm	900	900	900	900	1100	1100	1100	1100	1100	1100
H	(10)	mm	1910	1910	1910	1910	2100	2100	2100	2100	2100	2100
Operating weight	(10)	kg	430	440	460	470	810	840	840	860	920	960

Notes:

- 1 Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°C; Source (side) heat exchanger air (in) 35,0°C.
- 2 Values in compliance with EN14511
- 3 Plant (side) heat exchanger water (in/out) 40,00°C/45,00°C; Source (side) heat exchanger air (in) 7,0°C - 87% R.H.
- 4 Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°C; Source (side) heat exchanger air (in) 35,0°C; Plant (side) heat exchanger recovery water (in/out) 40,00°C/45,00°C.
- 5 Rated in accordance with AHRI Standard 550/590
- 6 Total sound power of fans, as declared by the manufacturer, at the rated speed of rotation and a nominal available static pressure on the delivery side.
- 7 Sound power level in cooling, indoors.
- 8 Sound power level in heating, indoors.
- 9 Sound power level in heating, outdoors.
- 10 Unit in standard configuration, without optional accessories.

- Not available

Data certified in EUROVENT

**GENERAL TECHNICAL DATA**

**NX-CN /K**

[ SI System ]

NX-CN /K		0352	0402	0452	0502	0552	0602	0702	0524	0604	0704	
Power supply		V/ph/Hz 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50										
<b>PERFORMANCE</b>												
<b>COOLING ONLY (GROSS VALUE)</b>												
Cooling capacity	(1)	kW	85,04	94,47	106,8	121,1	135,9	151,4	173,1	124,8	144,0	167,2
Total power input	(1)	kW	31,82	33,89	38,78	44,60	52,52	56,39	65,84	47,64	53,51	63,38
EER	(1)	kW/kW	2,673	2,788	2,753	2,715	2,589	2,684	2,631	2,622	2,692	2,637
<b>COOLING ONLY (EN14511 VALUE)</b>												
Cooling capacity	(1)(2)	kW	85,00	94,40	106,7	121,0	135,8	151,2	172,9	124,6	143,8	167,0
EER	(1)(2)	kW/kW	2,840	2,990	2,930	2,880	2,730	2,850	2,790	2,770	2,860	2,800
<b>HEATING ONLY (GROSS VALUE)</b>												
Total heating capacity	(3)	kW	89,35	102,2	114,6	131,1	146,9	162,9	187,1	135,0	156,7	179,9
Total power input	(3)	kW	32,23	35,08	39,32	45,56	53,15	56,97	64,72	48,55	54,35	64,53
COP	(3)	kW/kW	2,776	2,912	2,916	2,875	2,766	2,858	2,892	2,784	2,881	2,789
<b>HEATING ONLY (EN14511 VALUE)</b>												
Total heating capacity	(3)(2)	kW	89,50	102,3	114,7	131,2	147,1	163,1	187,4	135,2	156,9	180,2
COP	(3)(2)	kW/kW	2,950	3,110	3,100	3,050	2,920	3,030	3,070	2,940	3,060	2,960
<b>COOLING WITH PARTIAL RECOVERY</b>												
Cooling capacity	(4)	kW	88,23	98,01	110,8	125,6	141,0	157,1	179,6	129,4	149,4	173,5
Total power input	(4)	kW	30,85	32,82	37,55	43,25	50,95	54,62	63,84	46,20	51,82	61,45
Desuperheater heating capacity	(4)	kW	24,73	27,28	31,32	34,49	39,99	45,23	51,11	36,60	43,05	49,24
<b>EXCHANGERS</b>												
<b>HEAT EXCHANGER USER SIDE IN COOLING</b>												
Water flow	(1)	l/s	4,067	4,518	5,107	5,791	6,500	7,240	8,277	5,966	6,887	7,998
Pressure drop at the heat exchanger	(1)	kPa	13,5	13,2	13,5	13,3	14,3	14,9	15,5	19,6	19,6	19,9
<b>HEAT EXCHANGER USER SIDE IN HEATING</b>												
Water flow	(3)	l/s	4,313	4,932	5,532	6,328	7,091	7,864	9,034	6,518	7,564	8,685
Pressure drop at the heat exchanger	(3)	kPa	15,2	15,7	15,8	15,9	17,0	17,6	18,5	23,4	23,7	23,5
<b>PARTIAL RECOVERY USER SIDE IN REFRIGERATION</b>												
Water flow	(4)	l/s	1,194	1,317	1,512	1,665	1,930	2,183	2,467	1,767	2,078	2,377
Pressure drop at the heat exchanger	(4)	kPa	10,5	12,7	9,90	12,0	10,7	13,7	12,9	16,8	23,2	20,7
<b>REFRIGERANT CIRCUIT</b>												
Compressors nr.		N°	2	2	2	2	2	2	2	4	4	4
Number of capacity steps		N°	2	2	2	2	2	2	2	4	4	4
No. Circuits		N°	1	1	1	1	1	1	1	2	2	2
Regulation			STEPS	STEPS	STEPS	STEPS	STEPS	STEPS	STEPS	STEPS	STEPS	STEPS
Min. capacity step		%	50	50	50	50	50	50	50	25	25	25
Refrigerant			R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Refrigerant charge		kg	24,6	32,2	33,0	38,9	39,9	40,8	51,4	43,0	44,3	51,5
Oil charge		kg	8,90	10,3	12,6	15,0	14,4	13,9	13,9	14,3	14,9	17,7
Rc (ASHRAE)	(5)	kg/kW	0,29	0,34	0,31	0,32	0,30	0,27	0,30	0,35	0,31	0,31
<b>FANS</b>												
Quantity		N°	3	3	3	4	4	4	6	4	4	6
Air flow		m <sup>3</sup> /s	8,89	10,56	11,11	12,50	13,89	15,83	18,06	13,06	15,28	17,78
Available static pressure		Pa	120	120	120	120	120	120	120	120	120	120
Fans power input		kW	1,37	1,11	1,23	1,49	1,93	1,43	1,43	1,66	1,32	1,37
<b>NOISE LEVEL</b>												
Sound power level in cooling	(6)(7)	dB(A)	89	84	85	91	94	88	92	92	87	94
Sound power level in heating	(6)(8)	dB(A)	80	82	83	83	84	85	85	85	85	86
Sound power level in heating	(6)(9)	dB(A)	89	84	85	91	94	88	92	92	87	94
<b>SIZE AND WEIGHT</b>												
A	(10)	mm	2480	2980	2980	3970	3970	3970	4670	3970	3970	4670
B	(10)	mm	1100	1260	1260	1260	1260	1260	1260	1260	1260	1260
H	(10)	mm	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100
Operating weight	(10)	kg	1020	1260	1280	1510	1530	1610	1820	1490	1590	1910

Notes:

- 1 Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°C; Source (side) heat exchanger air (in) 35,0°C.
- 2 Values in compliance with EN14511
- 3 Plant (side) heat exchanger water (in/out) 40,00°C/45,00°C; Source (side) heat exchanger air (in) 7,0°C - 87% R.H.
- 4 Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°C; Source (side) heat exchanger air (in) 35,0°C; Plant (side) heat exchanger recovery water (in/out) 40,00°C/45,00°C.
- 5 Rated in accordance with AHRI Standard 550/590
- 6 Total sound power of fans, as declared by the manufacturer, at the rated speed of rotation and a nominal available static pressure on the delivery side.
- 7 Sound power level in cooling, indoors.
- 8 Sound power level in heating, indoors.
- 9 Sound power level in heating, outdoors.
- 10 Unit in standard configuration, without optional accessories.

- Not available

Data certified in EUROVENT

## GENERAL TECHNICAL DATA

## NX-CN /K

[ SI System ]

NX-CN /K		0804	0904	1004	1104	
Power supply		V/ph/Hz 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	186,9	216,9	241,1	265,3
Total power input	(1)	kW	73,33	77,85	88,00	103,8
EER	(1)	kW/kW	2,550	2,788	2,740	2,556
<b>COOLING ONLY (EN14511 VALUE)</b>						
Cooling capacity	(1)(2)	kW	186,6	216,6	240,8	265,0
EER	(1)(2)	kW/kW	2,690	2,960	2,900	2,680
<b>HEATING ONLY (GROSS VALUE)</b>						
Total heating capacity	(3)	kW	199,1	231,1	256,0	283,1
Total power input	(3)	kW	73,70	78,93	88,07	100,7
COP	(3)	kW/kW	2,701	2,929	2,906	2,811
<b>HEATING ONLY (EN14511 VALUE)</b>						
Total heating capacity	(3)(2)	kW	199,4	231,4	256,3	283,4
COP	(3)(2)	kW/kW	2,850	3,110	3,080	2,950
<b>COOLING WITH PARTIAL RECOVERY</b>						
Cooling capacity	(4)	kW	193,9	225,1	250,2	275,2
Total power input	(4)	kW	71,12	75,39	85,23	100,6
Desuperheater heating capacity	(4)	kW	56,30	62,74	70,62	83,97
<b>EXCHANGERS</b>						
<b>HEAT EXCHANGER USER SIDE IN COOLING</b>						
Water flow	(1)	l/s	8,935	10,37	11,53	12,69
Pressure drop at the heat exchanger	(1)	kPa	19,9	20,4	20,5	19,6
<b>HEAT EXCHANGER USER SIDE IN HEATING</b>						
Water flow	(3)	l/s	9,613	11,16	12,36	13,67
Pressure drop at the heat exchanger	(3)	kPa	23,0	23,5	23,5	22,8
<b>PARTIAL RECOVERY USER SIDE IN REFRIGERATION</b>						
Water flow	(4)	l/s	2,718	3,029	3,409	4,053
Pressure drop at the heat exchanger	(4)	kPa	27,1	19,7	25,0	35,3
<b>REFRIGERANT CIRCUIT</b>						
Compressors nr.		N°	4	4	4	4
Number of capacity steps		N°	4	4	4	4
No. Circuits		N°	2	2	2	2
Regulation			STEPS	STEPS	STEPS	STEPS
Min. capacity step		%	25	25	25	25
Refrigerant			R410A	R410A	R410A	R410A
Refrigerant charge		kg	53,5	68,5	71,0	72,8
Oil charge		kg	20,5	25,2	29,9	28,8
Rc (ASHRAE)	(5)	kg/kW	0,29	0,32	0,30	0,28
<b>FANS</b>						
Quantity		N°	6	6	6	6
Air flow		m³/s	19,44	22,50	24,17	24,17
Available static pressure		Pa	120	120	120	120
Fans power input		kW	1,71	1,26	1,48	1,63
<b>NOISE LEVEL</b>						
Sound power level in cooling	(6)(7)	dB(A)	94	88	90	90
Sound power level in heating	(6)(8)	dB(A)	86	88	90	90
Sound power level in heating	(6)(9)	dB(A)	94	88	90	90
<b>SIZE AND WEIGHT</b>						
A	(10)	mm	4670	5670	5670	5670
B	(10)	mm	1260	1260	1260	1260
H	(10)	mm	2100	2100	2100	2100
Operating weight	(10)	kg	2060	2430	2490	2540

### Notes:

- Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°C; Source (side) heat exchanger air (in) 35,0°C.
- Values in compliance with EN14511
- Plant (side) heat exchanger water (in/out) 40,00°C/45,00°C; Source (side) heat exchanger air (in) 7,0°C - 87% R.H.
- Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°C; Source (side) heat exchanger air (in) 35,0°C; Plant (side) heat exchanger recovery water (in/out) 40,00°C/45,00°C.
- Rated in accordance with AHRI Standard 550/590
- Total sound power of fans, as declared by the manufacturer, at the rated speed of rotation and a nominal available static pressure on the delivery side.
- Sound power level in cooling, indoors.
- Sound power level in heating, indoors.
- Sound power level in heating, outdoors.
- Unit in standard configuration, without optional accessories.

- Not available

Data certified in EUROVENT

**GENERAL TECHNICAL DATA**

**NX-CN /SL-K**

[ SI System ]

NX-CN /SL-K		0072	0092	0102	0122	0152	0182	0202	0232	0272	0302	
Power supply		V/ph/Hz 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50										
<b>PERFORMANCE</b>												
<b>COOLING ONLY (GROSS VALUE)</b>												
Cooling capacity	(1)	kW	18,03	22,02	24,45	28,64	37,03	43,88	50,75	56,21	64,42	72,59
Total power input	(1)	kW	6,240	8,120	9,570	11,41	12,83	14,68	17,48	20,06	23,07	26,39
EER	(1)	kW/kW	2,885	2,709	2,560	2,509	2,891	2,986	2,903	2,796	2,788	2,750
<b>COOLING ONLY (EN14511 VALUE)</b>												
Cooling capacity	(1)(2)	kW	18,00	22,00	24,40	28,60	37,00	43,80	50,70	56,10	64,40	72,50
EER	(1)(2)	kW/kW	3,100	2,880	2,700	2,630	3,080	3,210	3,100	2,970	2,970	2,910
<b>HEATING ONLY (GROSS VALUE)</b>												
Total heating capacity	(3)	kW	18,92	23,48	27,08	30,78	40,70	47,57	54,82	60,97	69,20	77,93
Total power input	(3)	kW	6,643	8,291	9,495	10,83	13,30	15,29	17,82	20,20	23,30	25,89
COP	(3)	kW/kW	2,846	2,835	2,856	2,852	3,060	3,111	3,079	3,020	2,970	3,008
<b>HEATING ONLY (EN14511 VALUE)</b>												
Total heating capacity	(3)(2)	kW	19,00	23,50	27,10	30,80	40,80	47,60	54,90	61,10	69,30	78,00
COP	(3)(2)	kW/kW	3,050	3,010	3,020	3,010	3,260	3,340	3,290	3,210	3,160	3,190
<b>COOLING WITH PARTIAL RECOVERY</b>												
Cooling capacity	(4)	kW	18,71	22,85	25,37	29,71	38,42	45,53	52,65	58,32	66,84	75,31
Total power input	(4)	kW	6,036	7,854	9,253	11,03	12,41	14,20	16,91	19,40	22,32	25,51
Desuperheater heating capacity	(4)	kW	5,195	6,784	8,078	9,685	10,65	12,19	14,53	16,73	19,04	22,32
<b>EXCHANGERS</b>												
<b>HEAT EXCHANGER USER SIDE IN COOLING</b>												
Water flow	(1)	l/s	0,862	1,053	1,169	1,370	1,771	2,098	2,427	2,688	3,081	3,471
Pressure drop at the heat exchanger	(1)	kPa	16,1	17,3	15,0	16,3	18,2	15,8	16,7	16,2	12,3	11,8
<b>HEAT EXCHANGER USER SIDE IN HEATING</b>												
Water flow	(3)	l/s	0,913	1,133	1,307	1,486	1,964	2,296	2,646	2,943	3,340	3,762
Pressure drop at the heat exchanger	(3)	kPa	18,1	20,0	18,7	19,2	22,3	19,0	19,8	19,4	14,4	13,9
<b>PARTIAL RECOVERY USER SIDE IN REFRIGERATION</b>												
Water flow	(4)	l/s	0,251	0,327	0,390	0,468	0,514	0,589	0,701	0,807	0,919	1,078
Pressure drop at the heat exchanger	(4)	kPa	3,09	5,27	7,47	10,7	4,75	6,22	8,84	11,7	9,10	12,5
<b>REFRIGERANT CIRCUIT</b>												
Compressors nr.		N°	2	2	2	2	2	2	2	2	2	2
Number of capacity steps		N°	2	2	2	2	2	2	2	2	2	2
No. Circuits		N°	1	1	1	1	1	1	1	1	1	1
Regulation			STEPS	STEPS	STEPS	STEPS	STEPS	STEPS	STEPS	STEPS	STEPS	STEPS
Min. capacity step		%	50	50	50	50	50	50	50	50	50	50
Refrigerant			R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Refrigerant charge		kg	8,20	8,50	18,3	18,5	19,0	20,2	21,1	21,5	34,1	29,9
Oil charge		kg	2,70	2,70	2,70	3,30	3,90	5,50	5,50	6,30	7,30	7,40
Rc (ASHRAE)	(5)	kg/kW	0,46	0,39	0,76	0,65	0,52	0,47	0,42	0,39	0,53	0,42
<b>FANS</b>												
Quantity		N°	2	2	2	2	2	3	3	3	3	3
Air flow		m³/s	1,81	2,08	2,22	2,36	3,61	4,44	4,86	5,14	6,11	6,39
Available static pressure		Pa	120	120	120	120	120	120	120	120	120	120
Fans power input		kW	0,21	0,26	0,26	0,28	0,45	0,34	0,40	0,44	0,58	0,46
<b>NOISE LEVEL</b>												
Sound power level in cooling	(6)(7)	dB(A)	68	70	72	73	76	74	76	77	81	74
Sound power level in heating	(6)(8)	dB(A)	60	61	59	60	73	72	74	73	75	72
Sound power level in heating	(6)(9)	dB(A)	68	70	72	73	76	74	76	77	81	74
<b>SIZE AND WEIGHT</b>												
A	(10)	mm	1500	1500	2480	2480	2480	2480	2480	2480	2980	2980
B	(10)	mm	900	900	1100	1100	1100	1100	1100	1100	1260	1260
H	(10)	mm	1910	1910	2100	2100	2100	2100	2100	2100	2100	2100
Operating weight	(10)	kg	480	490	820	830	860	920	920	940	1090	1160

Notes:

- 1 Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°C; Source (side) heat exchanger air (in) 35,0°C.
- 2 Values in compliance with EN14511
- 3 Plant (side) heat exchanger water (in/out) 40,00°C/45,00°C; Source (side) heat exchanger air (in) 7,0°C - 87% R.H.
- 4 Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°C; Source (side) heat exchanger air (in) 35,0°C; Plant (side) heat exchanger recovery water (in/out) 40,00°C/45,00°C.
- 5 Rated in accordance with AHRI Standard 550/590
- 6 Total sound power of fans, as declared by the manufacturer, at the rated speed of rotation and a nominal available static pressure on the delivery side.
- 7 Sound power level in cooling, indoors.
- 8 Sound power level in heating, indoors.
- 9 Sound power level in heating, outdoors.
- 10 Unit in standard configuration, without optional accessories.

- Not available

Data certified in EUROVENT



**GENERAL TECHNICAL DATA**

**NX-CN /SL-K**

[ SI System ]

NX-CN /SL-K		0352	0402	0452	0502	0552	0602	0702	0524	0604	0704	
Power supply		V/ph/Hz 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50										
<b>PERFORMANCE</b>												
<b>COOLING ONLY (GROSS VALUE)</b>												
Cooling capacity	(1)	kW	82,03	91,09	102,9	118,8	132,6	145,7	166,5	121,9	139,6	161,4
Total power input	(1)	kW	30,87	34,39	39,12	42,58	49,66	57,36	65,20	45,49	53,82	61,42
EER	(1)	kW/kW	2,654	2,648	2,632	2,789	2,668	2,538	2,554	2,679	2,595	2,629
<b>COOLING ONLY (EN14511 VALUE)</b>												
Cooling capacity	(1)(2)	kW	81,90	91,00	102,8	118,7	132,5	145,6	166,4	121,8	139,4	161,3
EER	(1)(2)	kW/kW	2,800	2,790	2,770	2,960	2,810	2,670	2,680	2,830	2,720	2,760
<b>HEATING ONLY (GROSS VALUE)</b>												
Total heating capacity	(3)	kW	87,39	99,80	111,9	129,4	144,6	159,1	181,8	133,1	153,7	175,9
Total power input	(3)	kW	29,63	33,67	37,47	42,29	48,47	54,79	62,17	44,85	52,15	59,27
COP	(3)	kW/kW	2,953	2,961	2,984	3,059	2,981	2,903	2,923	2,964	2,944	2,966
<b>HEATING ONLY (EN14511 VALUE)</b>												
Total heating capacity	(3)(2)	kW	87,50	99,90	112,1	129,5	144,8	159,3	182,0	133,3	153,9	176,2
COP	(3)(2)	kW/kW	3,120	3,130	3,150	3,240	3,150	3,060	3,070	3,130	3,100	3,130
<b>COOLING WITH PARTIAL RECOVERY</b>												
Cooling capacity	(4)	kW	85,11	94,51	106,8	123,3	137,6	151,2	172,8	126,5	144,8	167,5
Total power input	(4)	kW	29,84	33,26	37,82	41,18	48,03	55,48	63,08	44,00	52,05	59,38
Desuperheater heating capacity	(4)	kW	26,16	28,93	33,24	35,58	41,58	47,99	54,18	37,93	45,18	52,04
<b>EXCHANGERS</b>												
<b>HEAT EXCHANGER USER SIDE IN COOLING</b>												
Water flow	(1)	l/s	3,923	4,356	4,922	5,682	6,342	6,967	7,963	5,832	6,675	7,721
Pressure drop at the heat exchanger	(1)	kPa	12,5	12,2	12,5	12,8	13,6	13,8	14,4	18,7	18,4	18,5
<b>HEAT EXCHANGER USER SIDE IN HEATING</b>												
Water flow	(3)	l/s	4,218	4,818	5,403	6,246	6,982	7,680	8,777	6,427	7,420	8,491
Pressure drop at the heat exchanger	(3)	kPa	14,5	15,0	15,1	15,5	16,5	16,7	17,5	22,7	22,8	22,4
<b>PARTIAL RECOVERY USER SIDE IN REFRIGERATION</b>												
Water flow	(4)	l/s	1,263	1,396	1,605	1,717	2,007	2,316	2,615	1,831	2,181	2,512
Pressure drop at the heat exchanger	(4)	kPa	11,7	14,3	11,1	12,8	11,5	15,4	14,5	18,0	25,6	23,1
<b>REFRIGERANT CIRCUIT</b>												
Compressors nr.		N°	2	2	2	2	2	2	2	4	4	4
Number of capacity steps		N°	2	2	2	2	2	2	2	4	4	4
No. Circuits		N°	1	1	1	1	1	1	1	2	2	2
Regulation			STEPS	STEPS	STEPS	STEPS	STEPS	STEPS	STEPS	STEPS	STEPS	STEPS
Min. capacity step		%	50	50	50	50	50	50	50	25	25	25
Refrigerant			R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Refrigerant charge		kg	31,1	32,2	37,7	38,9	39,9	49,0	56,9	43,0	44,3	51,5
Oil charge		kg	8,90	10,3	12,6	15,0	14,4	13,9	13,9	14,3	14,9	17,7
Rc (ASHRAE)	(5)	kg/kW	0,38	0,36	0,37	0,33	0,30	0,34	0,35	0,36	0,32	0,32
<b>FANS</b>												
Quantity		N°	3	3	4	4	4	6	6	4	4	6
Air flow		m³/s	6,94	8,06	8,61	10,83	11,67	12,22	13,89	11,11	12,22	13,89
Available static pressure		Pa	120	120	120	120	120	120	120	120	120	120
Fans power input		kW	0,52	0,66	0,47	0,68	0,77	0,60	0,75	0,75	0,80	0,52
<b>NOISE LEVEL</b>												
Sound power level in cooling	(6)(7)	dB(A)	76	79	75	80	82	84	86	81	82	79
Sound power level in heating	(6)(8)	dB(A)	71	76	77	76	76	81	80	77	80	73
Sound power level in heating	(6)(9)	dB(A)	76	79	75	80	82	84	86	81	82	79
<b>SIZE AND WEIGHT</b>												
A	(10)	mm	2980	2980	3970	3970	3970	4670	5670	3970	4670	5670
B	(10)	mm	1260	1260	1260	1260	1260	1260	1260	1260	1260	1260
H	(10)	mm	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100
Operating weight	(10)	kg	1230	1320	1610	1630	1650	1880	2120	1610	1840	2310

Notes:

- 1 Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°C; Source (side) heat exchanger air (in) 35,0°C.
- 2 Values in compliance with EN14511
- 3 Plant (side) heat exchanger water (in/out) 40,00°C/45,00°C; Source (side) heat exchanger air (in) 7,0°C - 87% R.H.
- 4 Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°C; Source (side) heat exchanger air (in) 35,0°C; Plant (side) heat exchanger recovery water (in/out) 40,00°C/45,00°C.
- 5 Rated in accordance with AHRI Standard 550/590
- 6 Total sound power of fans, as declared by the manufacturer, at the rated speed of rotation and a nominal available static pressure on the delivery side.
- 7 Sound power level in cooling, indoors.
- 8 Sound power level in heating, indoors.
- 9 Sound power level in heating, outdoors.
- 10 Unit in standard configuration, without optional accessories.

- Not available

Data certified in EUROVENT

## GENERAL TECHNICAL DATA

## NX-CN /SL-K

[ SI System ]

NX-CN /SL-K		0804	0904	1004	
Power supply		V/ph/Hz	400/3/50	400/3/50	400/3/50
<b>PERFORMANCE</b>					
<b>COOLING ONLY (GROSS VALUE)</b>					
Cooling capacity	(1)	kW	179,8	212,2	234,1
Total power input	(1)	kW	70,62	78,27	88,72
EER	(1)	kW/kW	2,547	2,710	2,639
<b>COOLING ONLY (EN14511 VALUE)</b>					
Cooling capacity	(1)(2)	kW	179,5	211,9	233,8
EER	(1)(2)	kW/kW	2,670	2,860	2,760
<b>HEATING ONLY (GROSS VALUE)</b>					
Total heating capacity	(3)	kW	194,3	227,8	251,1
Total power input	(3)	kW	66,80	76,69	84,79
COP	(3)	kW/kW	2,909	2,970	2,961
<b>HEATING ONLY (EN14511 VALUE)</b>					
Total heating capacity	(3)(2)	kW	194,6	228,1	251,5
COP	(3)(2)	kW/kW	3,060	3,130	3,110
<b>COOLING WITH PARTIAL RECOVERY</b>					
Cooling capacity	(4)	kW	186,5	220,2	242,8
Total power input	(4)	kW	68,27	75,72	85,82
Desuperheater heating capacity	(4)	kW	59,88	64,99	74,05
<b>EXCHANGERS</b>					
<b>HEAT EXCHANGER USER SIDE IN COOLING</b>					
Water flow	(1)	l/s	8,596	10,15	11,19
Pressure drop at the heat exchanger	(1)	kPa	18,4	19,5	19,3
<b>HEAT EXCHANGER USER SIDE IN HEATING</b>					
Water flow	(3)	l/s	9,379	10,99	12,12
Pressure drop at the heat exchanger	(3)	kPa	21,9	22,9	22,7
<b>PARTIAL RECOVERY USER SIDE IN REFRIGERATION</b>					
Water flow	(4)	l/s	2,890	3,137	3,575
Pressure drop at the heat exchanger	(4)	kPa	30,6	21,2	27,5
<b>REFRIGERANT CIRCUIT</b>					
Compressors nr.		N°	4	4	4
Number of capacity steps		N°	4	4	4
No. Circuits		N°	2	2	2
Regulation			STEPS	STEPS	STEPS
Min. capacity step		%	25	25	25
Refrigerant			R410A	R410A	R410A
Refrigerant charge		kg	53,5	68,5	71,0
Oil charge		kg	20,5	25,2	29,9
Rc (ASHRAE)	(5)	kg/kW	0,30	0,33	0,31
<b>FANS</b>					
Quantity		N°	6	6	6
Air flow		m³/s	15,00	19,17	19,72
Available static pressure		Pa	120	120	120
Fans power input		kW	0,59	0,91	0,96
<b>NOISE LEVEL</b>					
Sound power level in cooling	(6)(7)	dB(A)	80	85	86
Sound power level in heating	(6)(8)	dB(A)	73	85	85
Sound power level in heating	(6)(9)	dB(A)	80	85	86
<b>SIZE AND WEIGHT</b>					
A	(10)	mm	5670	5670	5670
B	(10)	mm	1260	1260	1260
H	(10)	mm	2100	2100	2100
Operating weight	(10)	kg	2460	2550	2610

### Notes:

- Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°C; Source (side) heat exchanger air (in) 35,0°C.
- Values in compliance with EN14511
- Plant (side) heat exchanger water (in/out) 40,00°C/45,00°C; Source (side) heat exchanger air (in) 7,0°C - 87% R.H.
- Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°C; Source (side) heat exchanger air (in) 35,0°C; Plant (side) heat exchanger recovery water (in/out) 40,00°C/45,00°C.
- Rated in accordance with AHRI Standard 550/590
- Total sound power of fans, as declared by the manufacturer, at the rated speed of rotation and a nominal available static pressure on the delivery side.
- Sound power level in cooling, indoors.
- Sound power level in heating, indoors.
- Sound power level in heating, outdoors.
- Unit in standard configuration, without optional accessories.

- Not available

Data certified in EUROVENT

**GENERAL TECHNICAL DATA**

**NX-CN /A**

[ SI System ]

NX-CN /A		0072	0092	0102	0122	0152	0182	0202	0232	0272	0302	
Power supply		V/ph/Hz 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50										
<b>PERFORMANCE</b>												
<b>COOLING ONLY (GROSS VALUE)</b>												
Cooling capacity	(1)	kW	18,74	23,01	26,05	30,93	38,29	45,37	52,47	58,35	66,63	76,02
Total power input	(1)	kW	6,110	7,930	9,330	11,17	12,91	14,68	17,42	19,97	23,31	25,80
EER	(1)	kW/kW	3,061	2,900	2,787	2,759	2,969	3,088	3,017	2,915	2,858	2,946
<b>COOLING ONLY (EN14511 VALUE)</b>												
Cooling capacity	(1)(2)	kW	18,70	23,00	26,00	30,90	38,20	45,30	52,40	58,30	66,60	75,90
EER	(1)(2)	kW/kW	3,380	3,160	3,060	3,010	3,220	3,410	3,280	3,160	3,090	3,200
<b>HEATING ONLY (GROSS VALUE)</b>												
Total heating capacity	(3)	kW	19,42	24,20	28,26	32,28	41,76	48,86	56,28	62,60	70,87	80,28
Total power input	(3)	kW	6,903	8,689	10,34	12,02	14,07	16,10	18,74	21,31	24,71	27,08
COP	(3)	kW/kW	2,812	2,785	2,748	2,692	2,965	3,037	3,011	2,939	2,870	2,963
<b>HEATING ONLY (EN14511 VALUE)</b>												
Total heating capacity	(3)(2)	kW	19,50	24,20	28,30	32,30	41,80	48,90	56,40	62,70	71,00	80,40
COP	(3)(2)	kW/kW	3,080	3,020	2,990	2,910	3,200	3,320	3,260	3,170	3,090	3,210
<b>COOLING WITH PARTIAL RECOVERY</b>												
Cooling capacity	(4)	kW	19,44	23,87	27,03	32,09	39,73	47,07	54,44	60,54	69,13	78,87
Total power input	(4)	kW	5,921	7,685	9,051	10,84	12,52	14,23	16,88	19,35	22,60	24,99
Desuperheater heating capacity	(4)	kW	4,829	6,257	7,114	8,435	10,06	11,50	13,70	15,71	18,02	20,78
<b>EXCHANGERS</b>												
<b>HEAT EXCHANGER USER SIDE IN COOLING</b>												
Water flow	(1)	l/s	0,896	1,100	1,246	1,479	1,831	2,170	2,509	2,790	3,186	3,635
Pressure drop at the heat exchanger	(1)	kPa	17,4	18,9	17,0	19,0	19,4	16,9	17,8	17,4	13,1	13,0
<b>HEAT EXCHANGER USER SIDE IN HEATING</b>												
Water flow	(3)	l/s	0,937	1,168	1,364	1,558	2,016	2,358	2,717	3,022	3,421	3,875
Pressure drop at the heat exchanger	(3)	kPa	19,1	21,3	20,4	21,1	23,5	20,0	20,9	20,5	15,2	14,7
<b>PARTIAL RECOVERY USER SIDE IN REFRIGERATION</b>												
Water flow	(4)	l/s	0,233	0,302	0,343	0,407	0,486	0,555	0,661	0,758	0,870	1,003
Pressure drop at the heat exchanger	(4)	kPa	2,67	4,48	5,80	8,15	4,24	5,53	7,86	10,3	8,15	10,8
<b>REFRIGERANT CIRCUIT</b>												
Compressors nr.		N°	2	2	2	2	2	2	2	2	2	2
Number of capacity steps		N°	2	2	2	2	2	2	2	2	2	2
No. Circuits		N°	1	1	1	1	1	1	1	1	1	1
Regulation			STEPS	STEPS	STEPS	STEPS	STEPS	STEPS	STEPS	STEPS	STEPS	STEPS
Min. capacity step		%	50	50	50	50	50	50	50	50	50	50
Refrigerant			R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Refrigerant charge		kg	8,20	8,50	18,3	18,5	19,0	20,2	21,1	21,5	34,1	29,9
Oil charge		kg	2,70	2,70	2,70	3,30	3,90	5,50	5,50	6,30	7,30	7,40
Rc (ASHRAE)	(5)	kg/kW	0,44	0,37	0,71	0,60	0,50	0,45	0,41	0,37	0,52	0,40
<b>FANS</b>												
Quantity		N°	2	2	2	2	2	3	3	3	3	3
Air flow		m³/s	2,50	2,92	3,75	4,17	4,86	6,11	6,53	6,94	8,06	9,17
Available static pressure		Pa	120	120	120	120	120	120	120	120	120	120
Fans power input		kW	0,35	0,46	0,68	0,86	0,82	0,60	0,69	0,79	1,04	0,84
<b>NOISE LEVEL</b>												
Sound power level in cooling	(6)(7)	dB(A)	74	78	84	86	83	81	82	84	87	81
Sound power level in heating	(6)(8)	dB(A)	66	68	70	66	76	79	80	79	76	79
Sound power level in heating	(6)(9)	dB(A)	74	78	84	86	83	81	82	84	87	81
<b>SIZE AND WEIGHT</b>												
A	(10)	mm	1500	1500	2480	2480	2480	2480	2480	2480	2980	2980
B	(10)	mm	900	900	1100	1100	1100	1100	1100	1100	1260	1260
H	(10)	mm	1910	1910	2100	2100	2100	2100	2100	2100	2100	2100
Operating weight	(10)	kg	480	490	820	830	860	920	920	940	1090	1160

Notes:

- 1 Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°C; Source (side) heat exchanger air (in) 35,0°C.
- 2 Values in compliance with EN14511
- 3 Plant (side) heat exchanger water (in/out) 40,00°C/45,00°C; Source (side) heat exchanger air (in) 7,0°C - 87% R.H.
- 4 Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°C; Source (side) heat exchanger air (in) 35,0°C; Plant (side) heat exchanger recovery water (in/out) 40,00°C/45,00°C.
- 5 Rated in accordance with AHRI Standard 550/590
- 6 Total sound power of fans, as declared by the manufacturer, at the rated speed of rotation and a nominal available static pressure on the delivery side.
- 7 Sound power level in cooling, indoors.
- 8 Sound power level in heating, indoors.
- 9 Sound power level in heating, outdoors.
- 10 Unit in standard configuration, without optional accessories.

- Not available

Data certified in EUROVENT

**GENERAL TECHNICAL DATA**

**NX-CN /A**

[ SI System ]

NX-CN /A		0352	0402	0452	0502	0552	0602	0702	0524	0604	0704	
Power supply		V/ph/Hz 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50 400/3/50										
<b>PERFORMANCE</b>												
<b>COOLING ONLY (GROSS VALUE)</b>												
Cooling capacity	(1)	kW	85,95	94,75	108,3	122,0	136,6	152,7	173,7	124,8	144,3	169,3
Total power input	(1)	kW	30,07	34,11	37,83	42,16	49,13	57,38	65,69	44,80	53,22	59,86
EER	(1)	kW/kW	2,854	2,780	2,865	2,891	2,782	2,660	2,644	2,786	2,712	2,826
<b>COOLING ONLY (EN14511 VALUE)</b>												
Cooling capacity	(1)(2)	kW	85,90	94,70	108,2	121,9	136,5	152,5	173,6	124,6	144,2	169,0
EER	(1)(2)	kW/kW	3,070	2,980	3,080	3,110	2,960	2,840	2,810	2,960	2,880	3,040
<b>HEATING ONLY (GROSS VALUE)</b>												
Total heating capacity	(3)	kW	90,06	103,0	115,8	131,7	147,5	164,0	186,8	134,8	156,8	181,2
Total power input	(3)	kW	30,96	35,46	39,18	43,61	50,12	58,64	66,59	45,69	54,18	62,04
COP	(3)	kW/kW	2,906	2,901	2,954	3,021	2,944	2,799	2,805	2,950	2,893	2,923
<b>HEATING ONLY (EN14511 VALUE)</b>												
Total heating capacity	(3)(2)	kW	90,20	103,2	115,9	131,8	147,7	164,2	187,1	135,0	157,1	181,5
COP	(3)(2)	kW/kW	3,120	3,110	3,180	3,240	3,140	2,980	2,980	3,140	3,070	3,140
<b>COOLING WITH PARTIAL RECOVERY</b>												
Cooling capacity	(4)	kW	89,17	98,30	112,3	126,6	141,7	158,4	180,3	129,4	149,8	175,6
Total power input	(4)	kW	29,12	33,05	36,63	40,82	47,57	55,63	63,70	43,36	51,54	57,97
Desuperheater heating capacity	(4)	kW	24,32	27,15	30,63	34,06	39,68	44,63	50,82	36,60	42,90	48,29
<b>EXCHANGERS</b>												
<b>HEAT EXCHANGER USER SIDE IN COOLING</b>												
Water flow	(1)	l/s	4,110	4,531	5,178	5,835	6,532	7,301	8,308	5,966	6,903	8,094
Pressure drop at the heat exchanger	(1)	kPa	13,8	13,3	13,9	13,5	14,4	15,1	15,7	19,6	19,7	20,4
<b>HEAT EXCHANGER USER SIDE IN HEATING</b>												
Water flow	(3)	l/s	4,347	4,974	5,589	6,356	7,120	7,918	9,019	6,508	7,570	8,749
Pressure drop at the heat exchanger	(3)	kPa	15,4	16,0	16,2	16,1	17,1	17,8	18,4	23,3	23,7	23,8
<b>PARTIAL RECOVERY USER SIDE IN REFRIGERATION</b>												
Water flow	(4)	l/s	1,174	1,311	1,478	1,644	1,915	2,154	2,453	1,767	2,071	2,331
Pressure drop at the heat exchanger	(4)	kPa	10,1	12,6	9,46	11,7	10,5	13,3	12,8	16,8	23,1	19,9
<b>REFRIGERANT CIRCUIT</b>												
Compressors nr.		N°	2	2	2	2	2	2	2	4	4	4
Number of capacity steps		N°	2	2	2	2	2	2	2	4	4	4
No. Circuits		N°	1	1	1	1	1	1	1	2	2	2
Regulation			STEPS	STEPS	STEPS	STEPS	STEPS	STEPS	STEPS	STEPS	STEPS	STEPS
Min. capacity step		%	50	50	50	50	50	50	50	25	25	25
Refrigerant			R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Refrigerant charge		kg	31,1	32,2	37,7	38,9	39,9	49,0	56,9	43,0	48,4	64,1
Oil charge		kg	8,90	10,3	12,6	15,0	14,4	13,9	13,9	14,3	14,9	17,7
Rc (ASHRAE)	(5)	kg/kW	0,37	0,34	0,35	0,32	0,30	0,32	0,33	0,35	0,34	0,38
<b>FANS</b>												
Quantity		N°	3	3	4	4	4	6	6	4	4	6
Air flow		m³/s	9,72	11,11	12,50	13,33	14,44	16,94	18,61	13,06	15,56	19,72
Available static pressure		Pa	120	120	120	120	120	120	120	120	120	120
Fans power input		kW	0,94	1,23	0,88	1,00	1,17	1,23	1,46	0,95	1,29	0,96
<b>NOISE LEVEL</b>												
Sound power level in cooling	(6)(7)	dB(A)	82	85	83	84	86	91	93	84	87	86
Sound power level in heating	(6)(8)	dB(A)	78	79	79	80	81	82	85	81	85	80
Sound power level in heating	(6)(9)	dB(A)	82	85	83	84	86	91	93	84	87	86
<b>SIZE AND WEIGHT</b>												
A	(10)	mm	2980	2980	3970	3970	3970	4670	5670	3970	4670	5670
B	(10)	mm	1260	1260	1260	1260	1260	1260	1260	1260	1260	1260
H	(10)	mm	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100
Operating weight	(10)	kg	1230	1320	1610	1630	1650	1880	2120	1610	1840	2310

Notes:

- 1 Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°C; Source (side) heat exchanger air (in) 35,0°C.
- 2 Values in compliance with EN14511
- 3 Plant (side) heat exchanger water (in/out) 40,00°C/45,00°C; Source (side) heat exchanger air (in) 7,0°C - 87% R.H.
- 4 Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°C; Source (side) heat exchanger air (in) 35,0°C; Plant (side) heat exchanger recovery water (in/out) 40,00°C/45,00°C.
- 5 Rated in accordance with AHRI Standard 550/590
- 6 Total sound power of fans, as declared by the manufacturer, at the rated speed of rotation and a nominal available static pressure on the delivery side.
- 7 Sound power level in cooling, indoors.
- 8 Sound power level in heating, indoors.
- 9 Sound power level in heating, outdoors.
- 10 Unit in standard configuration, without optional accessories.

- Not available

Data certified in EUROVENT

**GENERAL TECHNICAL DATA**
**NX-CN /A**

[ SI System ]

NX-CN /A			0804	0904	1004
Power supply		V/ph/Hz	400/3/50	400/3/50	400/3/50
<b>PERFORMANCE</b>					
<b>COOLING ONLY (GROSS VALUE)</b>					
Cooling capacity	(1)	kW	187,2	216,9	238,0
Total power input	(1)	kW	68,64	77,49	88,02
EER	(1)	kW/kW	2,729	2,799	2,705
<b>COOLING ONLY (EN14511 VALUE)</b>					
Cooling capacity	(1)(2)	kW	186,9	216,6	237,7
EER	(1)(2)	kW/kW	2,900	2,970	2,850
<b>HEATING ONLY (GROSS VALUE)</b>					
Total heating capacity	(3)	kW	199,6	230,8	253,9
Total power input	(3)	kW	69,15	78,49	86,29
COP	(3)	kW/kW	2,889	2,940	2,942
<b>HEATING ONLY (EN14511 VALUE)</b>					
Total heating capacity	(3)(2)	kW	199,9	231,2	254,3
COP	(3)(2)	kW/kW	3,080	3,120	3,100
<b>COOLING WITH PARTIAL RECOVERY</b>					
Cooling capacity	(4)	kW	194,2	225,1	246,9
Total power input	(4)	kW	66,44	75,03	85,19
Desuperheater heating capacity	(4)	kW	56,13	62,74	72,14
<b>EXCHANGERS</b>					
<b>HEAT EXCHANGER USER SIDE IN COOLING</b>					
Water flow	(1)	l/s	8,952	10,37	11,38
Pressure drop at the heat exchanger	(1)	kPa	19,9	20,4	20,0
<b>HEAT EXCHANGER USER SIDE IN HEATING</b>					
Water flow	(3)	l/s	9,635	11,14	12,26
Pressure drop at the heat exchanger	(3)	kPa	23,1	23,5	23,2
<b>PARTIAL RECOVERY USER SIDE IN REFRIGERATION</b>					
Water flow	(4)	l/s	2,709	3,029	3,482
Pressure drop at the heat exchanger	(4)	kPa	26,9	19,7	26,1
<b>REFRIGERANT CIRCUIT</b>					
Compressors nr.		N°	4	4	4
Number of capacity steps		N°	4	4	4
No. Circuits		N°	2	2	2
Regulation			STEPS	STEPS	STEPS
Min. capacity step		%	25	25	25
Refrigerant			R410A	R410A	R410A
Refrigerant charge		kg	66,3	68,5	71,0
Oil charge		kg	20,5	25,2	29,9
Rc (ASHRAE)	(5)	kg/kW	0,36	0,32	0,30
<b>FANS</b>					
Quantity		N°	6	6	6
Air flow		m³/s	19,72	21,94	21,94
Available static pressure		Pa	120	120	120
Fans power input		kW	0,96	1,20	1,20
<b>NOISE LEVEL</b>					
Sound power level in cooling	(6)(7)	dB(A)	86	88	88
Sound power level in heating	(6)(8)	dB(A)	81	88	88
Sound power level in heating	(6)(9)	dB(A)	86	88	88
<b>SIZE AND WEIGHT</b>					
A	(10)	mm	5670	5670	5670
B	(10)	mm	1260	1260	1260
H	(10)	mm	2100	2100	2100
Operating weight	(10)	kg	2460	2550	2610

**Notes:**

- Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°C; Source (side) heat exchanger air (in) 35,0°C.
- Values in compliance with EN14511
- Plant (side) heat exchanger water (in/out) 40,00°C/45,00°C; Source (side) heat exchanger air (in) 7,0°C - 87% R.H.
- Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°C; Source (side) heat exchanger air (in) 35,0°C; Plant (side) heat exchanger recovery water (in/out) 40,00°C/45,00°C.
- Rated in accordance with AHRI Standard 550/590
- Total sound power of fans, as declared by the manufacturer, at the rated speed of rotation and a nominal available static pressure on the delivery side.
- Sound power level in cooling, indoors.
- Sound power level in heating, indoors.
- Sound power level in heating, outdoors.
- Unit in standard configuration, without optional accessories.

- Not available

Data certified in EUROVENT

GENERAL TECHNICAL DATA

FANS PERFORMANCES (1)

VER.	SIZE	FANS N.	TOTAL AIR FLOW [m³/h]	DESCRIPTION											
				External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
/K	0072	1	7500	External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
				TOT fans power input	kW	0,62	0,69	0,76	0,84	0,91	0,99	1,07	1,15	1,23	1,32
				Sound power level	dB(A)	84	83	83	83	83	83	83	83	83	83
				Fans speed	r.p.m	1147	1173	1199	1225	1251	1276	1301	1326	1350	1375
/K	0092	1	9000	External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
				TOT fans power input	kW	1,03	1,11	1,20	1,29	1,38	1,47	1,56	1,65	1,74	1,84
				Sound power level	dB(A)	88	88	87	88	88	88	88	88	88	88
				Fans speed	r.p.m	1366	1388	1410	1432	1453	1475	1496	1517	1538	1559
/K	0102	1	12000	External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
				TOT fans power input	kW	0,56	0,67	0,79	0,90	1,02	1,15	1,27	1,41	1,54	1,68
				Sound power level	dB(A)	78	77	77	78	78	78	78	78	79	79
				Fans speed	r.p.m	852	881	911	939	968	996	1023	1050	1077	1104
/K	0122	1	12500	External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
				TOT fans power input	kW	0,63	0,74	0,86	0,98	1,10	1,23	1,36	1,49	1,63	1,77
				Sound power level	dB(A)	78	78	78	79	79	79	79	79	79	80
				Fans speed	r.p.m	884	913	941	969	996	1023	1050	1076	1102	1128
/K	0152	2	16000	External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
				TOT fans power input	kW	1,42	1,57	1,73	1,88	2,04	2,20	2,37	2,54	2,71	2,88
				Sound power level	dB(A)	88	88	88	88	87	87	87	87	87	87
				Fans speed	r.p.m	1210	1235	1260	1284	1308	1332	1356	1380	1403	1426
/K	0182	2	19500	External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
				TOT fans power input	kW	1,53	1,71	1,89	2,07	2,26	2,45	2,65	2,85	3,05	3,26
				Sound power level	dB(A)	85	85	85	85	86	86	86	86	86	86
				Fans speed	r.p.m	1154	1181	1207	1233	1259	1284	1309	1334	1359	1383
/K	0202	2	20500	External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
				TOT fans power input	kW	1,76	1,94	2,13	2,32	2,52	2,72	2,92	3,13	3,34	3,56
				Sound power level	dB(A)	86	86	86	86	87	87	87	87	87	87
				Fans speed	r.p.m	1210	1236	1261	1286	1310	1335	1359	1383	1406	1430
/K	0232	2	21500	External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
				TOT fans power input	kW	2,01	2,20	2,40	2,60	2,80	3,01	3,22	3,44	3,65	3,88
				Sound power level	dB(A)	87	87	87	87	88	88	88	88	88	88
				Fans speed	r.p.m	1267	1291	1315	1339	1362	1386	1409	1432	1455	1477
/K	0272	2	27000	External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
				TOT fans power input	kW	1,63	1,87	2,12	2,38	2,65	2,92	3,20	3,49	3,78	4,07
				Sound power level	dB(A)	83	83	83	83	83	83	83	84	84	84
				Fans speed	r.p.m	960	987	1013	1039	1064	1090	1114	1139	1163	1187
/K	0302	3	29000	External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
				TOT fans power input	kW	2,46	2,72	3,00	3,28	3,56	3,85	4,15	4,46	4,76	5,08
				Sound power level	dB(A)	87	87	87	87	87	87	87	87	88	88
				Fans speed	r.p.m	1167	1193	1220	1246	1271	1297	1322	1347	1371	1396
/K	0352	3	32000	External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
				TOT fans power input	kW	3,23	3,52	3,82	4,12	4,43	4,75	5,07	5,40	5,73	6,06
				Sound power level	dB(A)	89	89	89	89	89	89	89	89	90	90
				Fans speed	r.p.m	1281	1306	1330	1353	1377	1400	1423	1446	1469	1491
/K	0402	3	38000	External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
				TOT fans power input	kW	2,23	2,58	2,94	3,32	3,70	4,10	4,50	4,92	5,34	5,77
				Sound power level	dB(A)	83	83	83	84	84	84	84	84	85	85
				Fans speed	r.p.m	919	947	974	1001	1028	1054	1080	1106	1132	1157
/K	0452	3	40000	External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
				TOT fans power input	kW	2,55	2,92	3,30	3,69	4,09	4,50	4,92	5,35	5,79	6,23
				Sound power level	dB(A)	85	85	85	85	85	85	85	85	85	86
				Fans speed	r.p.m	964	990	1017	1042	1068	1093	1118	1143	1167	1191
/K	0502	4	45000	External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
				TOT fans power input	kW	4,73	5,14	5,55	5,97	6,39	6,83	7,27	7,72	8,17	8,63
				Sound power level	dB(A)	91	91	91	91	92	92	92	92	92	92
				Fans speed	r.p.m	1333	1356	1379	1402	1424	1447	1469	1491	1513	1534

Notes:  
 (1) For higher external static pressure please contact our Sales Department



GENERAL TECHNICAL DATA

FANS PERFORMANCES (1)

VER.	SIZE	FANS N.	TOTAL AIR FLOW [m³/h]	DESCRIPTION											
					Pa	30	60	90	120	150	180	210	240	270	300
/K	0552	4	50000	External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
				TOT fans power input	kW	6,38	6,82	7,27	7,73	8,20	8,67	9,15	9,64	10,13	10,63
				Sound power level	dB(A)	94	94	94	94	94	94	94	94	94	94
				Fans speed	r.p.m	1476	1497	1517	1538	1558	1579	1599	1619	1639	1658
/K	0602	4	57000	External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
				TOT fans power input	kW	4,09	4,62	5,15	5,70	6,27	6,84	7,43	8,03	8,64	9,26
				Sound power level	dB(A)	87	87	87	88	88	88	88	88	88	88
				Fans speed	r.p.m	1027	1052	1076	1101	1125	1149	1172	1196	1219	1242
/K	0702	6	65000	External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
				TOT fans power input	kW	6,75	7,34	7,94	8,56	9,19	9,83	10,48	11,14	11,81	12,49
				Sound power level	dB(A)	92	92	92	92	93	93	93	93	93	93
				Fans speed	r.p.m	1301	1324	1348	1371	1395	1418	1440	1463	1485	1507
/K	0524	4	47000	External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
				TOT fans power input	kW	5,35	5,77	6,20	6,63	7,08	7,53	7,98	8,45	8,92	9,39
				Sound power level	dB(A)	92	92	92	92	93	93	93	93	93	93
				Fans speed	r.p.m	1390	1412	1434	1456	1478	1499	1520	1542	1563	1583
/K	0604	4	55000	External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
				TOT fans power input	kW	3,72	4,22	4,74	5,28	5,83	6,39	6,96	7,54	8,14	8,74
				Sound power level	dB(A)	86	86	86	87	87	87	87	87	87	88
				Fans speed	r.p.m	993	1019	1044	1069	1094	1119	1143	1167	1191	1214
/K	0704	6	64000	External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
				TOT fans power input	kW	6,46	7,05	7,64	8,25	8,87	9,50	10,14	10,79	11,46	12,13
				Sound power level	dB(A)	92	92	92	94	94	94	94	94	94	94
				Fans speed	r.p.m	1281	1306	1330	1353	1377	1400	1423	1446	1469	1491
/K	0804	6	70000	External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
				TOT fans power input	kW	8,31	8,95	9,59	10,25	10,92	11,60	12,29	12,98	13,69	14,41
				Sound power level	dB(A)	94	94	94	94	94	94	94	94	94	94
				Fans speed	r.p.m	1397	1419	1441	1463	1484	1506	1527	1548	1569	1590
/K	0904	6	81000	External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
				TOT fans power input	kW	5,28	6,03	6,80	7,58	8,39	9,22	10,07	10,93	11,81	12,71
				Sound power level	dB(A)	88	88	88	88	88	88	88	88	89	89
				Fans speed	r.p.m	975	1001	1027	1053	1078	1103	1128	1152	1176	1200
/K	1004	6	87000	External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
				TOT fans power input	kW	6,40	7,20	8,02	8,85	9,71	10,58	11,48	12,38	13,31	14,25
				Sound power level	dB(A)	89	89	89	90	90	90	90	90	90	90
				Fans speed	r.p.m	1043	1067	1092	1116	1139	1163	1186	1209	1232	1254
/K	1104	6	87000	External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
				TOT fans power input	kW	7,24	8,06	8,90	9,76	10,63	11,52	11,52	13,36	14,30	/
				Sound power level	dB(A)	89	89	89	90	90	90	90	90	90	/
				Fans speed	r.p.m	1069	1093	1117	1141	1164	1187	1187	1233	1256	/

Notes:  
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GENERAL TECHNICAL DATA

FANS PERFORMANCES (1)

VER.	SIZE	FANS N.	TOTAL AIR FLOW [m³/h]	DESCRIPTION											
				External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
/SL-K	0072	2	6500	External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
				TOT fans power input	kW	0,18	0,26	0,34	0,42	0,51	0,60	0,70	0,79	0,90	1,00
				Sound power level	dB(A)	68	68	68	68	71	73	74	75	76	77
				Fans speed	r.p.m	572	628	680	731	779	826	871	914	956	997
/SL-K	0092	2	7500	External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
				TOT fans power input	kW	0,26	0,34	0,42	0,52	0,61	0,71	0,82	0,92	1,03	1,14
				Sound power level	dB(A)	70	70	70	70	73	74	75	76	77	77
				Fans speed	r.p.m	643	692	739	785	829	871	912	953	992	1030
/SL-K	0102	2	8000	External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
				TOT fans power input	kW	0,25	0,34	0,42	0,52	0,62	0,72	0,82	0,93	1,04	1,16
				Sound power level	dB(A)	72	72	72	72	74	74	75	76	77	77
				Fans speed	r.p.m	652	700	745	789	832	874	914	953	991	1028
/SL-K	0122	2	8500	External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
				TOT fans power input	kW	0,29	0,38	0,47	0,57	0,67	0,78	0,88	1,00	1,11	1,23
				Sound power level	dB(A)	73	73	73	73	75	75	76	76	77	78
				Fans speed	r.p.m	687	732	775	817	858	898	937	974	1011	1047
/SL-K	0152	2	13000	External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
				TOT fans power input	kW	0,52	0,64	0,77	0,91	1,05	1,19	1,34	1,50	1,66	1,82
				Sound power level	dB(A)	76	76	76	76	77	78	78	79	79	80
				Fans speed	r.p.m	792	831	870	907	943	979	1013	1047	1081	1114
/SL-K	0182	3	16000	External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
				TOT fans power input	kW	0,52	0,68	0,85	1,03	1,22	1,42	1,62	1,84	2,05	2,28
				Sound power level	dB(A)	74	74	74	74	76	77	78	78	79	80
				Fans speed	r.p.m	679	725	770	813	855	896	935	974	1011	1048
/SL-K	0202	3	17500	External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
				TOT fans power input	kW	0,65	0,82	1,00	1,19	1,39	1,60	1,82	2,04	2,27	2,50
				Sound power level	dB(A)	76	76	76	76	77	78	79	79	80	80
				Fans speed	r.p.m	734	777	818	858	897	936	973	1009	1045	1079
/SL-K	0232	3	18500	External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
				TOT fans power input	kW	0,75	0,93	1,12	1,31	1,52	1,73	1,96	2,18	2,42	2,66
				Sound power level	dB(A)	77	77	77	77	78	79	79	80	80	81
				Fans speed	r.p.m	771	811	851	889	927	963	999	1034	1069	1102
/SL-K	0272	3	22000	External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
				TOT fans power input	kW	1,10	1,31	1,52	1,74	1,97	2,21	2,45	2,70	2,96	3,22
				Sound power level	dB(A)	81	81	81	81	81	82	82	82	83	83
				Fans speed	r.p.m	890	925	959	993	1025	1058	1089	1120	1151	1181
/SL-K	0302	3	23000	External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
				TOT fans power input	kW	0,64	0,87	1,12	1,38	1,66	1,94	2,24	2,54	2,86	3,18
				Sound power level	dB(A)	73	73	74	74	75	76	77	78	79	80
				Fans speed	r.p.m	587	632	674	716	756	795	832	869	905	940
/SL-K	0352	3	25000	External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
				TOT fans power input	kW	0,78	1,02	1,29	1,56	1,85	2,15	2,46	2,78	3,11	3,45
				Sound power level	dB(A)	74	75	75	76	76	77	78	79	80	80
				Fans speed	r.p.m	630	672	711	750	788	825	860	895	929	963
/SL-K	0402	4	29000	External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
				TOT fans power input	kW	1,11	1,39	1,68	1,99	2,31	2,64	2,97	3,32	3,68	4,05
				Sound power level	dB(A)	78	78	78	79	79	79	80	80	81	82
				Fans speed	r.p.m	718	754	789	823	857	890	922	953	984	1015
/SL-K	0452	4	31000	External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
				TOT fans power input	kW	0,88	1,19	1,52	1,87	2,24	2,63	3,02	3,44	3,86	4,29
				Sound power level	dB(A)	74	74	75	75	77	78	79	79	80	81
				Fans speed	r.p.m	593	637	680	720	760	799	836	873	908	943
/SL-K	0502	4	39000	External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
				TOT fans power input	kW	1,52	1,90	2,29	2,70	3,13	3,57	4,02	4,49	4,97	5,46
				Sound power level	dB(A)	79	79	79	80	80	81	81	82	82	83
				Fans speed	r.p.m	724	760	795	829	862	895	927	958	989	1019

Notes:  
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GENERAL TECHNICAL DATA

FANS PERFORMANCES (1)

VER.	SIZE	FANS N.	TOTAL AIR FLOW [m³/h]	DESCRIPTION												
/SL-K	0552	4	42000	<b>External static pressure</b>	<b>Pa</b>	<b>30</b>	<b>60</b>	<b>90</b>	<b>120</b>	<b>150</b>	<b>180</b>	<b>210</b>	<b>240</b>	<b>270</b>	<b>300</b>	
				TOT fans power input	kW	1,83	2,23	2,65	3,08	3,53	3,99	4,47	4,96	5,46	5,97	
				Sound power level	dB(A)	81	81	81	82	82	82	82	83	83	84	
				Fans speed	r.p.m	774	807	840	872	903	934	964	994	1023	1052	
/SL-K	0602	6	44000	<b>External static pressure</b>	<b>Pa</b>	<b>30</b>	<b>60</b>	<b>90</b>	<b>120</b>	<b>150</b>	<b>180</b>	<b>210</b>	<b>240</b>	<b>270</b>	<b>300</b>	
				TOT fans power input	kW	2,33	2,75	3,18	3,63	4,09	4,57	5,06	5,57	6,09	6,62	
				Sound power level	dB(A)	84	84	84	84	85	85	85	85	86	86	
				Fans speed	r.p.m	901	936	970	1003	1036	1068	1099	1130	1161	1191	
/SL-K	0702	6	50000	<b>External static pressure</b>	<b>Pa</b>	<b>30</b>	<b>60</b>	<b>90</b>	<b>120</b>	<b>150</b>	<b>180</b>	<b>210</b>	<b>240</b>	<b>270</b>	<b>300</b>	
				TOT fans power input	kW	3,10	3,56	4,03	4,52	5,02	5,54	6,07	6,61	7,17	7,74	
				Sound power level	dB(A)	86	86	86	86	87	87	87	88	88	88	
				Fans speed	r.p.m	1002	1033	1063	1093	1123	1152	1180	1209	1236	1264	
/SL-K	0524	4	40000	<b>External static pressure</b>	<b>Pa</b>	<b>30</b>	<b>60</b>	<b>90</b>	<b>120</b>	<b>150</b>	<b>180</b>	<b>210</b>	<b>240</b>	<b>270</b>	<b>300</b>	
				TOT fans power input	kW	1,77	2,16	2,57	2,99	3,43	3,88	4,35	4,83	5,32	5,82	
				Sound power level	dB(A)	80	80	80	81	81	81	82	82	83	83	
				Fans speed	r.p.m	754	789	823	856	888	920	951	982	1012	1041	
/SL-K	0604	4	44000	<b>External static pressure</b>	<b>Pa</b>	<b>30</b>	<b>60</b>	<b>90</b>	<b>120</b>	<b>150</b>	<b>180</b>	<b>210</b>	<b>240</b>	<b>270</b>	<b>300</b>	
				TOT fans power input	kW	1,90	2,31	2,74	3,18	3,64	4,11	4,60	5,09	5,60	6,13	
				Sound power level	dB(A)	82	82	82	82	82	82	83	83	84	84	
				Fans speed	r.p.m	794	827	858	889	920	949	979	1008	1036	1064	
/SL-K	0704	6	50000	<b>External static pressure</b>	<b>Pa</b>	<b>30</b>	<b>60</b>	<b>90</b>	<b>120</b>	<b>150</b>	<b>180</b>	<b>210</b>	<b>240</b>	<b>270</b>	<b>300</b>	
				TOT fans power input	kW	1,56	2,05	2,57	3,13	3,70	4,30	4,92	5,56	6,22	6,90	
				Sound power level	dB(A)	77	78	78	79	79	80	81	82	83	83	
				Fans speed	r.p.m	630	672	711	750	788	825	860	895	929	963	
/SL-K	0804	6	54000	<b>External static pressure</b>	<b>Pa</b>	<b>30</b>	<b>60</b>	<b>90</b>	<b>120</b>	<b>150</b>	<b>180</b>	<b>210</b>	<b>240</b>	<b>270</b>	<b>300</b>	
				TOT fans power input	kW	1,87	2,39	2,95	3,53	4,14	4,76	5,41	6,08	6,77	7,48	
				Sound power level	dB(A)	79	79	79	80	81	81	82	83	83	84	
				Fans speed	r.p.m	674	712	750	786	822	856	890	923	956	988	
/SL-K	0904	6	69000	<b>External static pressure</b>	<b>Pa</b>	<b>30</b>	<b>60</b>	<b>90</b>	<b>120</b>	<b>150</b>	<b>180</b>	<b>210</b>	<b>240</b>	<b>270</b>	<b>300</b>	
				TOT fans power input	kW	3,46	4,10	4,78	5,47	6,19	6,93	7,68	8,46	9,25	10,06	
				Sound power level	dB(A)	84	84	84	85	85	85	85	86	86	87	
				Fans speed	r.p.m	840	871	901	930	959	988	1016	1044	1071	1098	
/SL-K	1004	6	71000	<b>External static pressure</b>	<b>Pa</b>	<b>30</b>	<b>60</b>	<b>90</b>	<b>120</b>	<b>150</b>	<b>180</b>	<b>210</b>	<b>240</b>	<b>270</b>	<b>300</b>	
				TOT fans power input	kW	3,72	4,39	5,08	5,79	6,52	7,27	8,04	8,83	9,64	10,47	
				Sound power level	dB(A)	85	85	85	86	86	86	86	86	87	87	
				Fans speed	r.p.m	862	892	922	950	979	1007	1034	1061	1088	1115	

Notes:  
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GENERAL TECHNICAL DATA

FANS PERFORMANCES (1)

VER.	SIZE	FANS N.	TOTAL AIR FLOW [m³/h]	DESCRIPTION											
					Pa	30	60	90	120	150	180	210	240	270	300
/A	0072	2	9000	External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
				TOT fans power input	kW	0,40	0,49	0,59	0,70	0,80	0,92	1,03	1,15	1,27	1,40
				Sound power level	dB(A)	74	74	74	74	76	76	77	77	78	79
				Fans speed	r.p.m	752	794	834	874	912	949	986	1022	1057	1091
/A	0092	2	10500	External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
				TOT fans power input	kW	0,59	0,70	0,81	0,93	1,05	1,17	1,30	1,43	1,56	1,70
				Sound power level	dB(A)	78	78	78	78	79	79	79	80	80	80
				Fans speed	r.p.m	863	899	934	969	1003	1036	1069	1101	1133	1164
/A	0102	2	13500	External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
				TOT fans power input	kW	0,96	1,09	1,22	1,36	1,50	1,65	1,79	1,94	2,10	2,25
				Sound power level	dB(A)	84	84	84	84	84	84	84	84	84	84
				Fans speed	r.p.m	1045	1075	1103	1132	1160	1187	1215	1241	1268	1294
/A	0122	2	15000	External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
				TOT fans power input	kW	1,28	1,42	1,57	1,72	1,87	2,03	2,19	2,35	2,52	2,68
				Sound power level	dB(A)	87	86	86	86	86	86	86	86	86	86
				Fans speed	r.p.m	1155	1181	1207	1233	1259	1284	1309	1333	1358	1382
/A	0152	2	17500	External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
				TOT fans power input	kW	1,14	1,30	1,46	1,63	1,80	1,98	2,16	2,35	2,54	2,73
				Sound power level	dB(A)	83	83	83	83	83	83	84	84	84	84
				Fans speed	r.p.m	1042	1071	1100	1129	1158	1185	1213	1240	1267	1294
/A	0182	3	22000	External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
				TOT fans power input	kW	1,17	1,37	1,59	1,81	2,05	2,29	2,53	2,78	3,04	3,31
				Sound power level	dB(A)	81	81	81	81	82	82	82	82	83	83
				Fans speed	r.p.m	901	936	970	1003	1036	1068	1099	1130	1161	1191
/A	0202	3	23500	External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
				TOT fans power input	kW	1,39	1,61	1,84	2,07	2,32	2,57	2,82	3,09	3,36	3,63
				Sound power level	dB(A)	82	82	82	82	83	83	83	84	84	84
				Fans speed	r.p.m	958	990	1022	1054	1085	1115	1145	1174	1203	1232
/A	0232	3	25000	External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
				TOT fans power input	kW	1,64	1,87	2,11	2,36	2,61	2,88	3,14	3,42	3,70	3,98
				Sound power level	dB(A)	83	83	83	83	84	84	84	85	85	85
				Fans speed	r.p.m	1015	1045	1075	1105	1134	1163	1192	1220	1247	1275
/A	0272	3	29000	External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
				TOT fans power input	kW	2,32	2,58	2,85	3,13	3,41	3,70	3,99	4,30	4,60	4,91
				Sound power level	dB(A)	87	87	87	87	87	87	87	87	88	88
				Fans speed	r.p.m	1153	1179	1206	1232	1258	1283	1309	1334	1358	1383
/A	0302	3	33000	External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
				TOT fans power input	kW	1,54	1,85	2,18	2,51	2,86	3,22	3,59	3,96	4,35	4,74
				Sound power level	dB(A)	80	80	80	81	81	81	82	82	83	83
				Fans speed	r.p.m	807	838	870	901	931	960	990	1018	1047	1074
/A	0352	3	35000	External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
				TOT fans power input	kW	1,79	2,12	2,46	2,81	3,18	3,55	3,93	4,32	4,72	5,13
				Sound power level	dB(A)	82	82	82	82	82	82	83	83	83	84
				Fans speed	r.p.m	851	881	911	940	969	997	1025	1053	1080	1106
/A	0402	4	42000	External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
				TOT fans power input	kW	2,55	2,92	3,30	3,69	4,09	4,50	4,92	5,35	5,79	6,23
				Sound power level	dB(A)	85	85	85	85	85	85	85	85	85	86
				Fans speed	r.p.m	964	990	1017	1042	1068	1093	1118	1143	1167	1191
/A	0452	4	45000	External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
				TOT fans power input	kW	2,19	2,61	3,05	3,51	3,98	4,46	4,96	5,47	5,99	6,53
				Sound power level	dB(A)	82	82	82	83	83	83	83	84	84	84
				Fans speed	r.p.m	824	855	886	916	946	975	1004	1032	1060	1087
/A	0502	4	48000	External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
				TOT fans power input	kW	2,59	3,04	3,50	3,98	4,47	4,98	5,50	6,03	6,58	7,13
				Sound power level	dB(A)	83	83	84	84	84	84	84	85	85	85
				Fans speed	r.p.m	875	904	933	961	989	1017	1044	1071	1097	1124

Notes:  
 (1) For higher external static pressure please contact our Sales Department



GENERAL TECHNICAL DATA

FANS PERFORMANCES (1)

VER.	SIZE	FANS N.	TOTAL AIR FLOW [m³/h]	DESCRIPTION											
					Pa	30	60	90	120	150	180	210	240	270	300
/A	0552	4	52000	External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
				TOT fans power input	kW	3,20	3,68	4,18	4,69	5,21	5,75	6,30	6,86	7,43	8,02
				Sound power level	dB(A)	85	85	85	86	86	86	86	86	86	87
				Fans speed	r.p.m	942	969	996	1023	1049	1075	1100	1125	1150	1175
/A	0602	6	61000	External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
				TOT fans power input	kW	5,65	6,21	6,78	7,36	7,96	8,57	9,19	9,81	10,46	11,11
				Sound power level	dB(A)	91	91	91	91	91	91	91	91	92	92
				Fans speed	r.p.m	1224	1249	1274	1299	1324	1348	1372	1396	1420	1443
/A	0702	6	67000	External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
				TOT fans power input	kW	6,94	7,54	8,15	8,77	9,41	10,06	10,71	11,38	12,06	12,75
				Sound power level	dB(A)	94	93	93	93	93	93	93	93	93	93
				Fans speed	r.p.m	1323	1346	1369	1392	1415	1437	1460	1482	1504	1525
/A	0524	4	47000	External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
				TOT fans power input	kW	2,45	2,89	3,35	3,82	4,30	4,80	5,32	5,84	6,38	6,92
				Sound power level	dB(A)	83	83	83	84	84	84	84	84	85	85
				Fans speed	r.p.m	858	888	917	946	975	1003	1030	1058	1085	1111
/A	0604	4	56000	External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
				TOT fans power input	kW	3,59	4,09	4,61	5,15	5,70	6,26	6,83	7,41	8,01	8,61
				Sound power level	dB(A)	87	87	87	87	87	87	87	87	87	88
				Fans speed	r.p.m	994	1019	1045	1070	1094	1119	1143	1167	1190	1214
/A	0704	6	71000	External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
				TOT fans power input	kW	3,72	4,39	5,08	5,79	6,52	7,27	8,04	8,83	9,64	10,47
				Sound power level	dB(A)	85	85	85	86	86	86	86	86	87	87
				Fans speed	r.p.m	862	892	922	950	979	1007	1034	1061	1088	1115
/A	0804	6	71000	External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
				TOT fans power input	kW	3,72	4,39	5,08	5,79	6,52	7,27	8,04	8,83	9,64	10,47
				Sound power level	dB(A)	85	85	85	86	86	86	86	86	87	87
				Fans speed	r.p.m	862	892	922	950	979	1007	1034	1061	1088	1115
/A	0904	6	79000	External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
				TOT fans power input	kW	4,94	5,67	6,42	7,19	7,99	8,80	9,63	10,48	11,35	12,23
				Sound power level	dB(A)	87	87	87	88	88	88	88	88	88	89
				Fans speed	r.p.m	952	979	1006	1032	1058	1084	1109	1134	1158	1183
/A	1004	6	79000	External static pressure	Pa	30	60	90	120	150	180	210	240	270	300
				TOT fans power input	kW	4,94	5,67	6,42	7,19	7,99	8,80	9,63	10,48	11,35	12,23
				Sound power level	dB(A)	87	87	87	88	88	88	88	88	88	89
				Fans speed	r.p.m	952	979	1006	1032	1058	1084	1109	1134	1158	1183

Notes:  
 (1) For higher external static pressure please contact our Sales Department



## 6.1 TECHNICAL DATA SEASONAL EFFICIENCY IN HEATING (EN14825 VALUE)

NX-CN /K

[ SI System ]

NX-CN /K - LOW TEMPERATURE application			0072	0092	0102	0122	0152	0182
Power supply		(V/ph/Hz)	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
WEATHER CONDITIONS - AVERAGE								
Rated heat output at Tdesignh	(1)(2)	kW	14	17	20	23	30	35
Bivalent temperature	(1)(2)	°C	-7	-7	-7	-7	-7	-7
SCOP	(1)(2)		3,77	3,73	4,16	4,15	3,89	3,93
Seasonal space heating energy efficiency	(1)(2)	%	148	146	164	163	153	154
Seasonal space heating energy efficiency class	(1)(2)		A+	A+	A++	A++	A++	A++

1 Seasonal space heating energy efficiency class LOW TEMPERATURE [REGULATION (EU) N. 813/2013]

2 Tipo di calcolo con portata variabile e temperatura variabile.

Data certified in EUROVENT

NX-CN /K - LOW TEMPERATURE application			0202	0232	0272	0302	0352	0402
Power supply		(V/ph/Hz)	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
WEATHER CONDITIONS - AVERAGE								
Rated heat output at Tdesignh	(1)(2)	kW	41	45	52	58	65	74
Bivalent temperature	(1)(2)	°C	-7	-7	-7	-7	-7	-7
SCOP	(1)(2)		3,89	3,91	4,08	3,76	3,75	3,80
Seasonal space heating energy efficiency	(1)(2)	%	153	153	160	147	147	149
Seasonal space heating energy efficiency class	(1)(2)		A++	A++	A++	A+	A+	-

1 Seasonal space heating energy efficiency class LOW TEMPERATURE [REGULATION (EU) N. 813/2013]

2 Tipo di calcolo con portata variabile e temperatura variabile.

Data certified in EUROVENT

NX-CN /K - LOW TEMPERATURE application			0452	0502	0552	0602	0702	0524
Power supply		(V/ph/Hz)	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
WEATHER CONDITIONS - AVERAGE								
Rated heat output at Tdesignh	(1)(2)	kW	83	95	107	119	137	99
Bivalent temperature	(1)(2)	°C	-7	-7	-7	-7	-7	-7
SCOP	(1)(2)		3,87	3,75	3,72	3,73	3,77	3,99
Seasonal space heating energy efficiency	(1)(2)	%	152	147	146	146	148	157
Seasonal space heating energy efficiency class	(1)(2)		-	-	-	-	-	-

1 Seasonal space heating energy efficiency class LOW TEMPERATURE [REGULATION (EU) N. 813/2013]

2 Tipo di calcolo con portata variabile e temperatura variabile.

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

**NX-CN /K**

[ SI System ]

<b>NX-CN /K - LOW TEMPERATURE application</b>			<b>0604</b>	<b>0704</b>	<b>0804</b>	<b>0904</b>	<b>1004</b>	<b>1104</b>
Power supply		(V/ph/Hz)	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
<b>WEATHER CONDITIONS - AVERAGE</b>								
Rated heat output at Tdesignh	(1)(2)	kW	115	132	145	168	186	206
Bivalent temperature	(1)(2)	°C	-7	-7	-7	-7	-7	-7
SCOP	(1)(2)		4,03	4,02	3,85	4,12	4,09	4,05
Seasonal space heating energy efficiency	(1)(2)	%	158	158	151	162	161	159
Seasonal space heating energy efficiency class	(1)(2)		-	-	-	-	-	-

1 Seasonal space heating energy efficiency class LOW TEMPERATURE [REGULATION (EU) N. 813/2013]

2 Tipo di calcolo con portata variabile e temperatura variabile.

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

**NX-CN /SL-K**

[ SI System ]

<b>NX-CN /SL-K - LOW TEMPERATURE application</b>			<b>0072</b>	<b>0092</b>	<b>0102</b>	<b>0122</b>	<b>0152</b>	<b>0182</b>
Power supply		(V/ph/Hz)	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
<b>WEATHER CONDITIONS - AVERAGE</b>								
Rated heat output at Tdesignh	(1)(2)	kW	14	17	19	22	30	35
Bivalent temperature	(1)(2)	°C	-7	-7	-7	-7	-7	-7
SCOP	(1)(2)		4,09	4,10	4,16	4,20	4,07	4,19
Seasonal space heating energy efficiency	(1)(2)	%	161	161	163	165	160	165
Seasonal space heating energy efficiency class	(1)(2)		A++	A++	A++	A++	A++	A++

1 Seasonal space heating energy efficiency class LOW TEMPERATURE [REGULATION (EU) N. 813/2013]

2 Tipo di calcolo con portata variabile e temperatura variabile.

Data certified in EUROVENT

<b>NX-CN /SL-K - LOW TEMPERATURE application</b>			<b>0202</b>	<b>0232</b>	<b>0272</b>	<b>0302</b>	<b>0352</b>	<b>0402</b>
Power supply		(V/ph/Hz)	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
<b>WEATHER CONDITIONS - AVERAGE</b>								
Rated heat output at Tdesignh	(1)(2)	kW	40	45	51	57	64	72
Bivalent temperature	(1)(2)	°C	-7	-7	-7	-7	-7	-7
SCOP	(1)(2)		4,16	4,21	4,09	3,91	3,97	3,80
Seasonal space heating energy efficiency	(1)(2)	%	163	165	161	153	156	149
Seasonal space heating energy efficiency class	(1)(2)		A++	A++	A++	A++	A++	-

1 Seasonal space heating energy efficiency class LOW TEMPERATURE [REGULATION (EU) N. 813/2013]

2 Tipo di calcolo con portata variabile e temperatura variabile.

Data certified in EUROVENT

<b>NX-CN /SL-K - LOW TEMPERATURE application</b>			<b>0452</b>	<b>0502</b>	<b>0552</b>	<b>0602</b>	<b>0702</b>	<b>0524</b>
Power supply		(V/ph/Hz)	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
<b>WEATHER CONDITIONS - AVERAGE</b>								
Rated heat output at Tdesignh	(1)(2)	kW	81	94	105	116	133	97
Bivalent temperature	(1)(2)	°C	-7	-7	-7	-7	-7	-7
SCOP	(1)(2)		3,93	3,97	4,03	3,75	3,89	4,10
Seasonal space heating energy efficiency	(1)(2)	%	154	156	158	147	152	161
Seasonal space heating energy efficiency class	(1)(2)		-	-	-	-	-	-

1 Seasonal space heating energy efficiency class LOW TEMPERATURE [REGULATION (EU) N. 813/2013]

2 Tipo di calcolo con portata variabile e temperatura variabile.

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

**NX-CN /SL-K**

[ SI System ]

<b>NX-CN /SL-K - LOW TEMPERATURE application</b>			<b>0604</b>	<b>0704</b>	<b>0804</b>	<b>0904</b>	<b>1004</b>
Power supply		(V/ph/Hz)	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
<b>WEATHER CONDITIONS - AVERAGE</b>							
Rated heat output at Tdesignh	(1)(2)	kW	112	128	140	165	180
Bivalent temperature	(1)(2)	°C	-7	-7	-7	-7	-7
SCOP	(1)(2)		3,99	4,12	3,92	4,08	4,03
Seasonal space heating energy efficiency	(1)(2)	%	156	162	154	160	158
Seasonal space heating energy efficiency class	(1)(2)		-	-	-	-	-

1 Seasonal space heating energy efficiency class LOW TEMPERATURE [REGULATION (EU) N. 813/2013]

2 Tipo di calcolo con portata variabile e temperatura variabile.

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

**NX-CN /A**

[ SI System ]

<b>NX-CN /A - LOW TEMPERATURE application</b>			<b>0072</b>	<b>0092</b>	<b>0102</b>	<b>0122</b>	<b>0152</b>	<b>0182</b>
Power supply		(V/ph/Hz)	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
<b>WEATHER CONDITIONS - AVERAGE</b>								
Rated heat output at Tdesignh	(1)(2)	kW	14	17	20	23	31	36
Bivalent temperature	(1)(2)	°C	-7	-7	-7	-7	-7	-7
SCOP	(1)(2)		4,15	4,05	4,06	4,01	4,02	4,11
Seasonal space heating energy efficiency	(1)(2)	%	163	159	160	157	158	161
Seasonal space heating energy efficiency class	(1)(2)		A++	A++	A++	A++	A++	A++

1 Seasonal space heating energy efficiency class LOW TEMPERATURE [REGULATION (EU) N. 813/2013]

2 Tipo di calcolo con portata variabile e temperatura variabile.

Data certified in EUROVENT

<b>NX-CN /A - LOW TEMPERATURE application</b>			<b>0202</b>	<b>0232</b>	<b>0272</b>	<b>0302</b>	<b>0352</b>	<b>0402</b>
Power supply		(V/ph/Hz)	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
<b>WEATHER CONDITIONS - AVERAGE</b>								
Rated heat output at Tdesignh	(1)(2)	kW	41	46	52	59	66	75
Bivalent temperature	(1)(2)	°C	-7	-7	-7	-7	-7	-7
SCOP	(1)(2)		4,07	4,08	3,99	3,94	3,97	3,80
Seasonal space heating energy efficiency	(1)(2)	%	160	160	156	155	156	149
Seasonal space heating energy efficiency class	(1)(2)		A++	A++	A++	A++	A++	-

1 Seasonal space heating energy efficiency class LOW TEMPERATURE [REGULATION (EU) N. 813/2013]

2 Tipo di calcolo con portata variabile e temperatura variabile.

Data certified in EUROVENT

<b>NX-CN /A - LOW TEMPERATURE application</b>			<b>0452</b>	<b>0502</b>	<b>0552</b>	<b>0602</b>	<b>0702</b>	<b>0524</b>
Power supply		(V/ph/Hz)	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
<b>WEATHER CONDITIONS - AVERAGE</b>								
Rated heat output at Tdesignh	(1)(2)	kW	84	96	108	120	137	100
Bivalent temperature	(1)(2)	°C	-7	-7	-7	-7	-7	-7
SCOP	(1)(2)		3,97	3,97	4,01	3,68	3,76	4,15
Seasonal space heating energy efficiency	(1)(2)	%	156	156	157	144	147	163
Seasonal space heating energy efficiency class	(1)(2)		-	-	-	-	-	-

1 Seasonal space heating energy efficiency class LOW TEMPERATURE [REGULATION (EU) N. 813/2013]

2 Tipo di calcolo con portata variabile e temperatura variabile.



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

**NX-CN /A**

[ SI System ]

<b>NX-CN /A - LOW TEMPERATURE application</b>			<b>0604</b>	<b>0704</b>	<b>0804</b>	<b>0904</b>	<b>1004</b>
Power supply		(V/ph/Hz)	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
<b>WEATHER CONDITIONS - AVERAGE</b>							
Rated heat output at Tdesignh	(1)(2)	kW	117	135	146	171	183
Bivalent temperature	(1)(2)	°C	-7	-7	-7	-7	-7
SCOP	(1)(2)		4,01	4,16	3,98	4,06	4,02
Seasonal space heating energy efficiency	(1)(2)	%	158	163	156	160	158
Seasonal space heating energy efficiency class	(1)(2)		-	-	-	-	-

1 Seasonal space heating energy efficiency class LOW TEMPERATURE [REGULATION (EU) N. 813/2013]

2 Tipo di calcolo con portata variabile e temperatura variabile.

## 7.1 TECHNICAL DATA SEASONAL EFFICIENCY IN COOLING (EN14825 VALUE)

[ SI System ]

### ENERGY EFFICIENCY

#### SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281)

Ambient refrigeration

NX-CN /K			0072	0092	0102	0122	0152	0182	0202	0232	0272	0302
Prated,c	(1)	kW	18,3	22,6	25,7	30,3	37,9	44,8	51,7	57,6	66,0	74,9
SEER	(1) (2)	-	4,27	4,07	4,34	3,15	4,21	4,30	4,21	4,13	4,44	4,12
Performance $\eta_s$	(1) (3)	%	168,0	160,0	170,0	123,0	165,0	169,0	166,0	162,0	174,0	162,0
NX-CN /K			0352	0402	0452	0502	0552	0602	0702	0524	0604	0704
Prated,c	(1)	kW	85,0	94,4	106,7	121,0	135,8	151,2	172,9	124,6	143,8	167,0
SEER	(1) (2)	-	4,04	4,12	4,10	3,98	3,87	4,03	3,98	4,23	4,28	4,35
Performance $\eta_s$	(1) (3)	%	159,0	162,0	161,0	156,0	152,0	158,0	156,0	166,0	168,0	171,0
NX-CN /K			0804	0904	1004	1104						
Prated,c	(1)	kW	186,6	216,6	240,8	265,0						
SEER	(1) (2)	-	4,16	4,45	4,29	4,21						
Performance $\eta_s$	(1) (3)	%	163,0	175,0	168,0	165,0						

NX-CN /SL-K			0072	0092	0102	0122	0152	0182	0202	0232	0272	0302
Prated,c	(1)	kW	18,0	22,0	24,4	28,6	37,0	43,8	50,7	56,1	64,4	72,5
SEER	(1) (2)	-	4,39	4,22	3,95	4,10	4,19	4,41	4,33	4,36	4,35	4,03
Performance $\eta_s$	(1) (3)	%	173,0	166,0	155,0	161,0	165,0	173,0	170,0	171,0	171,0	158,0
NX-CN /SL-K			0352	0402	0452	0502	0552	0602	0702	0524	0604	0704
Prated,c	(1)	kW	81,9	91,0	102,8	118,7	132,5	145,6	166,4	121,8	139,4	161,3
SEER	(1) (2)	-	4,10	3,90	4,03	4,08	4,12	3,80	3,97	4,19	4,07	4,25
Performance $\eta_s$	(1) (3)	%	161,0	153,0	158,0	160,0	162,0	149,0	156,0	165,0	160,0	167,0
NX-CN /SL-K			0804	0904	1004							
Prated,c	(1)	kW	179,5	211,9	233,8							
SEER	(1) (2)	-	4,01	4,32	4,11							
Performance $\eta_s$	(1) (3)	%	157,0	170,0	161,0							

NX-CN /A			0072	0092	0102	0122	0152	0182	0202	0232	0272	0302
Prated,c	(1)	kW	18,7	23,0	26,0	30,9	38,2	45,3	52,4	58,3	66,6	75,9
SEER	(1) (2)	-	4,81	4,49	4,34	4,43	4,40	4,54	4,44	4,45	4,46	4,37
Performance $\eta_s$	(1) (3)	%	189,0	177,0	171,0	174,0	173,0	179,0	175,0	175,0	175,0	172,0
NX-CN /A			0352	0402	0452	0502	0552	0602	0702	0524	0604	0704
Prated,c	(1)	kW	85,9	94,7	108,2	121,9	136,5	152,5	173,6	124,6	144,2	169,0
SEER	(1) (2)	-	4,39	4,13	4,34	4,23	4,26	4,01	4,08	4,35	4,29	4,58
Performance $\eta_s$	(1) (3)	%	173,0	162,0	171,0	166,0	167,0	157,0	160,0	171,0	168,0	180,0
NX-CN /A			0804	0904	1004							
Prated,c	(1)	kW	186,9	216,6	237,7							
SEER	(1) (2)	-	4,31	4,41	4,20							
Performance $\eta_s$	(1) (3)	%	169,0	174,0	165,0							

Notes:

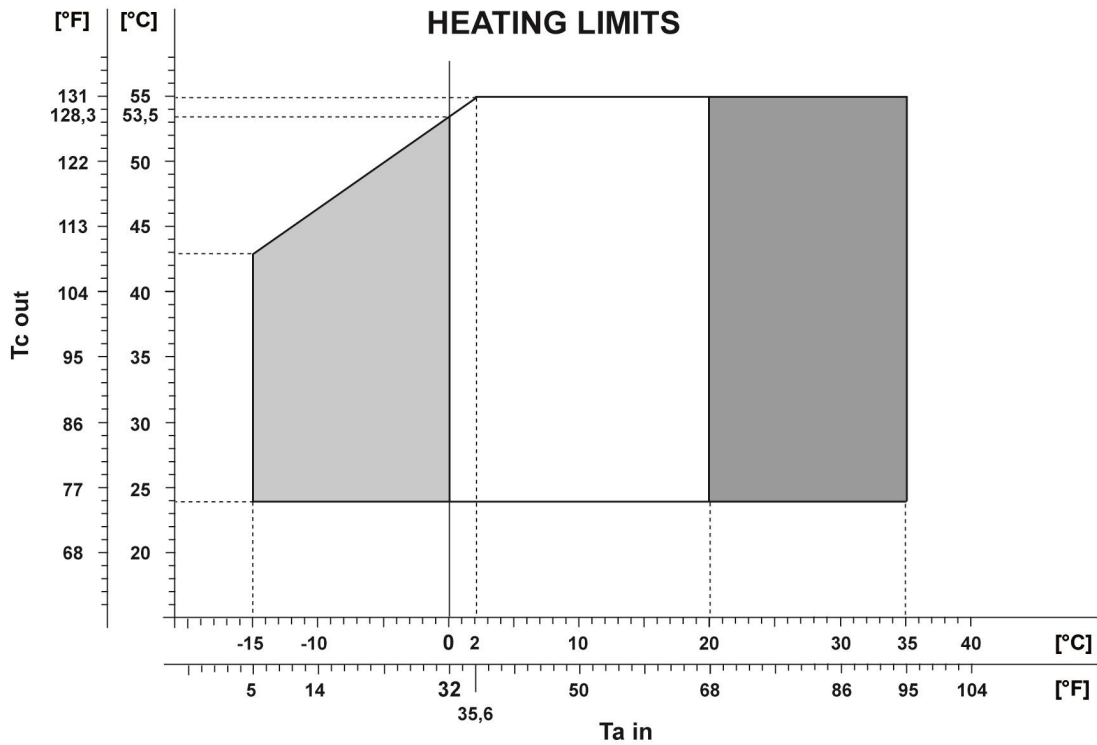
(1) Parameter calculated according to [REGULATION (EU) N. 2016/2281]

(2) Seasonal energy efficiency ratio

(3) Seasonal space cooling energy efficiency

The units highlighted in this publication contain R410A [GWP<sub>100</sub> 2088] fluorinated greenhouse gases.

## 8.1 OPERATING LIMITS

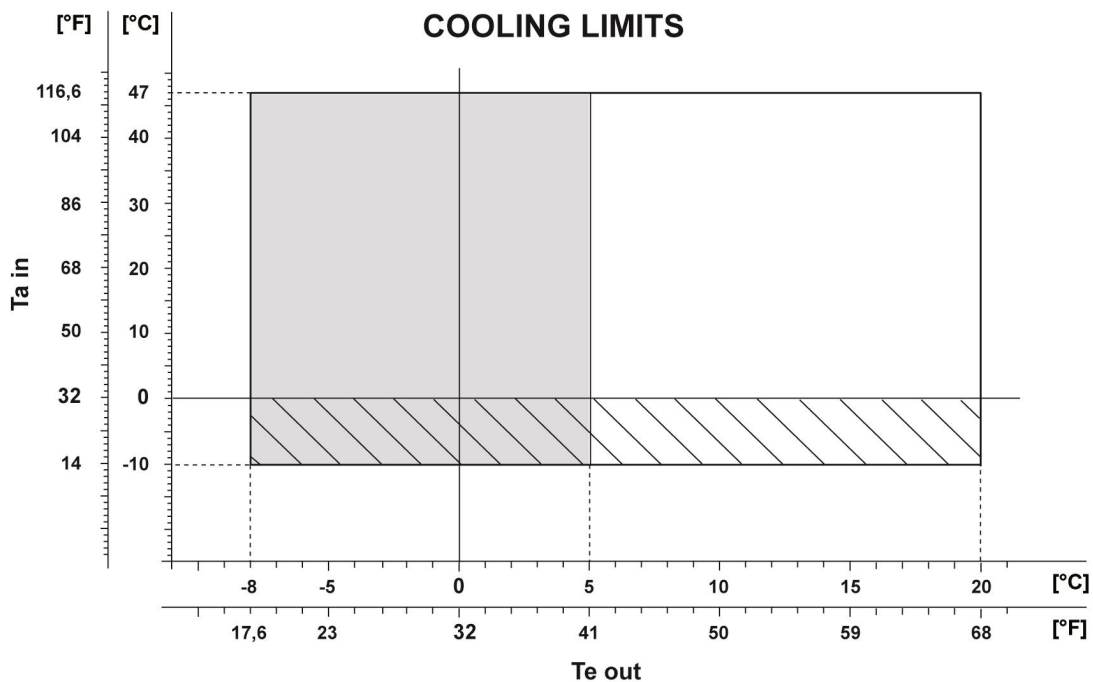


**Ta in** Source (side) heat exchanger air

**Tc out** Plant (side) heat exchanger water

Required accessories if hydronic module is present: ANTIFREEZE PIPING, PUMPS (Option 2432)

Required accessories: ELECTRONIC EXPANSION VALVE (Option 1941)



**Ta in** Source (side) heat exchanger air

**Te out** Plant (side) cooling exchanger water

Required accessories: EVAPORATOR OUTLET WATER TEMPERATURE <5°C (Option 874)

Required accessories if hydronic module is present: ANTIFREEZE PIPING, PUMPS (Option 2432)

SIZE		
NX-CN /K /0072	NX-CN /SL-K /0202	NX-CN /A /0552
NX-CN /K /0092	NX-CN /SL-K /0232	NX-CN /A /0602
NX-CN /K /0102	NX-CN /SL-K /0272	NX-CN /A /0702
NX-CN /K /0122	NX-CN /SL-K /0302	NX-CN /A /0524
NX-CN /K /0152	NX-CN /SL-K /0352	NX-CN /A /0604
NX-CN /K /0182	NX-CN /SL-K /0402	NX-CN /A /0704
NX-CN /K /0202	NX-CN /SL-K /0452	NX-CN /A /0804
NX-CN /K /0232	NX-CN /SL-K /0502	NX-CN /A /0904
NX-CN /K /0272	NX-CN /SL-K /0552	NX-CN /A /1004
NX-CN /K /0302	NX-CN /SL-K /0602	NX-CN /D /A /0072
NX-CN /K /0352	NX-CN /SL-K /0702	NX-CN /D /A /0092
NX-CN /K /0402	NX-CN /SL-K /0524	NX-CN /D /A /0102
NX-CN /K /0452	NX-CN /SL-K /0604	NX-CN /D /A /0122
NX-CN /K /0502	NX-CN /SL-K /0704	NX-CN /D /A /0152
NX-CN /K /0552	NX-CN /SL-K /0804	NX-CN /D /A /0182
NX-CN /K /0602	NX-CN /SL-K /0904	NX-CN /D /A /0202
NX-CN /K /0702	NX-CN /SL-K /1004	NX-CN /D /A /0232
NX-CN /K /0524	NX-CN /D /SL-K /0072	NX-CN /D /A /0272
NX-CN /K /0604	NX-CN /D /SL-K /0092	NX-CN /D /A /0302
NX-CN /K /0704	NX-CN /D /SL-K /0102	NX-CN /D /A /0352
NX-CN /K /0804	NX-CN /D /SL-K /0122	NX-CN /D /A /0402
NX-CN /K /0904	NX-CN /D /SL-K /0152	NX-CN /D /A /0452
NX-CN /K /1004	NX-CN /D /SL-K /0182	NX-CN /D /A /0502
NX-CN /K /1104	NX-CN /D /SL-K /0202	NX-CN /D /A /0552
NX-CN /D /K /0072	NX-CN /D /SL-K /0232	NX-CN /D /A /0602
NX-CN /D /K /0092	NX-CN /D /SL-K /0272	NX-CN /D /A /0702
NX-CN /D /K /0102	NX-CN /D /SL-K /0302	NX-CN /D /A /0524
NX-CN /D /K /0122	NX-CN /D /SL-K /0352	NX-CN /D /A /0604
NX-CN /D /K /0152	NX-CN /D /SL-K /0402	NX-CN /D /A /0704
NX-CN /D /K /0182	NX-CN /D /SL-K /0452	NX-CN /D /A /0804
NX-CN /D /K /0202	NX-CN /D /SL-K /0502	NX-CN /D /A /0904
NX-CN /D /K /0232	NX-CN /D /SL-K /0552	NX-CN /D /A /1004
NX-CN /D /K /0272	NX-CN /D /SL-K /0602	
NX-CN /D /K /0302	NX-CN /D /SL-K /0702	
NX-CN /D /K /0352	NX-CN /D /SL-K /0524	
NX-CN /D /K /0402	NX-CN /D /SL-K /0604	
NX-CN /D /K /0452	NX-CN /D /SL-K /0704	
NX-CN /D /K /0502	NX-CN /D /SL-K /0804	
NX-CN /D /K /0552	NX-CN /D /SL-K /0904	
NX-CN /D /K /0602	NX-CN /D /SL-K /1004	
NX-CN /D /K /0702	NX-CN /A /0072	
NX-CN /D /K /0524	NX-CN /A /0092	
NX-CN /D /K /0604	NX-CN /A /0102	
NX-CN /D /K /0704	NX-CN /A /0122	
NX-CN /D /K /0804	NX-CN /A /0152	
NX-CN /D /K /0904	NX-CN /A /0182	
NX-CN /D /K /1004	NX-CN /A /0202	
NX-CN /D /K /1104	NX-CN /A /0232	
NX-CN /SL-K /0072	NX-CN /A /0272	
NX-CN /SL-K /0092	NX-CN /A /0302	
NX-CN /SL-K /0102	NX-CN /A /0352	
NX-CN /SL-K /0122	NX-CN /A /0402	
NX-CN /SL-K /0152	NX-CN /A /0452	
NX-CN /SL-K /0182	NX-CN /A /0502	

**8.2 ETHYLENE GLYCOL MIXTURE**

Ethylene glycol and water mixture, used as a heat-conveying fluid, cause a variation in unit performance. For correct data, use the factors indicated in the following tabel.

	Freezing point (°C)							
	0	-5	-10	-15	-20	-25	-30	-35
	Ethylene glycol percentage by weight							
	0%	12%	20%	30%	35%	40%	45%	50%
cPf	1	0,985	0,98	0,974	0,97	0,965	0,964	0,96
cQ	1	1,02	1,04	1,075	1,11	1,14	1,17	1,2
cdp	1	1,07	1,11	1,18	1,22	1,24	1,27	1,3

cPf: cooling power correction factor

cQ: flow correction factor

cdp: pressure drop correction factor

For data concerning other kind of anti-freeze solutions (e.g. propylene glycol) please contact our Sale Department.

**8.3 FOULING FACTORS**

Performances are based on clean condition of tubes (fouling factor = 1). For different fouling values, performance should be adjusted using the correction factors shown in the following table.

SERIES	FOULING FACTORS	EVAPORATOR			CONDENSER/RECOVERY			DESUPERHEATER
	ff (m <sup>2</sup> °CW)	F1	FK1	KE [°C]	F2	FK2	KC [°C]	R3
VARIOUS	0	1,000	1,000	0,0	1,000	1,000	0,0	1,000
VARIOUS	1,80 x 10 <sup>-5</sup>	1,000	1,000	0,0	1,000	1,000	0,0	1,000
VARIOUS	4,40 x 10 <sup>-5</sup>	1,000	1,000	0,0	0,990	1,030	1,0	0,990
VARIOUS	8,80 x 10 <sup>-5</sup>	0,960	0,990	0,7	0,980	1,040	1,5	0,980
VARIOUS	13,20 x 10 <sup>-5</sup>	0,944	0,985	1,0	0,964	1,050	2,3	0,964
VARIOUS	17,20 x 10 <sup>-5</sup>	0,930	0,980	1,5	0,950	1,060	3,0	0,950

ff: fouling factors

F1 - F2: potential correction factors

FK1 - FK2: compressor power input correction factors

R3: capacity correction factors

KE: minimum evaporator outlet temperature increase

KC: maximum condenser outlet temperature decrease

## 9.1 HYDRAULIC DATA

[ SI System ]

### Water flow and pressure drop

Water flow in the plant (side) exchanger is given by:

$$Q = P / (4,186 \times Dt)$$

Q: water flow (l/s)

Dt: difference between inlet and outlet water temp. (°C)

P: heat exchanger capacity (kW)

Pressure drop is given by:

$$Dp = K \times (3,6 \times Q)^2 / 1000$$

Q: water flow (l/s)

Dp: pressure drop (kPa)

K: unit size ratio

SIZE	Power supply V/ph/Hz	HEAT EXCHANGER USER SIDE					HEAT RECOVERY EX. USER SIDE			
		K	Q min l/s	Q max l/s	C.A.S. l	C.a. min l	K	Q min l/s	Q max l/s	C.A.S. l
NX-CN /K /0072	400/3/50	1674	0,667	1,250	1,90	46,0	-	-	-	-
NX-CN /K /0092	400/3/50	1203	0,833	1,556	2,30	57,0	-	-	-	-
NX-CN /K /0102	400/3/50	846	1,000	1,833	2,70	65,0	-	-	-	-
NX-CN /K /0122	400/3/50	670	1,111	2,083	3,10	76,0	-	-	-	-
NX-CN /K /0152	400/3/50	447	1,472	2,722	3,80	95,0	-	-	-	-
NX-CN /K /0182	400/3/50	278	1,694	3,167	5,00	112	-	-	-	-
NX-CN /K /0202	400/3/50	218	1,944	3,639	5,80	129	-	-	-	-
NX-CN /K /0232	400/3/50	173	2,167	4,028	6,80	144	-	-	-	-
NX-CN /K /0272	400/3/50	99,9	2,472	4,611	6,30	165	-	-	-	-
NX-CN /K /0302	400/3/50	75,7	2,806	5,194	7,30	187	-	-	-	-
NX-CN /K /0352	400/3/50	62,9	3,139	5,833	8,10	213	-	-	-	-
NX-CN /K /0402	400/3/50	49,8	3,611	6,694	9,10	236	-	-	-	-
NX-CN /K /0452	400/3/50	39,9	4,028	7,500	10,3	268	-	-	-	-
NX-CN /K /0502	400/3/50	30,7	4,639	8,611	11,7	303	-	-	-	-
NX-CN /K /0552	400/3/50	26,1	5,167	9,611	12,9	340	-	-	-	-
NX-CN /K /0602	400/3/50	21,9	5,750	10,67	14,3	378	-	-	-	-
NX-CN /K /0702	400/3/50	17,5	6,556	12,19	16,4	433	-	-	-	-
NX-CN /K /0524	400/3/50	42,5	4,750	8,833	11,4	313	-	-	-	-
NX-CN /K /0604	400/3/50	31,9	5,528	10,25	13,5	360	-	-	-	-
NX-CN /K /0704	400/3/50	24,0	6,333	11,78	15,9	418	-	-	-	-
NX-CN /K /0804	400/3/50	19,2	7,056	13,11	18,4	468	-	-	-	-
NX-CN /K /0904	400/3/50	14,6	8,139	15,11	29,8	543	-	-	-	-
NX-CN /K /1004	400/3/50	11,9	9,000	16,72	33,3	603	-	-	-	-
NX-CN /K /1104	400/3/50	9,40	10,03	18,61	38,0	663	-	-	-	-
NX-CN /D /K /0072	400/3/50	1674	0,667	1,250	1,90	46,0	3793	-	0,361	0,40
NX-CN /D /K /0092	400/3/50	1203	0,833	1,556	2,30	57,0	3793	-	0,472	0,40
NX-CN /D /K /0102	400/3/50	846	1,000	1,833	2,70	65,0	3793	-	0,528	0,40
NX-CN /D /K /0122	400/3/50	670	1,111	2,083	3,10	76,0	3793	-	0,639	0,40
NX-CN /D /K /0152	400/3/50	447	1,472	2,722	3,80	95,0	1386	-	0,694	0,60
NX-CN /D /K /0182	400/3/50	278	1,694	3,167	5,00	112	1386	-	0,778	0,60
NX-CN /D /K /0202	400/3/50	218	1,944	3,639	5,80	129	1386	-	0,917	0,60
NX-CN /D /K /0232	400/3/50	173	2,167	4,028	6,80	144	1386	-	1,056	0,60
NX-CN /D /K /0272	400/3/50	99,9	2,472	4,611	6,30	165	831	-	1,194	0,80
NX-CN /D /K /0302	400/3/50	75,7	2,806	5,194	7,30	187	831	-	1,389	0,80
NX-CN /D /K /0352	400/3/50	62,9	3,139	5,833	8,10	213	567	-	1,611	1,00
NX-CN /D /K /0402	400/3/50	49,8	3,611	6,694	9,10	236	567	-	1,778	1,00
NX-CN /D /K /0452	400/3/50	39,9	4,028	7,500	10,3	268	334	-	2,028	1,40
NX-CN /D /K /0502	400/3/50	30,7	4,639	8,611	11,7	303	334	-	2,167	1,40
NX-CN /D /K /0552	400/3/50	26,1	5,167	9,611	12,9	340	221	-	2,528	1,80
NX-CN /D /K /0602	400/3/50	21,9	5,750	10,67	14,3	378	221	-	2,917	1,80
NX-CN /D /K /0702	400/3/50	17,5	6,556	12,19	16,4	433	164	-	3,278	2,30

Q min: minimum water flow admitted to the heat exchanger  
 Q max: maximum water flow admitted to the heat exchanger  
 C.a. min: minimum water content admitted in the plant  
 C.A.S.: Exchanger water content

## HYDRAULIC DATA

[ SI System ]

SIZE	Power supply V/ph/Hz	HEAT EXCHANGER USER SIDE					HEAT RECOVERY EX. USER SIDE			
		K	Q min l/s	Q max l/s	C.A.S. l	C.a. min l	K	Q min l/s	Q max l/s	C.A.S. l
NX-CN /D /K /0524	400/3/50	42,5	4,750	8,833	11,4	313	415	-	2,333	1,60
NX-CN /D /K /0604	400/3/50	31,9	5,528	10,25	13,5	360	415	-	2,750	1,60
NX-CN /D /K /0704	400/3/50	24,0	6,333	11,78	15,9	418	283	-	3,167	2,00
NX-CN /D /K /0804	400/3/50	19,2	7,056	13,11	18,4	468	283	-	3,639	2,00
NX-CN /D /K /0904	400/3/50	14,6	8,139	15,11	29,8	543	166	-	3,944	2,80
NX-CN /D /K /1004	400/3/50	11,9	9,000	16,72	33,3	603	166	-	4,472	2,80
NX-CN /D /K /1104	400/3/50	9,40	10,03	18,61	38,0	663	166	-	5,083	2,80
NX-CN /SL-K /0072	400/3/50	1674	0,667	1,222	1,90	45,0	-	-	-	-
NX-CN /SL-K /0092	400/3/50	1203	0,833	1,528	2,30	55,0	-	-	-	-
NX-CN /SL-K /0102	400/3/50	846	0,944	1,778	2,70	61,0	-	-	-	-
NX-CN /SL-K /0122	400/3/50	670	1,083	2,000	3,10	72,0	-	-	-	-
NX-CN /SL-K /0152	400/3/50	447	1,417	2,639	3,80	93,0	-	-	-	-
NX-CN /SL-K /0182	400/3/50	278	1,667	3,111	5,00	110	-	-	-	-
NX-CN /SL-K /0202	400/3/50	218	1,917	3,583	5,80	127	-	-	-	-
NX-CN /SL-K /0232	400/3/50	173	2,139	3,972	6,80	141	-	-	-	-
NX-CN /SL-K /0272	400/3/50	99,9	2,444	4,528	6,30	161	-	-	-	-
NX-CN /SL-K /0302	400/3/50	75,7	2,722	5,056	7,30	182	-	-	-	-
NX-CN /SL-K /0352	400/3/50	62,9	3,056	5,667	8,10	205	-	-	-	-
NX-CN /SL-K /0402	400/3/50	49,8	3,500	6,472	9,10	228	-	-	-	-
NX-CN /SL-K /0452	400/3/50	39,9	3,917	7,278	10,3	258	-	-	-	-
NX-CN /SL-K /0502	400/3/50	30,7	4,528	8,417	11,7	298	-	-	-	-
NX-CN /SL-K /0552	400/3/50	26,1	5,056	9,417	12,9	333	-	-	-	-
NX-CN /SL-K /0602	400/3/50	21,9	5,556	10,33	14,3	365	-	-	-	-
NX-CN /SL-K /0702	400/3/50	17,5	6,361	11,81	16,4	418	-	-	-	-
NX-CN /SL-K /0524	400/3/50	42,5	4,667	8,667	11,4	305	-	-	-	-
NX-CN /SL-K /0604	400/3/50	31,9	5,389	10,00	13,5	350	-	-	-	-
NX-CN /SL-K /0704	400/3/50	24,0	6,167	11,42	15,9	403	-	-	-	-
NX-CN /SL-K /0804	400/3/50	19,2	6,806	12,61	18,4	450	-	-	-	-
NX-CN /SL-K /0904	400/3/50	14,6	7,972	14,83	29,8	530	-	-	-	-
NX-CN /SL-K /1004	400/3/50	11,9	8,778	16,31	33,3	585	-	-	-	-
NX-CN /D /SL-K /0072	400/3/50	1674	0,667	1,222	1,90	45,0	3793	-	0,361	0,40
NX-CN /D /SL-K /0092	400/3/50	1203	0,833	1,528	2,30	55,0	3793	-	0,472	0,40
NX-CN /D /SL-K /0102	400/3/50	846	0,944	1,778	2,70	61,0	3793	-	0,528	0,40
NX-CN /D /SL-K /0122	400/3/50	670	1,083	2,000	3,10	72,0	3793	-	0,639	0,40
NX-CN /D /SL-K /0152	400/3/50	447	1,417	2,639	3,80	93,0	1386	-	0,694	0,60
NX-CN /D /SL-K /0182	400/3/50	278	1,667	3,111	5,00	110	1386	-	0,778	0,60
NX-CN /D /SL-K /0202	400/3/50	218	1,917	3,583	5,80	127	1386	-	0,917	0,60
NX-CN /D /SL-K /0232	400/3/50	173	2,139	3,972	6,80	141	1386	-	1,056	0,60
NX-CN /D /SL-K /0272	400/3/50	99,9	2,444	4,528	6,30	161	831	-	1,194	0,80
NX-CN /D /SL-K /0302	400/3/50	75,7	2,722	5,056	7,30	182	831	-	1,389	0,80
NX-CN /D /SL-K /0352	400/3/50	62,9	3,056	5,667	8,10	205	567	-	1,611	1,00
NX-CN /D /SL-K /0402	400/3/50	49,8	3,500	6,472	9,10	228	567	-	1,778	1,00
NX-CN /D /SL-K /0452	400/3/50	39,9	3,917	7,278	10,3	258	334	-	2,028	1,40
NX-CN /D /SL-K /0502	400/3/50	30,7	4,528	8,417	11,7	298	334	-	2,167	1,40
NX-CN /D /SL-K /0552	400/3/50	26,1	5,056	9,417	12,9	333	221	-	2,528	1,80
NX-CN /D /SL-K /0602	400/3/50	21,9	5,556	10,33	14,3	365	221	-	2,917	1,80
NX-CN /D /SL-K /0702	400/3/50	17,5	6,361	11,81	16,4	418	164	-	3,278	2,30
NX-CN /D /SL-K /0524	400/3/50	42,5	4,667	8,667	11,4	305	415	-	2,333	1,60
NX-CN /D /SL-K /0604	400/3/50	31,9	5,389	10,00	13,5	350	415	-	2,750	1,60

Q min: minimum water flow admitted to the heat exchanger  
 Q max: maximum water flow admitted to the heat exchanger  
 C.a. min: minimum water content admitted in the plant  
 C.A.S.: Exchanger water content

# HYDRAULIC DATA

[ SI System ]

SIZE	Power supply V/ph/Hz	HEAT EXCHANGER USER SIDE					HEAT RECOVERY EX. USER SIDE			
		K	Q min l/s	Q max l/s	C.A.S. l	C.a. min l	K	Q min l/s	Q max l/s	C.A.S. l
NX-CN /D /SL-K /0704	400/3/50	24,0	6,167	11,42	15,9	403	283	-	3,167	2,00
NX-CN /D /SL-K /0804	400/3/50	19,2	6,806	12,61	18,4	450	283	-	3,639	2,00
NX-CN /D /SL-K /0904	400/3/50	14,6	7,972	14,83	29,8	530	166	-	3,944	2,80
NX-CN /D /SL-K /1004	400/3/50	11,9	8,778	16,31	33,3	585	166	-	4,472	2,80
NX-CN /A /0072	400/3/50	1674	0,694	1,278	1,90	47,0	-	-	-	-
NX-CN /A /0092	400/3/50	1203	0,861	1,583	2,30	58,0	-	-	-	-
NX-CN /A /0102	400/3/50	846	1,000	1,861	2,70	65,0	-	-	-	-
NX-CN /A /0122	400/3/50	670	1,139	2,111	3,10	77,0	-	-	-	-
NX-CN /A /0152	400/3/50	447	1,472	2,722	3,80	96,0	-	-	-	-
NX-CN /A /0182	400/3/50	278	1,722	3,194	5,00	114	-	-	-	-
NX-CN /A /0202	400/3/50	218	1,972	3,667	5,80	131	-	-	-	-
NX-CN /A /0232	400/3/50	173	2,194	4,083	6,80	146	-	-	-	-
NX-CN /A /0272	400/3/50	99,9	2,500	4,639	6,30	167	-	-	-	-
NX-CN /A /0302	400/3/50	75,7	2,944	5,444	7,30	190	-	-	-	-
NX-CN /A /0352	400/3/50	62,9	3,167	5,889	8,10	215	-	-	-	-
NX-CN /A /0402	400/3/50	49,8	3,639	6,750	9,10	237	-	-	-	-
NX-CN /A /0452	400/3/50	39,9	4,083	7,583	10,3	270	-	-	-	-
NX-CN /A /0502	400/3/50	30,7	4,639	8,611	11,7	305	-	-	-	-
NX-CN /A /0552	400/3/50	26,1	5,194	9,639	12,9	343	-	-	-	-
NX-CN /A /0602	400/3/50	21,9	5,778	10,72	14,3	383	-	-	-	-
NX-CN /A /0702	400/3/50	17,5	6,583	12,22	16,4	435	-	-	-	-
NX-CN /A /0524	400/3/50	42,5	4,750	8,833	11,4	313	-	-	-	-
NX-CN /A /0604	400/3/50	31,9	5,528	10,28	13,5	360	-	-	-	-
NX-CN /A /0704	400/3/50	24,0	6,389	11,86	15,9	423	-	-	-	-
NX-CN /A /0804	400/3/50	19,2	7,028	13,03	18,4	468	-	-	-	-
NX-CN /A /0904	400/3/50	14,6	8,111	15,06	29,8	543	-	-	-	-
NX-CN /A /1004	400/3/50	11,9	8,889	16,53	33,3	595	-	-	-	-
NX-CN /D /A /0072	400/3/50	1674	0,694	1,278	1,90	47,0	3793	-	0,361	0,40
NX-CN /D /A /0092	400/3/50	1203	0,861	1,583	2,30	58,0	3793	-	0,472	0,40
NX-CN /D /A /0102	400/3/50	846	1,000	1,861	2,70	65,0	3793	-	0,528	0,40
NX-CN /D /A /0122	400/3/50	670	1,139	2,111	3,10	77,0	3793	-	0,639	0,40
NX-CN /D /A /0152	400/3/50	447	1,472	2,722	3,80	96,0	1386	-	0,694	0,60
NX-CN /D /A /0182	400/3/50	278	1,722	3,194	5,00	114	1386	-	0,778	0,60
NX-CN /D /A /0202	400/3/50	218	1,972	3,667	5,80	131	1386	-	0,917	0,60
NX-CN /D /A /0232	400/3/50	173	2,194	4,083	6,80	146	1386	-	1,056	0,60
NX-CN /D /A /0272	400/3/50	99,9	2,500	4,639	6,30	167	831	-	1,194	0,80
NX-CN /D /A /0302	400/3/50	75,7	2,944	5,444	7,30	190	831	-	1,389	0,80
NX-CN /D /A /0352	400/3/50	62,9	3,167	5,889	8,10	215	567	-	1,611	1,00
NX-CN /D /A /0402	400/3/50	49,8	3,639	6,750	9,10	237	567	-	1,778	1,00
NX-CN /D /A /0452	400/3/50	39,9	4,083	7,583	10,3	270	334	-	2,028	1,40
NX-CN /D /A /0502	400/3/50	30,7	4,639	8,611	11,7	305	334	-	2,167	1,40
NX-CN /D /A /0552	400/3/50	26,1	5,194	9,639	12,9	343	221	-	2,528	1,80
NX-CN /D /A /0602	400/3/50	21,9	5,778	10,72	14,3	383	221	-	2,917	1,80
NX-CN /D /A /0702	400/3/50	17,5	6,583	12,22	16,4	435	164	-	3,278	2,30
NX-CN /D /A /0524	400/3/50	42,5	4,750	8,833	11,4	313	415	-	2,333	1,60
NX-CN /D /A /0604	400/3/50	31,9	5,528	10,28	13,5	360	415	-	2,750	1,60
NX-CN /D /A /0704	400/3/50	24,0	6,389	11,86	15,9	423	283	-	3,167	2,00
NX-CN /D /A /0804	400/3/50	19,2	7,028	13,03	18,4	468	283	-	3,639	2,00
NX-CN /D /A /0904	400/3/50	14,6	8,111	15,06	29,8	543	166	-	3,944	2,80

Q min: minimum water flow admitted to the heat exchanger  
 Q max: maximum water flow admitted to the heat exchanger  
 C.a. min: minimum water content admitted in the plant  
 C.A.S.: Exchanger water content



## HYDRAULIC DATA

[ SI System ]

SIZE	Power supply V/ph/Hz	HEAT EXCHANGER USER SIDE					HEAT RECOVERY EX. USER SIDE			
		K	Q min l/s	Q max l/s	C.A.S. l	C.a. min l	K	Q min l/s	Q max l/s	C.A.S. l
NX-CN /D /A /1004	400/3/50	11,9	8,889	16,53	33,3	595	166	-	4,472	2,80

Q min: minimum water flow admitted to the heat exchanger  
Q max: maximum water flow admitted to the heat exchanger  
C.a. min: minimum water content admitted in the plant  
C.A.S.: Exchanger water content

10.1 ELECTRICAL DATA

NX-CN /K

[ SI System ]

SIZE	Power supply V/ph/Hz	Maximum values								
		n	Compressor			Fans (1)		Total (1)(2)		
			F.L.I. [kW]	F.L.A. [A]	L.R.A. [A]	F.L.I. [kW]	F.L.A. [A]	F.L.I. [kW]	F.L.A. [A]	S.A. [A]
0072	400/3/50	2	2 x 4,39	2 x 7,24	2 x 43	2,600	4	11,38	18	54,2
0092	400/3/50	2	2 x 5,6	2 x 8,42	2 x 51,5	2,600	4	13,80	21	63,9
0102	400/3/50	2	2 x 6,55	2 x 10,23	2 x 67,1	2,800	4	15,90	25	81,5
0122	400/3/50	2	2 x 7,26	2 x 12,07	2 x 75	2,800	4	17,32	28	91,3
0152	400/3/50	2	2 x 8,6	2 x 13,9	2 x 101	2,600	4	22,40	36	122,9
0182	400/3/50	2	2 x 9,91	2 x 17,1	2 x 128	2,900	4	25,62	43	154
0202	400/3/50	2	2 x 11,6	2 x 20,1	2 x 139	2,900	4	29,00	49	168
0232	400/3/50	2	2 x 13	2 x 21,44	2 x 118	2,900	4	31,80	52	148,3
0272	400/3/50	2	2 x 15,1	2 x 25,63	2 x 140	2,800	4	35,80	60	174
0302	400/3/50	2	2 x 16,9	2 x 31,58	2 x 174	2,900	4	42,50	76	218,9
0352	400/3/50	2	1 x 16,9 + 1 x 22,5	1 x 31,58 + 1 x 36,4	1 x 174 + 1 x 225	2,900	4	48,10	81	269,9
0402	400/3/50	2	2 x 22,5	2 x 36,46	2 x 225	2,800	4	53,40	86	274,1
0452	400/3/50	2	1 x 22,5 + 1 x 27,6	1 x 36,46 + 1 x 44,5	1 x 225 + 1 x 272	2,800	4	58,50	94	321,1
0502	400/3/50	2	2 x 27,6	2 x 44,57	2 x 272	2,900	4	66,80	107	334,3
0552	400/3/50	2	1 x 27,6 + 1 x 35,9	1 x 44,57 + 1 x 58,9	1 x 272 + 1 x 310	2,900	4	75,10	121	372,3
0602	400/3/50	2	2 x 35,9	2 x 58,97	2 x 310	2,800	4	83,00	135	385,8
0702	400/3/50	2	1 x 35,9 + 1 x 44,7	1 x 58,97 + 1 x 73,3	1 x 310 + 1 x 408	2,900	4	98,00	159	493,5
0524	400/3/50	4	4 x 15,1	4 x 25,63	4 x 140	2,900	4	72,00	120	234,6
0604	400/3/50	4	4 x 16,9	4 x 31,58	4 x 174	2,800	4	78,80	143	285,5
0704	400/3/50	4	2 x 16,9 + 2 x 22,5	2 x 31,58 + 2 x 36,4	2 x 174 + 2 x 225	2,900	4	96,20	163	351,2
0804	400/3/50	4	4 x 22,5	4 x 36,46	4 x 225	2,900	4	107,4	172	361
0904	400/3/50	4	2 x 22,5 + 2 x 27,6	2 x 36,46 + 2 x 44,5	2 x 225 + 2 x 272	2,800	4	117,0	187	414,7
1004	400/3/50	4	4 x 27,6	4 x 44,57	4 x 272	2,800	4	127,2	203	430,9
1104	400/3/50	4	2 x 27,6 + 2 x 35,9	2 x 44,57 + 2 x 58,9	2 x 272 + 2 x 310	2,800	4	143,8	232	483,3

F.L.I.: Full load power

F.L.A.: Full load current

L.R.A.: Locked rotor amperes for single compressor

S.A.: Inrush current

(1) Values calculated referring to the version with the maximum number of fans working at the max absorbed current

(1)(2) Safety values to be considered when cabling the unit for power supply and line-protections

Data valid for standard units without any additional option.

Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°C; Source (side) heat exchanger air (in) 35,0°C.

Voltage tolerance: 10%

Maximum voltage unbalance: 3%

Given the typical operating conditions of units designed for indoor installation, which can be associated (according to reference document IEC 60721) to the following classes:

- climatic conditions class AA4: air temperature range from 5 up to 42°C (\*)
- special climatic conditions negligible
- presence of water class AD2: possibility of water dripping inside the technical room
- biological conditions class 4B1 and 4C2: negligible presence of corrosive and polluting substances
- mechanically active substances class 4S2: locations in areas with sand or dust sources

The required protection level for safe operation, according to reference document IEC 60529, is IP21 BW (protection against access of external devices with diameter larger than 12 mm and water falling vertically).

The unit can be considered IP21 CW protected, thus fulfilling the above operating conditions.

(\*) for the unit's operating limits, see "selection limits" section

**ELECTRICAL DATA**

**NX-CN /SL-K**

[ SI System ]

SIZE	Power supply V/ph/Hz	Maximum values								
		n	Compressor			Fans (1)		Total (1)(2)		
			F.L.I. [kW]	F.L.A. [A]	L.R.A. [A]	F.L.I. [kW]	F.L.A. [A]	F.L.I. [kW]	F.L.A. [A]	S.A. [A]
0072	400/3/50	2	2 x 4,39	2 x 7,24	2 x 43	2,600	4	13,98	22	58,2
0092	400/3/50	2	2 x 5,6	2 x 8,42	2 x 51,5	2,600	4	16,40	25	67,9
0102	400/3/50	2	2 x 6,55	2 x 10,23	2 x 67,1	2,600	4	18,30	28	85,3
0122	400/3/50	2	2 x 7,26	2 x 12,07	2 x 75	2,600	4	19,72	32	95,1
0152	400/3/50	2	2 x 8,6	2 x 13,9	2 x 101	2,900	4	23,00	37	123,8
0182	400/3/50	2	2 x 9,91	2 x 17,1	2 x 128	2,900	4	28,52	47	158,4
0202	400/3/50	2	2 x 11,6	2 x 20,1	2 x 139	2,900	4	31,90	53	172,4
0232	400/3/50	2	2 x 13	2 x 21,44	2 x 118	2,900	4	34,70	56	152,7
0272	400/3/50	2	2 x 15,1	2 x 25,63	2 x 140	2,900	4	38,90	65	178,9
0302	400/3/50	2	2 x 16,9	2 x 31,58	2 x 174	2,800	4	42,20	76	218,2
0352	400/3/50	2	1 x 16,9 + 1 x 22,5	1 x 31,58 + 1 x 36,4	1 x 174 + 1 x 225	2,800	4	47,80	81	269,2
0402	400/3/50	2	2 x 22,5	2 x 36,46	2 x 225	2,800	4	53,40	86	274,1
0452	400/3/50	2	1 x 22,5 + 1 x 27,6	1 x 36,46 + 1 x 44,5	1 x 225 + 1 x 272	2,800	4	61,30	98	325,3
0502	400/3/50	2	2 x 27,6	2 x 44,57	2 x 272	2,800	4	66,40	106	333,4
0552	400/3/50	2	1 x 27,6 + 1 x 35,9	1 x 44,57 + 1 x 58,9	1 x 272 + 1 x 310	2,800	4	74,70	120	371,4
0602	400/3/50	2	2 x 35,9	2 x 58,97	2 x 310	2,900	4	89,20	145	395,5
0702	400/3/50	2	1 x 35,9 + 1 x 44,7	1 x 58,97 + 1 x 73,3	1 x 310 + 1 x 408	2,900	4	98,00	159	493,5
0524	400/3/50	4	4 x 15,1	4 x 25,63	4 x 140	2,800	4	71,60	119	233,7
0604	400/3/50	4	4 x 16,9	4 x 31,58	4 x 174	2,800	4	78,80	143	285,5
0704	400/3/50	4	2 x 16,9 + 2 x 22,5	2 x 31,58 + 2 x 36,4	2 x 174 + 2 x 225	2,800	4	95,60	161	349,8
0804	400/3/50	4	4 x 22,5	4 x 36,46	4 x 225	2,800	4	106,8	171	359,6
0904	400/3/50	4	2 x 22,5 + 2 x 27,6	2 x 36,46 + 2 x 44,5	2 x 225 + 2 x 272	2,800	4	117,0	187	414,7
1004	400/3/50	4	4 x 27,6	4 x 44,57	4 x 272	2,800	4	127,2	203	430,9

F.L.I.: Full load power

F.L.A.: Full load current

L.R.A.: Locked rotor amperes for single compressor

S.A.: Inrush current

(1) Values calculated referring to the version with the maximum number of fans working at the max absorbed current

(1)(2) Safety values to be considered when cabling the unit for power supply and line-protections

Data valid for standard units without any additional option.

Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°C; Source (side) heat exchanger air (in) 35,0°C.

Voltage tolerance: 10%

Maximum voltage unbalance: 3%

Given the typical operating conditions of units designed for indoor installation, which can be associated (according to reference document IEC 60721) to the following classes:

- climatic conditions class AA4: air temperature range from 5 up to 42°C (\*)
- special climatic conditions negligible
- presence of water class AD2: possibility of water dripping inside the technical room
- biological conditions class 4B1 and 4C2: negligible presence of corrosive and polluting substances
- mechanically active substances class 4S2: locations in areas with sand or dust sources

The required protection level for safe operation, according to reference document IEC 60529, is IP21 BW (protection against access of external devices with diameter larger than 12 mm and water falling vertically).

The unit can be considered IP21 CW protected, thus fulfilling the above operating conditions.

(\*) for the unit's operating limits, see "selection limits" section

**ELECTRICAL DATA**

**NX-CN /A**

[ SI System ]

SIZE	Power supply V/ph/Hz	Maximum values								
		n	Compressor			Fans (1)		Total (1)(2)		
			F.L.I. [kW]	F.L.A. [A]	L.R.A. [A]	F.L.I. [kW]	F.L.A. [A]	F.L.I. [kW]	F.L.A. [A]	S.A. [A]
0072	400/3/50	2	2 x 4,39	2 x 7,24	2 x 43	2,600	4	13,98	22	58,2
0092	400/3/50	2	2 x 5,6	2 x 8,42	2 x 51,5	2,600	4	16,40	25	67,9
0102	400/3/50	2	2 x 6,55	2 x 10,23	2 x 67,1	2,600	4	18,30	28	85,3
0122	400/3/50	2	2 x 7,26	2 x 12,07	2 x 75	2,600	4	19,72	32	95,1
0152	400/3/50	2	2 x 8,6	2 x 13,9	2 x 101	2,900	4	23,00	37	123,8
0182	400/3/50	2	2 x 9,91	2 x 17,1	2 x 128	2,900	4	28,52	47	158,4
0202	400/3/50	2	2 x 11,6	2 x 20,1	2 x 139	2,900	4	31,90	53	172,4
0232	400/3/50	2	2 x 13	2 x 21,44	2 x 118	2,900	4	34,70	56	152,7
0272	400/3/50	2	2 x 15,1	2 x 25,63	2 x 140	2,900	4	38,90	65	178,9
0302	400/3/50	2	2 x 16,9	2 x 31,58	2 x 174	2,800	4	42,20	76	218,2
0352	400/3/50	2	1 x 16,9 + 1 x 22,5	1 x 31,58 + 1 x 36,4	1 x 174 + 1 x 225	2,800	4	47,80	81	269,2
0402	400/3/50	2	2 x 22,5	2 x 36,46	2 x 225	2,800	4	53,40	86	274,1
0452	400/3/50	2	1 x 22,5 + 1 x 27,6	1 x 36,46 + 1 x 44,5	1 x 225 + 1 x 272	2,800	4	61,30	98	325,3
0502	400/3/50	2	2 x 27,6	2 x 44,57	2 x 272	2,800	4	66,40	106	333,4
0552	400/3/50	2	1 x 27,6 + 1 x 35,9	1 x 44,57 + 1 x 58,9	1 x 272 + 1 x 310	2,800	4	74,70	120	371,4
0602	400/3/50	2	2 x 35,9	2 x 58,97	2 x 310	2,900	4	89,20	145	395,5
0702	400/3/50	2	1 x 35,9 + 1 x 44,7	1 x 58,97 + 1 x 73,3	1 x 310 + 1 x 408	2,900	4	98,00	159	493,5
0524	400/3/50	4	4 x 15,1	4 x 25,63	4 x 140	2,800	4	71,60	119	233,7
0604	400/3/50	4	4 x 16,9	4 x 31,58	4 x 174	2,800	4	78,80	143	285,5
0704	400/3/50	4	2 x 16,9 + 2 x 22,5	2 x 31,58 + 2 x 36,4	2 x 174 + 2 x 225	2,800	4	95,60	161	349,8
0804	400/3/50	4	4 x 22,5	4 x 36,46	4 x 225	2,800	4	106,8	171	359,6
0904	400/3/50	4	2 x 22,5 + 2 x 27,6	2 x 36,46 + 2 x 44,5	2 x 225 + 2 x 272	2,800	4	117,0	187	414,7
1004	400/3/50	4	4 x 27,6	4 x 44,57	4 x 272	2,800	4	127,2	203	430,9

F.L.I.: Full load power

F.L.A.: Full load current

L.R.A.: Locked rotor amperes for single compressor

S.A.: Inrush current

(1) Values calculated referring to the version with the maximum number of fans working at the max absorbed current

(1)(2) Safety values to be considered when cabling the unit for power supply and line-protections

Data valid for standard units without any additional option.

Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°C; Source (side) heat exchanger air (in) 35,0°C.

Voltage tolerance: 10%

Maximum voltage unbalance: 3%

Given the typical operating conditions of units designed for indoor installation, which can be associated (according to reference document IEC 60721) to the following classes:

- climatic conditions class AA4: air temperature range from 5 up to 42°C (\*)
- special climatic conditions negligible
- presence of water class AD2: possibility of water dripping inside the technical room
- biological conditions class 4B1 and 4C2: negligible presence of corrosive and polluting substances
- mechanically active substances class 4S2: locations in areas with sand or dust sources

The required protection level for safe operation, according to reference document IEC 60529, is IP21 BW (protection against access of external devices with diameter larger than 12 mm and water falling vertically).

The unit can be considered IP21 CW protected, thus fulfilling the above operating conditions.

(\*) for the unit's operating limits, see "selection limits" section

11.1 FULL LOAD SOUND LEVEL

NX-CN /K

SOUND POWER LEVEL IN COOLING									
SIZE	Octave band [Hz]								Total sound level dB(A)
	63	125	250	500	1000	2000	4000	8000	
	Sound power level dB								
0072	77	76	77	80	80	75	69	60	83
0092	81	80	82	84	84	79	74	64	88
0102	67	73	72	75	73	71	62	53	78
0122	67	74	73	76	74	72	63	54	79
0152	81	80	82	84	85	80	74	64	88
0182	83	77	78	82	83	75	68	59	85
0202	84	79	80	83	84	76	69	61	86
0232	85	80	81	84	85	78	71	62	87
0272	72	78	78	81	79	77	67	59	83
0302	84	79	80	83	84	77	70	61	87
0352	87	81	82	85	87	79	72	63	89
0402	73	79	78	82	79	78	68	60	84
0452	74	80	79	83	80	79	69	61	85
0502	89	84	85	88	89	82	75	66	91
0552	92	86	87	90	92	84	77	68	94
0602	76	83	82	85	83	81	72	63	88
0702	90	85	86	89	90	82	75	67	92
0524	90	85	86	89	90	83	76	67	92
0604	76	82	81	85	82	81	71	63	87
0704	92	86	87	90	92	84	77	68	94
0804	92	86	87	90	92	84	77	68	94
0904	77	83	83	86	83	82	72	64	88
1004	78	85	84	87	85	83	74	65	90
1104	79	85	84	88	85	84	74	66	90

Working conditions

Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°C; Source (side) heat exchanger air (in) 35,0°C.

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

Sound power level in cooling, indoors.

FULL LOAD SOUND LEVEL

NX-CN /K

SOUND POWER LEVEL IN HEATING									
SIZE	Octave band [Hz]								Total sound level dB(A)
	63	125	250	500	1000	2000	4000	8000	
	Sound power level dB								
0072	0	0	0	0	0	0	0	0	70
0092	0	0	0	0	0	0	0	0	70
0102	0	0	0	0	0	0	0	0	70
0122	0	0	0	0	0	0	0	0	70
0152	0	0	0	0	0	0	0	0	80
0182	0	0	0	0	0	0	0	0	80
0202	0	0	0	0	0	0	0	0	80
0232	0	0	0	0	0	0	0	0	80
0272	0	0	0	0	0	0	0	0	80
0302	0	0	0	0	0	0	0	0	80
0352	0	0	0	0	0	0	0	0	80
0402	0	0	0	0	0	0	0	0	82
0452	0	0	0	0	0	0	0	0	83
0502	0	0	0	0	0	0	0	0	83
0552	0	0	0	0	0	0	0	0	84
0602	0	0	0	0	0	0	0	0	85
0702	0	0	0	0	0	0	0	0	85
0524	0	0	0	0	0	0	0	0	85
0604	0	0	0	0	0	0	0	0	85
0704	0	0	0	0	0	0	0	0	86
0804	0	0	0	0	0	0	0	0	86
0904	0	0	0	0	0	0	0	0	88
1004	0	0	0	0	0	0	0	0	90
1104	0	0	0	0	0	0	0	0	90

NOT AVAILABLE

**Working conditions**

Sound power on the basis of measurements made in compliance with ISO 9614.  
 Sound power level in heating, indoors.

FULL LOAD SOUND LEVEL

NX-CN /K

SOUND POWER LEVEL IN HEATING									
SIZE	Octave band [Hz]								Total sound level dB(A)
	63	125	250	500	1000	2000	4000	8000	
	Sound power level dB								
0072	0	0	0	0	0	0	0	0	83
0092	0	0	0	0	0	0	0	0	88
0102	0	0	0	0	0	0	0	0	78
0122	0	0	0	0	0	0	0	0	79
0152	0	0	0	0	0	0	0	0	88
0182	0	0	0	0	0	0	0	0	85
0202	0	0	0	0	0	0	0	0	86
0232	0	0	0	0	0	0	0	0	87
0272	0	0	0	0	0	0	0	0	83
0302	0	0	0	0	0	0	0	0	87
0352	0	0	0	0	0	0	0	0	89
0402	0	0	0	0	0	0	0	0	84
0452	0	0	0	0	0	0	0	0	85
0502	0	0	0	0	0	0	0	0	91
0552	0	0	0	0	0	0	0	0	94
0602	0	0	0	0	0	0	0	0	88
0702	0	0	0	0	0	0	0	0	92
0524	0	0	0	0	0	0	0	0	92
0604	0	0	0	0	0	0	0	0	87
0704	0	0	0	0	0	0	0	0	94
0804	0	0	0	0	0	0	0	0	94
0904	0	0	0	0	0	0	0	0	88
1004	0	0	0	0	0	0	0	0	90
1104	0	0	0	0	0	0	0	0	90

NOT AVAILABLE

**Working conditions**

Sound power on the basis of measurements made in compliance with ISO 9614.  
 Sound power level in heating, outdoors.

**FULL LOAD SOUND LEVEL**

**NX-CN /SL-K**

<b>SOUND POWER LEVEL IN COOLING</b>									
<b>SIZE</b>	<b>Octave band [Hz]</b>								<b>Total sound level dB(A)</b>
	<b>63</b>	<b>125</b>	<b>250</b>	<b>500</b>	<b>1000</b>	<b>2000</b>	<b>4000</b>	<b>8000</b>	
	<b>Sound power level dB</b>								
<b>0072</b>	61	60	62	64	64	60	54	44	<b>68</b>
<b>0092</b>	64	63	64	67	67	62	56	47	<b>70</b>
<b>0102</b>	65	64	66	68	68	63	58	48	<b>72</b>
<b>0122</b>	67	65	67	70	70	65	59	49	<b>73</b>
<b>0152</b>	74	69	70	73	74	67	60	51	<b>76</b>
<b>0182</b>	72	66	67	70	72	64	57	48	<b>74</b>
<b>0202</b>	74	68	69	72	74	66	59	50	<b>76</b>
<b>0232</b>	75	69	70	73	75	67	60	51	<b>77</b>
<b>0272</b>	78	73	74	77	78	71	64	55	<b>81</b>
<b>0302</b>	62	69	68	71	69	67	58	49	<b>74</b>
<b>0352</b>	64	71	70	73	71	69	60	51	<b>76</b>
<b>0402</b>	68	74	73	77	74	73	63	55	<b>79</b>
<b>0452</b>	64	70	70	73	70	69	59	51	<b>75</b>
<b>0502</b>	69	75	75	78	76	74	65	56	<b>80</b>
<b>0552</b>	71	77	76	79	77	75	66	57	<b>82</b>
<b>0602</b>	81	76	77	80	81	74	67	58	<b>84</b>
<b>0702</b>	84	79	80	83	84	77	70	61	<b>86</b>
<b>0524</b>	70	76	75	79	76	75	65	57	<b>81</b>
<b>0604</b>	71	77	77	80	78	76	66	58	<b>82</b>
<b>0704</b>	67	74	73	76	74	72	63	54	<b>79</b>
<b>0804</b>	69	75	75	78	75	74	64	56	<b>80</b>
<b>0904</b>	74	80	79	83	80	79	69	61	<b>85</b>
<b>1004</b>	74	81	80	83	81	79	70	61	<b>86</b>

**Working conditions**

Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°C; Source (side) heat exchanger air (in) 35,0°C.

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

Sound power level in cooling, indoors.



FULL LOAD SOUND LEVEL

NX-CN /SL-K

SOUND POWER LEVEL IN HEATING									
SIZE	Octave band [Hz]								Total sound level dB(A)
	63	125	250	500	1000	2000	4000	8000	
	Sound power level dB								
0072	0	0	0	0	0	0	0	0	60
0092	0	0	0	0	0	0	0	0	61
0102	0	0	0	0	0	0	0	0	59
0122	0	0	0	0	0	0	0	0	60
0152	0	0	0	0	0	0	0	0	73
0182	0	0	0	0	0	0	0	0	72
0202	0	0	0	0	0	0	0	0	74
0232	0	0	0	0	0	0	0	0	73
0272	0	0	0	0	0	0	0	0	75
0302	0	0	0	0	0	0	0	0	72
0352	0	0	0	0	0	0	0	0	71
0402	0	0	0	0	0	0	0	0	76
0452	0	0	0	0	0	0	0	0	77
0502	0	0	0	0	0	0	0	0	76
0552	0	0	0	0	0	0	0	0	76
0602	0	0	0	0	0	0	0	0	81
0702	0	0	0	0	0	0	0	0	80
0524	0	0	0	0	0	0	0	0	77
0604	0	0	0	0	0	0	0	0	80
0704	0	0	0	0	0	0	0	0	73
0804	0	0	0	0	0	0	0	0	73
0904	0	0	0	0	0	0	0	0	85
1004	0	0	0	0	0	0	0	0	85

NOT AVAILABLE

Working conditions

Sound power on the basis of measurements made in compliance with ISO 9614.  
 Sound power level in heating, indoors.

FULL LOAD SOUND LEVEL

NX-CN /SL-K

SOUND POWER LEVEL IN HEATING									
SIZE	Octave band [Hz]								Total sound level dB(A)
	63	125	250	500	1000	2000	4000	8000	
	Sound power level dB								
0072	0	0	0	0	0	0	0	0	68
0092	0	0	0	0	0	0	0	0	70
0102	0	0	0	0	0	0	0	0	72
0122	0	0	0	0	0	0	0	0	73
0152	0	0	0	0	0	0	0	0	76
0182	0	0	0	0	0	0	0	0	74
0202	0	0	0	0	0	0	0	0	76
0232	0	0	0	0	0	0	0	0	77
0272	0	0	0	0	0	0	0	0	81
0302	0	0	0	0	0	0	0	0	74
0352	0	0	0	0	0	0	0	0	76
0402	0	0	0	0	0	0	0	0	79
0452	0	0	0	0	0	0	0	0	75
0502	0	0	0	0	0	0	0	0	80
0552	0	0	0	0	0	0	0	0	82
0602	0	0	0	0	0	0	0	0	84
0702	0	0	0	0	0	0	0	0	86
0524	0	0	0	0	0	0	0	0	81
0604	0	0	0	0	0	0	0	0	82
0704	0	0	0	0	0	0	0	0	79
0804	0	0	0	0	0	0	0	0	80
0904	0	0	0	0	0	0	0	0	85
1004	0	0	0	0	0	0	0	0	86

NOT AVAILABLE

Working conditions

Sound power on the basis of measurements made in compliance with ISO 9614.  
 Sound power level in heating, outdoors.

**FULL LOAD SOUND LEVEL**

**NX-CN /A**

<b>SOUND POWER LEVEL IN COOLING</b>									
<b>SIZE</b>	<b>Octave band [Hz]</b>								<b>Total sound level dB(A)</b>
	<b>63</b>	<b>125</b>	<b>250</b>	<b>500</b>	<b>1000</b>	<b>2000</b>	<b>4000</b>	<b>8000</b>	
	<b>Sound power level dB</b>								
<b>0072</b>	68	67	68	71	71	66	60	51	<b>74</b>
<b>0092</b>	72	70	72	75	75	70	64	54	<b>78</b>
<b>0102</b>	77	76	78	80	81	76	70	60	<b>84</b>
<b>0122</b>	80	79	80	83	83	78	72	63	<b>86</b>
<b>0152</b>	80	75	76	79	80	73	66	57	<b>83</b>
<b>0182</b>	78	73	74	77	78	71	64	55	<b>81</b>
<b>0202</b>	80	74	75	79	80	72	65	56	<b>82</b>
<b>0232</b>	81	76	77	80	81	74	67	58	<b>84</b>
<b>0272</b>	84	79	80	83	84	77	70	61	<b>87</b>
<b>0302</b>	70	76	76	79	77	75	65	57	<b>81</b>
<b>0352</b>	71	77	77	80	78	76	67	58	<b>82</b>
<b>0402</b>	74	80	79	83	80	79	69	61	<b>85</b>
<b>0452</b>	72	78	77	81	78	77	67	59	<b>83</b>
<b>0502</b>	73	79	79	82	79	78	68	60	<b>84</b>
<b>0552</b>	75	81	80	83	81	79	70	61	<b>86</b>
<b>0602</b>	89	83	84	87	89	81	74	65	<b>91</b>
<b>0702</b>	91	85	86	89	91	83	76	67	<b>93</b>
<b>0524</b>	73	79	78	81	79	77	68	59	<b>84</b>
<b>0604</b>	76	82	81	85	82	81	71	63	<b>87</b>
<b>0704</b>	74	81	80	83	81	79	70	61	<b>86</b>
<b>0804</b>	74	81	80	83	81	79	70	61	<b>86</b>
<b>0904</b>	76	83	82	85	83	81	72	63	<b>88</b>
<b>1004</b>	76	83	82	85	83	81	72	63	<b>88</b>

**Working conditions**

Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°C; Source (side) heat exchanger air (in) 35,0°C.

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

Sound power level in cooling, indoors.

FULL LOAD SOUND LEVEL

NX-CN /A

SOUND POWER LEVEL IN HEATING									
SIZE	Octave band [Hz]								Total sound level dB(A)
	63	125	250	500	1000	2000	4000	8000	
	Sound power level dB								
0072	0	0	0	0	0	0	0	0	66
0092	0	0	0	0	0	0	0	0	68
0102	0	0	0	0	0	0	0	0	70
0122	0	0	0	0	0	0	0	0	66
0152	0	0	0	0	0	0	0	0	76
0182	0	0	0	0	0	0	0	0	79
0202	0	0	0	0	0	0	0	0	80
0232	0	0	0	0	0	0	0	0	79
0272	0	0	0	0	0	0	0	0	76
0302	0	0	0	0	0	0	0	0	79
0352	0	0	0	0	0	0	0	0	78
0402	0	0	0	0	0	0	0	0	79
0452	0	0	0	0	0	0	0	0	79
0502	0	0	0	0	0	0	0	0	80
0552	0	0	0	0	0	0	0	0	81
0602	0	0	0	0	0	0	0	0	82
0702	0	0	0	0	0	0	0	0	85
0524	0	0	0	0	0	0	0	0	81
0604	0	0	0	0	0	0	0	0	85
0704	0	0	0	0	0	0	0	0	80
0804	0	0	0	0	0	0	0	0	81
0904	0	0	0	0	0	0	0	0	88
1004	0	0	0	0	0	0	0	0	88

NOT AVAILABLE

Working conditions

Sound power on the basis of measurements made in compliance with ISO 9614.  
 Sound power level in heating, indoors.

FULL LOAD SOUND LEVEL

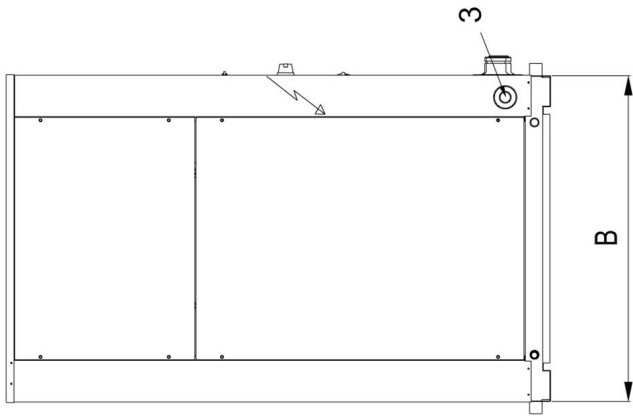
NX-CN /A

SOUND POWER LEVEL IN HEATING									
SIZE	Octave band [Hz]								Total sound level dB(A)
	63	125	250	500	1000	2000	4000	8000	
	Sound power level dB								
0072	0	0	0	0	0	0	0	0	74
0092	0	0	0	0	0	0	0	0	78
0102	0	0	0	0	0	0	0	0	84
0122	0	0	0	0	0	0	0	0	86
0152	0	0	0	0	0	0	0	0	83
0182	0	0	0	0	0	0	0	0	81
0202	0	0	0	0	0	0	0	0	82
0232	0	0	0	0	0	0	0	0	84
0272	0	0	0	0	0	0	0	0	87
0302	0	0	0	0	0	0	0	0	81
0352	0	0	0	0	0	0	0	0	82
0402	0	0	0	0	0	0	0	0	85
0452	0	0	0	0	0	0	0	0	83
0502	0	0	0	0	0	0	0	0	84
0552	0	0	0	0	0	0	0	0	86
0602	0	0	0	0	0	0	0	0	91
0702	0	0	0	0	0	0	0	0	93
0524	0	0	0	0	0	0	0	0	84
0604	0	0	0	0	0	0	0	0	87
0704	0	0	0	0	0	0	0	0	86
0804	0	0	0	0	0	0	0	0	86
0904	0	0	0	0	0	0	0	0	88
1004	0	0	0	0	0	0	0	0	88

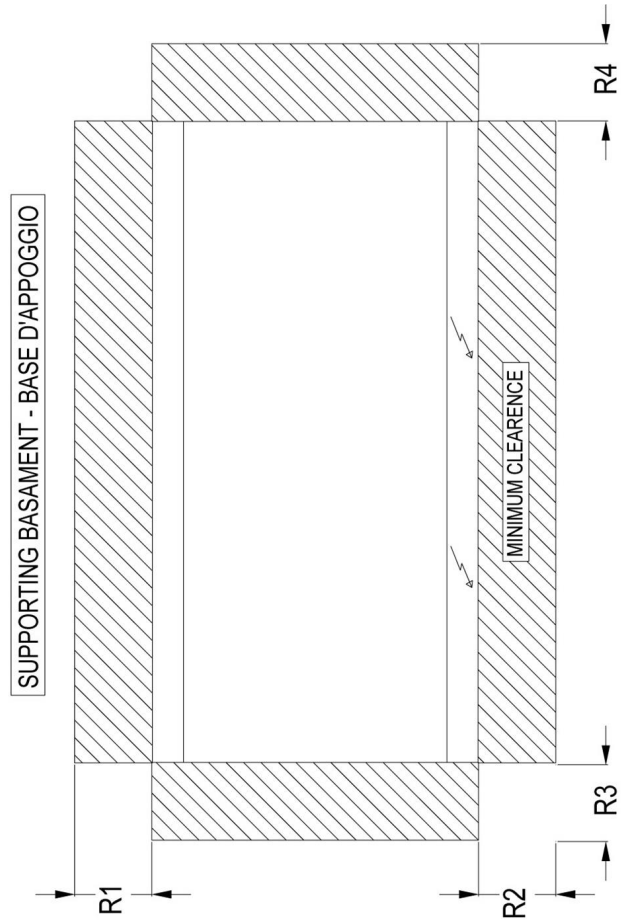
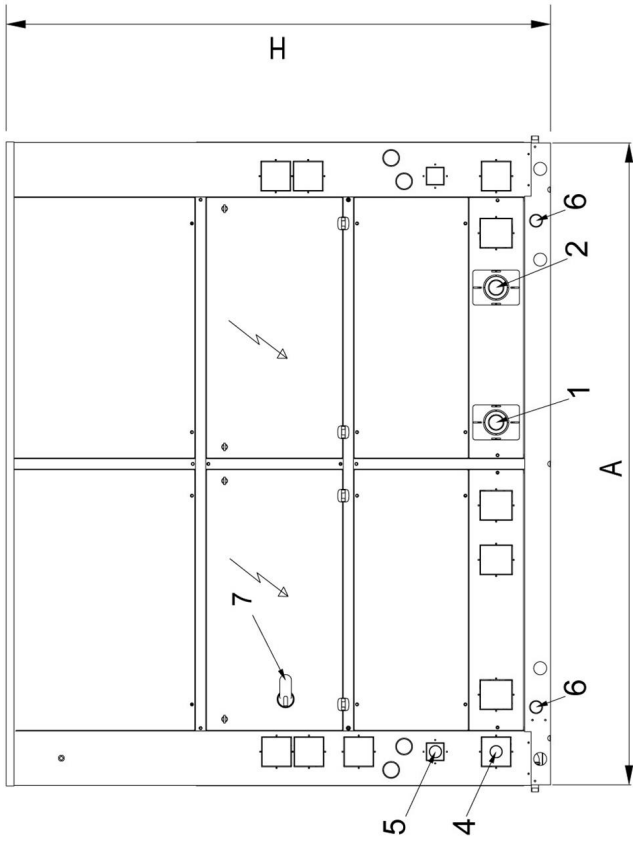
NOT AVAILABLE

Working conditions

Sound power on the basis of measurements made in compliance with ISO 9614.  
 Sound power level in heating, outdoors.



- 1 EVAPORATOR WATER INLET  
ENTRATA ACQUA EVAPORATORE
- 2 EVAPORATOR WATER OUTLET  
USCITA ACQUA EVAPORATORE
- 3 POWER INLET  
INGRESSO LINEA ELETTRICA
- 4 DESUPERHEATER WATER INLET  
ENTRATA ACQUA  
DESURRISCALTATORE
- 5 DESUPERHEATER WATER OUTLET  
USCITA ACQUA  
DESURRISCALTATORE
- 6 LIFTING POINTS  
PUNTI DI SOLLEVAMENTO
- 7 MAIN ISOLATOR  
SEZIONATORE PRINCIPALE



REMARKS: For installation purposes, please refer to the documentation sent after the purchase contract. This technical data should be considered as indicative. Mitsubishi Electric Hydraulics & IT Cooling Systems S.p.A. may modify them at any moment. Data valid for standard units without any additional option.

**DIMENSIONAL DRAWINGS**

**NX-CN 0072 - 1104**

[ SI System ]

SIZE	DIMENSIONS AND WEIGHTS				CLEARANCE				HEAT EXCHANGER USER SIDE		HEAT RECOVERY EX. USER SIDE	
	A	B	H	WEIGHT	R1	R2	R3	R4	IN/OUT		IN/OUT	
	[mm]	[mm]	[mm]	[kg]	[mm]	[mm]	[mm]	[mm]	TYPE	Ø	TYPE	Ø
NX-CN /K /0072	1500	900	1910	430	1000	1000	1000	1000	B1	1"1/2	-	-
NX-CN /K /0092	1500	900	1910	440	1000	1000	1000	1000	B1	1"1/2	-	-
NX-CN /K /0102	1500	900	1910	460	1000	1000	1000	1000	B1	1"1/2	-	-
NX-CN /K /0122	1500	900	1910	470	1000	1000	1000	1000	B1	1"1/2	-	-
NX-CN /K /0152	2480	1100	2100	810	1000	1000	1000	1000	A	2"	-	-
NX-CN /K /0182	2480	1100	2100	840	1000	1000	1000	1000	A	2"	-	-
NX-CN /K /0202	2480	1100	2100	840	1000	1000	1000	1000	A	2"	-	-
NX-CN /K /0232	2480	1100	2100	860	1000	1000	1000	1000	A	2"	-	-
NX-CN /K /0272	2480	1100	2100	920	1000	1000	1000	1000	A	2"	-	-
NX-CN /K /0302	2480	1100	2100	960	1000	1000	1000	1000	A	2"	-	-
NX-CN /K /0352	2480	1100	2100	1020	1000	1000	1000	1000	A	2"	-	-
NX-CN /K /0402	2980	1260	2100	1260	1000	1000	1000	1000	A	2"	-	-
NX-CN /K /0452	2980	1260	2100	1280	1000	1000	1000	1000	A	2"	-	-
NX-CN /K /0502	3970	1260	2100	1510	1000	1000	1000	1000	A	2"1/2	-	-
NX-CN /K /0552	3970	1260	2100	1530	1000	1000	1000	1000	A	2"1/2	-	-
NX-CN /K /0602	3970	1260	2100	1610	1000	1000	1000	1000	A	2"1/2	-	-
NX-CN /K /0702	4670	1260	2100	1820	1000	1000	1000	1000	A	2"1/2	-	-
NX-CN /D /K /0072	1500	900	1910	430	1000	1000	1000	1000	B1	1"1/2	B1	1"
NX-CN /D /K /0092	1500	900	1910	440	1000	1000	1000	1000	B1	1"1/2	B1	1"
NX-CN /D /K /0102	1500	900	1910	460	1000	1000	1000	1000	B1	1"1/2	B1	1"
NX-CN /D /K /0122	1500	900	1910	470	1000	1000	1000	1000	B1	1"1/2	B1	1"
NX-CN /D /K /0152	2480	1100	2100	810	1000	1000	1000	1000	A	2"	B1	1"1/4
NX-CN /D /K /0182	2480	1100	2100	840	1000	1000	1000	1000	A	2"	B1	1"1/4
NX-CN /D /K /0202	2480	1100	2100	840	1000	1000	1000	1000	A	2"	B1	1"1/4
NX-CN /D /K /0232	2480	1100	2100	860	1000	1000	1000	1000	A	2"	B1	1"1/4
NX-CN /D /K /0272	2480	1100	2100	920	1000	1000	1000	1000	A	2"	B1	1"1/4
NX-CN /D /K /0302	2480	1100	2100	960	1000	1000	1000	1000	A	2"	B1	1"1/4
NX-CN /D /K /0352	2480	1100	2100	1020	1000	1000	1000	1000	A	2"	B1	1"1/4
NX-CN /D /K /0402	2980	1260	2100	1260	1000	1000	1000	1000	A	2"	B1	1"1/4
NX-CN /D /K /0452	2980	1260	2100	1280	1000	1000	1000	1000	A	2"	B1	1"1/4
NX-CN /D /K /0502	3970	1260	2100	1510	1000	1000	1000	1000	A	2"1/2	B1	1"1/2
NX-CN /D /K /0552	3970	1260	2100	1530	1000	1000	1000	1000	A	2"1/2	B1	1"1/2
NX-CN /D /K /0602	3970	1260	2100	1610	1000	1000	1000	1000	A	2"1/2	B1	1"1/2
NX-CN /D /K /0702	4670	1260	2100	1820	1000	1000	1000	1000	A	2"1/2	B1	1"1/2
NX-CN /SL-K /0072	1500	900	1910	480	1000	1000	1000	1000	B1	1"1/2	-	-
NX-CN /SL-K /0092	1500	900	1910	490	1000	1000	1000	1000	B1	1"1/2	-	-
NX-CN /SL-K /0102	2480	1100	2100	820	1000	1000	1000	1000	A	2"	-	-
NX-CN /SL-K /0122	2480	1100	2100	830	1000	1000	1000	1000	A	2"	-	-
NX-CN /SL-K /0152	2480	1100	2100	860	1000	1000	1000	1000	A	2"	-	-
NX-CN /SL-K /0182	2480	1100	2100	920	1000	1000	1000	1000	A	2"	-	-
NX-CN /SL-K /0202	2480	1100	2100	920	1000	1000	1000	1000	A	2"	-	-
NX-CN /SL-K /0232	2480	1100	2100	940	1000	1000	1000	1000	A	2"	-	-
NX-CN /SL-K /0272	2980	1260	2100	1090	1000	1000	1000	1000	A	2"	-	-
NX-CN /SL-K /0302	2980	1260	2100	1160	1000	1000	1000	1000	A	2"	-	-
NX-CN /SL-K /0352	2980	1260	2100	1230	1000	1000	1000	1000	A	2"	-	-
NX-CN /SL-K /0402	2980	1260	2100	1320	1000	1000	1000	1000	A	2"	-	-
NX-CN /SL-K /0452	3970	1260	2100	1610	1000	1000	1000	1000	A	2"1/2	-	-
NX-CN /SL-K /0502	3970	1260	2100	1630	1000	1000	1000	1000	A	2"1/2	-	-
NX-CN /SL-K /0552	3970	1260	2100	1650	1000	1000	1000	1000	A	2"1/2	-	-
NX-CN /SL-K /0602	4670	1260	2100	1880	1000	1000	1000	1000	A	2"1/2	-	-
NX-CN /SL-K /0702	5670	1260	2100	2120	1000	1000	1000	1000	A	3"	-	-
NX-CN /D /SL-K /0072	1500	900	1910	480	1000	1000	1000	1000	B1	1"1/2	B1	1"

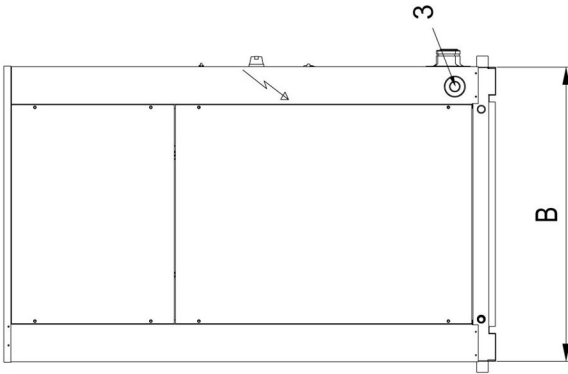
**DIMENSIONAL DRAWINGS**

**NX-CN 0072 - 1104**

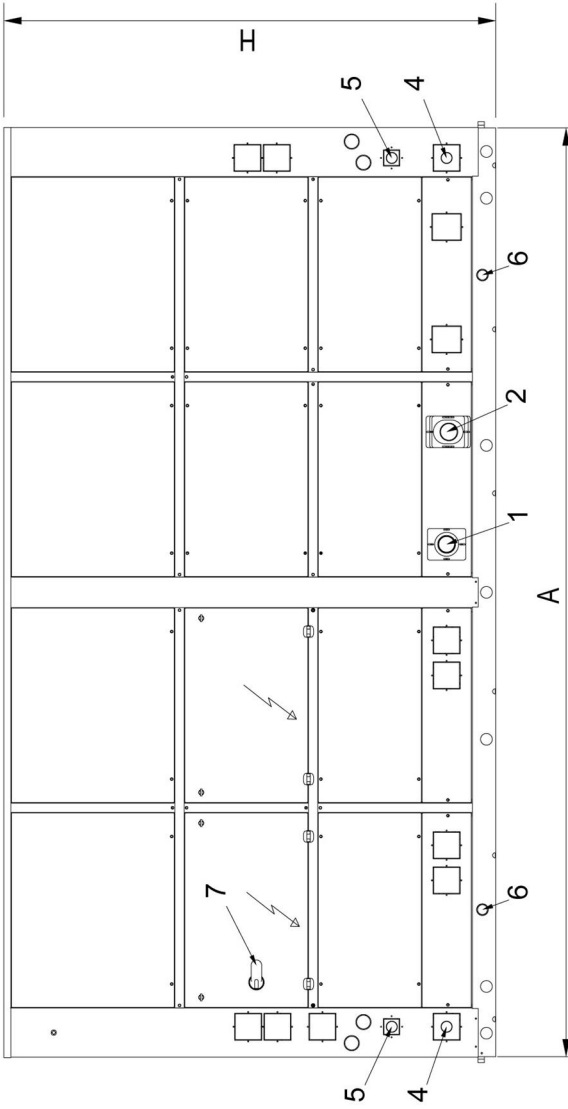
[ SI System ]

SIZE	DIMENSIONS AND WEIGHTS				CLEARANCE				HEAT EXCHANGER USER SIDE		HEAT RECOVERY EX. USER SIDE	
	A	B	H	WEIGHT	R1	R2	R3	R4	IN/OUT		IN/OUT	
	[mm]	[mm]	[mm]	[kg]	[mm]	[mm]	[mm]	[mm]	TYPE	Ø	TYPE	Ø
NX-CN /D /SL-K /0092	1500	900	1910	490	1000	1000	1000	1000	B1	1"1/2	B1	1"
NX-CN /D /SL-K /0102	2480	1100	2100	820	1000	1000	1000	1000	A	2"	B1	1"1/4
NX-CN /D /SL-K /0122	2480	1100	2100	830	1000	1000	1000	1000	A	2"	B1	1"1/4
NX-CN /D /SL-K /0152	2480	1100	2100	860	1000	1000	1000	1000	A	2"	B1	1"1/4
NX-CN /D /SL-K /0182	2480	1100	2100	920	1000	1000	1000	1000	A	2"	B1	1"1/4
NX-CN /D /SL-K /0202	2480	1100	2100	920	1000	1000	1000	1000	A	2"	B1	1"1/4
NX-CN /D /SL-K /0232	2480	1100	2100	940	1000	1000	1000	1000	A	2"	B1	1"1/4
NX-CN /D /SL-K /0272	2980	1260	2100	1090	1000	1000	1000	1000	A	2"	B1	1"1/4
NX-CN /D /SL-K /0302	2980	1260	2100	1160	1000	1000	1000	1000	A	2"	B1	1"1/4
NX-CN /D /SL-K /0352	2980	1260	2100	1230	1000	1000	1000	1000	A	2"	B1	1"1/4
NX-CN /D /SL-K /0402	2980	1260	2100	1320	1000	1000	1000	1000	A	2"	B1	1"1/4
NX-CN /D /SL-K /0452	3970	1260	2100	1610	1000	1000	1000	1000	A	2"1/2	B1	1"1/2
NX-CN /D /SL-K /0502	3970	1260	2100	1630	1000	1000	1000	1000	A	2"1/2	B1	1"1/2
NX-CN /D /SL-K /0552	3970	1260	2100	1650	1000	1000	1000	1000	A	2"1/2	B1	1"1/2
NX-CN /D /SL-K /0602	4670	1260	2100	1880	1000	1000	1000	1000	A	2"1/2	B1	1"1/2
NX-CN /D /SL-K /0702	5670	1260	2100	2120	1000	1000	1000	1000	A	3"	B1	1"1/2
NX-CN /A /0072	1500	900	1910	480	1000	1000	1000	1000	B1	1"1/2	-	-
NX-CN /A /0092	1500	900	1910	490	1000	1000	1000	1000	B1	1"1/2	-	-
NX-CN /A /0102	2480	1100	2100	820	1000	1000	1000	1000	A	2"	-	-
NX-CN /A /0122	2480	1100	2100	830	1000	1000	1000	1000	A	2"	-	-
NX-CN /A /0152	2480	1100	2100	860	1000	1000	1000	1000	A	2"	-	-
NX-CN /A /0182	2480	1100	2100	920	1000	1000	1000	1000	A	2"	-	-
NX-CN /A /0202	2480	1100	2100	920	1000	1000	1000	1000	A	2"	-	-
NX-CN /A /0232	2480	1100	2100	940	1000	1000	1000	1000	A	2"	-	-
NX-CN /A /0272	2980	1260	2100	1090	1000	1000	1000	1000	A	2"	-	-
NX-CN /A /0302	2980	1260	2100	1160	1000	1000	1000	1000	A	2"	-	-
NX-CN /A /0352	2980	1260	2100	1230	1000	1000	1000	1000	A	2"	-	-
NX-CN /A /0402	2980	1260	2100	1320	1000	1000	1000	1000	A	2"	-	-
NX-CN /A /0452	3970	1260	2100	1610	1000	1000	1000	1000	A	2"1/2	-	-
NX-CN /A /0502	3970	1260	2100	1630	1000	1000	1000	1000	A	2"1/2	-	-
NX-CN /A /0552	3970	1260	2100	1650	1000	1000	1000	1000	A	2"1/2	-	-
NX-CN /A /0602	4670	1260	2100	1880	1000	1000	1000	1000	A	2"1/2	-	-
NX-CN /A /0702	5670	1260	2100	2120	1000	1000	1000	1000	A	3"	-	-
NX-CN /D /A /0072	1500	900	1910	480	1000	1000	1000	1000	B1	1"1/2	B1	1"
NX-CN /D /A /0092	1500	900	1910	490	1000	1000	1000	1000	B1	1"1/2	B1	1"
NX-CN /D /A /0102	2480	1100	2100	820	1000	1000	1000	1000	A	2"	B1	1"1/4
NX-CN /D /A /0122	2480	1100	2100	830	1000	1000	1000	1000	A	2"	B1	1"1/4
NX-CN /D /A /0152	2480	1100	2100	860	1000	1000	1000	1000	A	2"	B1	1"1/4
NX-CN /D /A /0182	2480	1100	2100	920	1000	1000	1000	1000	A	2"	B1	1"1/4
NX-CN /D /A /0202	2480	1100	2100	920	1000	1000	1000	1000	A	2"	B1	1"1/4
NX-CN /D /A /0232	2480	1100	2100	940	1000	1000	1000	1000	A	2"	B1	1"1/4
NX-CN /D /A /0272	2980	1260	2100	1090	1000	1000	1000	1000	A	2"	B1	1"1/4
NX-CN /D /A /0302	2980	1260	2100	1160	1000	1000	1000	1000	A	2"	B1	1"1/4
NX-CN /D /A /0352	2980	1260	2100	1230	1000	1000	1000	1000	A	2"	B1	1"1/4
NX-CN /D /A /0402	2980	1260	2100	1320	1000	1000	1000	1000	A	2"	B1	1"1/4
NX-CN /D /A /0452	3970	1260	2100	1610	1000	1000	1000	1000	A	2"1/2	B1	1"1/2
NX-CN /D /A /0502	3970	1260	2100	1630	1000	1000	1000	1000	A	2"1/2	B1	1"1/2
NX-CN /D /A /0552	3970	1260	2100	1650	1000	1000	1000	1000	A	2"1/2	B1	1"1/2
NX-CN /D /A /0602	4670	1260	2100	1880	1000	1000	1000	1000	A	2"1/2	B1	1"1/2
NX-CN /D /A /0702	5670	1260	2100	2120	1000	1000	1000	1000	A	3"	B1	1"1/2

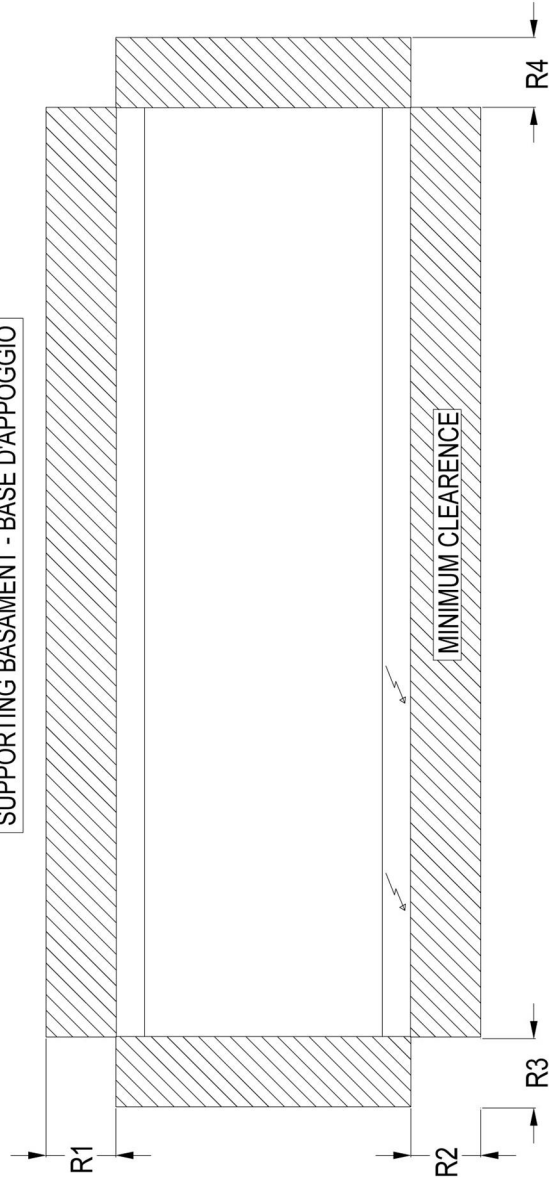




- 1 EVAPORATOR WATER INLET  
ENTRATA ACQUA EVAPORATORE
- 2 EVAPORATOR WATER OUTLET  
USCITA ACQUA EVAPORATORE
- 3 POWER INLET  
INGRESSO LINEA ELETTRICA
- 4 DESUPERHEATER WATER INLET  
ENTRATA ACQUA DESURRISCALITATORE
- 5 DESUPERHEATER WATER OUTLET  
USCITA ACQUA DESURRISCALITATORE
- 6 LIFTING POINTS  
PUNTI DI SOLLEVAMENTO
- 7 MAIN ISOLATOR  
SEZIONATORE PRINCIPALE



SUPPORTING BASAMENT - BASE D'APPOGGIO



REMARKS: For installation purposes, please refer to the documentation sent after the purchase contract. This technical data should be considered as indicative. Mitsubishi Electric Hydraulics & IT Cooling Systems S.p.A. may modify them at any moment. Data valid for standard units without any additional option.

**DIMENSIONAL DRAWINGS**

**NX-CN 0072 - 1104**

[ SI System ]

SIZE	DIMENSIONS AND WEIGHTS				CLEARANCE				HEAT EXCHANGER USER SIDE		HEAT RECOVERY EX. USER SIDE	
	A	B	H	WEIGHT	R1	R2	R3	R4	IN/OUT		IN/OUT	
	[mm]	[mm]	[mm]	[kg]	[mm]	[mm]	[mm]	[mm]	TYPE	Ø	TYPE	Ø
NX-CN /K /0524	3970	1260	2100	1490	1000	1000	1000	1000	A	2"1/2	-	-
NX-CN /K /0604	3970	1260	2100	1590	1000	1000	1000	1000	A	2"1/2	-	-
NX-CN /K /0704	4670	1260	2100	1910	1000	1000	1000	1000	A	2"1/2	-	-
NX-CN /K /0804	4670	1260	2100	2060	1000	1000	1000	1000	A	2"1/2	-	-
NX-CN /K /0904	5670	1260	2100	2430	1000	1000	1000	1000	A	3"	-	-
NX-CN /K /1004	5670	1260	2100	2490	1000	1000	1000	1000	A	3"	-	-
NX-CN /K /1104	5670	1260	2100	2540	1000	1000	1000	1000	A	3"	-	-
NX-CN /D /K /0524	3970	1260	2100	1490	1000	1000	1000	1000	A	2"1/2	B1	1"1/2
NX-CN /D /K /0604	3970	1260	2100	1590	1000	1000	1000	1000	A	2"1/2	B1	1"1/2
NX-CN /D /K /0704	4670	1260	2100	1910	1000	1000	1000	1000	A	2"1/2	B1	1"1/2
NX-CN /D /K /0804	4670	1260	2100	2060	1000	1000	1000	1000	A	2"1/2	B1	1"1/2
NX-CN /D /K /0904	5670	1260	2100	2430	1000	1000	1000	1000	A	3"	B1	1"1/2
NX-CN /D /K /1004	5670	1260	2100	2490	1000	1000	1000	1000	A	3"	B1	1"1/2
NX-CN /D /K /1104	5670	1260	2100	2540	1000	1000	1000	1000	A	3"	B1	1"1/2
NX-CN /SL-K /0524	3970	1260	2100	1610	1000	1000	1000	1000	A	2"1/2	-	-
NX-CN /SL-K /0604	4670	1260	2100	1840	1000	1000	1000	1000	A	2"1/2	-	-
NX-CN /SL-K /0704	5670	1260	2100	2310	1000	1000	1000	1000	A	3"	-	-
NX-CN /SL-K /0804	5670	1260	2100	2460	1000	1000	1000	1000	A	3"	-	-
NX-CN /SL-K /0904	5670	1260	2100	2550	1000	1000	1000	1000	A	3"	-	-
NX-CN /SL-K /1004	5670	1260	2100	2610	1000	1000	1000	1000	A	3"	-	-
NX-CN /D /SL-K /0524	3970	1260	2100	1610	1000	1000	1000	1000	A	2"1/2	B1	1"1/2
NX-CN /D /SL-K /0604	4670	1260	2100	1840	1000	1000	1000	1000	A	2"1/2	B1	1"1/2
NX-CN /D /SL-K /0704	5670	1260	2100	2310	1000	1000	1000	1000	A	3"	B1	1"1/2
NX-CN /D /SL-K /0804	5670	1260	2100	2460	1000	1000	1000	1000	A	3"	B1	1"1/2
NX-CN /D /SL-K /0904	5670	1260	2100	2550	1000	1000	1000	1000	A	3"	B1	1"1/2
NX-CN /D /SL-K /1004	5670	1260	2100	2610	1000	1000	1000	1000	A	3"	B1	1"1/2
NX-CN /A /0524	3970	1260	2100	1610	1000	1000	1000	1000	A	2"1/2	-	-
NX-CN /A /0604	4670	1260	2100	1840	1000	1000	1000	1000	A	2"1/2	-	-
NX-CN /A /0704	5670	1260	2100	2310	1000	1000	1000	1000	A	3"	-	-
NX-CN /A /0804	5670	1260	2100	2460	1000	1000	1000	1000	A	3"	-	-
NX-CN /A /0904	5670	1260	2100	2550	1000	1000	1000	1000	A	3"	-	-
NX-CN /A /1004	5670	1260	2100	2610	1000	1000	1000	1000	A	3"	-	-
NX-CN /D /A /0524	3970	1260	2100	1610	1000	1000	1000	1000	A	2"1/2	B1	1"1/2
NX-CN /D /A /0604	4670	1260	2100	1840	1000	1000	1000	1000	A	2"1/2	B1	1"1/2
NX-CN /D /A /0704	5670	1260	2100	2310	1000	1000	1000	1000	A	3"	B1	1"1/2
NX-CN /D /A /0804	5670	1260	2100	2460	1000	1000	1000	1000	A	3"	B1	1"1/2
NX-CN /D /A /0904	5670	1260	2100	2550	1000	1000	1000	1000	A	3"	B1	1"1/2
NX-CN /D /A /1004	5670	1260	2100	2610	1000	1000	1000	1000	A	3"	B1	1"1/2

## DIMENSIONAL DRAWINGS

### LEGEND OF PIPE CONNECTIONS



**TYPE = A**  
Grooved pipe



**TYPE = B**  
Male threaded pipe

NOMINAL PIPE SIZE	PIPE OUTSIDE DIAMETER
ø inches	ø mm
¾	26,7
1	33,7
1 ¼	42,4
1 ½	48,3
2	60,3
2 ½	76,1
3	88,9
3 ½	101,6

NOMINAL PIPE SIZE	PIPE OUTSIDE DIAMETER
ø inches	ø mm
4	114,3
4 ½	127,0
5	139,7
6	168,3
8	219,1
10	273,0
12	323,9
14	355,6

#### UNI ISO 228/13

Pipe threads where pressure-tight joints are not made on the threads - Designation, dimensions and tolerances

##### Used terminology:

G: Pipe threads where pressure-tight joints are not made on the threads

A: Close tolerance class for external pipe threads where pressure-tight joints are not made on the threads

B: Wider tolerance class for external pipe threads where pressure-tight joints are not made on the threads

Internal threads: G letter followed by thread mark (only tolerance class)

External threads: G letter followed by thread mark and by A letter for A class external threads or by B letter for B class external threads.

#### UNI EN 10226-1

Pipe threads where pressure-tight joints are made on the threads - Designation, dimensions and tolerances

##### Used terminology:

Rp: Internal cylindrical threads where pressure-tight joints are made on the threads

Rc: Internal conical threads where pressure-tight joints are made on the threads

R: External conical threads where pressure-tight joints are made on the threads

Internal cylindrical threads: R letter followed by p letter

Internal conical threads: R letter followed by c letter

External conical threads: R letter

DESIGNATION	DESCRIPTION
UNI EN 10226-1 - Rp 1 1/2	Internal cylindrical threads where pressure-tight joints are made on the threads, defined by standard UNI ISO 7/1 Conventional ø 1 1/2"
UNI EN 10226-1 - Rp 2 1/2	Internal cylindrical threads where pressure-tight joints are made on the threads, defined by standard UNI ISO 7/1 Conventional ø 2 1/2"
UNI EN 10226-1 - Rp 3	Internal cylindrical threads where pressure-tight joints are made on the threads, defined by standard UNI ISO 7/1 Conventional ø 3"
UNI EN 10226-1 - R 3	External conical threads where pressure-tight joints are made on the threads, defined by standard UNI ISO 7/1 Conventional ø 3"
UNI ISO 228/1 - G 4 B	Internal cylindrical threads where pressure-tight joints are not made on the threads, defined by standard UNI ISO 228/1 Tolerance class B for external thread Conventional ø 4"
DN 80 PN 16	Flange Nominal Diameter: 80 mm Nominal Pressure: 16 bar

#### NOTE:

Conventional diameter value [in inches] identifies short thread designation, based upon the relative standard.

All relative values are defined by standards.

As example, here below some values:

	UNI EN 10226-1	UNI ISO 228/1
Conventional ø	1"	1"
Pitch	2.309 mm	2.309 mm
External ø	33.249 mm	33.249 mm
Core ø	30.291 mm	30.291 mm
Thread height	1.479 mm	1.479 mm

## 13.1 HYDRONIC GROUP

### 13.1 HYDRONIC MODULE

The NX-C(N) units can be fitted with the hydronic module that includes the main water circuit components, thus optimizing water circuit and electrical installation space, times and costs.

The built-in hydronic module is available as option with single or twin in-line pump, for achieving low head or high head, fixed or variable speed.

The hydronic module is available with only terminals, ON/OFF or modulating, to control the activation of external pump(s).

For the hydronic modules with only terminals, the factory-mounted components are:

- terminals for external pumps control (only relays or relays + 0-10V signal)
- paddle flow switch

For the hydronic modules with pumps, the factory-mounted components are:

- 1 or 2 pumps, 2 poles, low head or high head, fixed or variable speed
- paddle flow switch
- Clapet valve to link the impellers of twin type in-line pumps
- purge valve
- safety valve (6 bar) + pressure gauge

The second pump operates in stand-by to the first.

The relative operating hours of the two pumps are balanced. In case the operating pump breaks down, the back-up pump is automatically enabled.

The electrical panel of the unit is protected with fuses and contactors with thermals cut-out.

Suction, volute and discharge of each pump and all the water pipes are covered with an insulation lining in closed-cell reticulated foam in PE, CFC and HCFC-free.

Note: the use of the pumps in SL versions increases the sound power by 1 dB(A).

### 13.1 IN-LINE PUMP SPECIFICATION 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. Three-phase electric motor protected to IP55, insulation class F, suitable for continuous service. "Back pull-out" design, impeller, adapter, and motor can be extracted without disconnecting the pump body from the piping system.



### 13.2 IN-LINE PUMP SPECIFICATION IN SINGLE OR TWIN VERSION AT VARIABLE SPEED

The pumps with 2-pole motors are fitted with permanent-magnet and electronically speed-controlled which have an efficiency that exceeds the IE4 demands, including the energy consumption of the integrated frequency converter. The resulting in energy savings of up to 50% compared to conventional pumps.

Grundfos 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 pumps are equipped with an unbalanced mechanical shaft seal.

The pumps are of the "top-pull-out" design, i.e. the power head (motor, pump head and impeller) can be removed for maintenance or service while the pump housing remains in the pipework.

The twin-head pumps are designed with two parallel power heads. A non-return flap valve in the common discharge port is opened by the flow of the pumped liquid and prevents backflow of liquid into the idle pump head.



### 13.3 SPECIAL PUMPS

For pumps with different configurations, please contact our sales department.

### 13.3 OTHER COMPONENTS

The hydronic kits do not include the following accessories though they are recommended to ensure correct system operation:

- Pressure gauges upline and downline from the unit
- Flexible joints on piping
- On-off valves
- Outlet control thermometer
- Mains filter

### 13.3 MECHANICAL WATER FILTER (optional)

"Y" filter designed and built to trap the impurities in the water circuit. Fitted with stainless steel mesh cartridge and 0.9 mm openings, it can be replaced without removing the valve body from the piping. This accessory is recommended to ensure correct system operation.

### Possible configurations

PUMP GROUP	Versions		
	A	K	SL-K
U - 1 PUMP 2P LH (FIX SPEED)(4736)	X	X	X
U - 1 PUMP 2P HH (FIX SPEED)(4737)	X	X	X
U - 2 PUMPS 2P LH (FIX SPEED)(4741)	X	X	X
U - 2 PUMPS 2P HH (FIX SPEED)(4742)	X	X	X
U - 1 PUMP 2P LH (VAR SPEED)(4747)	X	X	X
U - 2 PUMPS 2P LH (VAR SPEED)(4752)	X	X	X

## HYDRONIC GROUP

### Hydronic kit positioning

	Version	U - 1 PUMP 2P LH (FIX SPEED) (4736)				U - 1 PUMP 2P HH (FIX SPEED) (4737)				U - 2 PUMPS 2P LH (FIX SPEED) (4741)				U - 2 PUMPS 2P HH (FIX SPEED) (4742)			
		extra L [mm]	extra W [mm]	extra H [mm]	extra WGT [kg]	extra L [mm]	extra W [mm]	extra H [mm]	extra WGT [kg]	extra L [mm]	extra W [mm]	extra H [mm]	extra WGT [kg]	extra L [mm]	extra W [mm]	extra H [mm]	extra WGT [kg]
0122	A	/	/	/	32	/	/	/	40	/	/	/	65	n.a.	n.a.	n.a.	n.a.
	K	/	/	/	32	/	/	/	40	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	SL-K	/	/	/	32	/	/	/	40	/	/	/	65	n.a.	n.a.	n.a.	n.a.
0152	A	/	/	/	32	/	/	/	40	/	/	/	65	/	/	/	81
	K	/	/	/	32	/	/	/	40	/	/	/	65	/	/	/	81
	SL-K	/	/	/	32	/	/	/	40	/	/	/	65	/	/	/	81
0182	A	/	/	/	32	/	/	/	40	/	/	/	65	/	/	/	81
	K	/	/	/	32	/	/	/	40	/	/	/	65	/	/	/	81
	SL-K	/	/	/	32	/	/	/	40	/	/	/	65	/	/	/	81
0202	A	/	/	/	32	/	/	/	40	/	/	/	65	/	/	/	81
	K	/	/	/	32	/	/	/	40	/	/	/	65	/	/	/	81
	SL-K	/	/	/	32	/	/	/	40	/	/	/	65	/	/	/	81
0232	A	/	/	/	32	/	/	/	40	/	/	/	65	/	/	/	81
	K	/	/	/	32	/	/	/	40	/	/	/	65	/	/	/	81
	SL-K	/	/	/	32	/	/	/	40	/	/	/	65	/	/	/	81
0272	A	/	/	/	32	/	/	/	40	/	/	/	65	/	/	/	81
	K	/	/	/	32	/	/	/	40	/	/	/	65	/	/	/	81
	SL-K	/	/	/	32	/	/	/	40	/	/	/	65	/	/	/	81
0302	A	/	/	/	32	/	/	/	40	/	/	/	65	/	/	/	81
	K	/	/	/	32	/	/	/	40	/	/	/	65	/	/	/	81
	SL-K	/	/	/	32	/	/	/	40	/	/	/	65	/	/	/	81
0352	A	/	/	/	33	/	/	/	40	/	/	/	65	/	/	/	81
	K	/	/	/	33	/	/	/	40	/	/	/	65	/	/	/	81
	SL-K	/	/	/	33	/	/	/	40	/	/	/	65	/	/	/	81
0402	A	/	/	/	33	/	/	/	42	/	/	/	65	/	/	/	81
	K	/	/	/	33	/	/	/	42	/	/	/	65	/	/	/	81
	SL-K	/	/	/	33	/	/	/	42	/	/	/	65	/	/	/	81
0452	A	/	/	/	33	/	/	/	42	/	/	/	65	/	/	/	81
	K	/	/	/	33	/	/	/	42	/	/	/	65	/	/	/	81
	SL-K	/	/	/	33	/	/	/	42	/	/	/	65	/	/	/	81
0502	A	/	/	/	41	/	/	/	42	/	/	/	79	/	/	/	81
	K	/	/	/	41	/	/	/	42	/	/	/	79	/	/	/	81
	SL-K	/	/	/	41	/	/	/	42	/	/	/	79	/	/	/	81
0524	A	/	/	/	41	/	/	/	42	/	/	/	79	/	/	/	81
	K	/	/	/	41	/	/	/	42	/	/	/	79	/	/	/	81
	SL-K	/	/	/	41	/	/	/	42	/	/	/	79	/	/	/	81
0552	A	/	/	/	41	/	/	/	42	/	/	/	79	/	/	/	100
	K	/	/	/	41	/	/	/	42	/	/	/	79	/	/	/	100
	SL-K	/	/	/	41	/	/	/	42	/	/	/	79	/	/	/	100
0602	A	/	/	/	41	/	/	/	47	/	/	/	88	/	/	/	100

<b>extra L</b>	Unit's extra length
<b>extra W</b>	Unit's extra operating width (NOT to be considered for transport)
<b>extra H</b>	Unit's extra height
<b>extra WGT</b>	Unit's extra weight (pumps and piping)
<b>U - 1 PUMP 2P LH (FIX SPEED)</b>	U - 1 PUMP 2P LH (FIX SPEED)
<b>U - 1 PUMP 2P HH (FIX SPEED)</b>	U - 1 PUMP 2P HH (FIX SPEED)
<b>U - 2 PUMPS 2P LH (FIX SPEED)</b>	U - 2 PUMPS 2P LH (FIX SPEED)
<b>U - 2 PUMPS 2P HH (FIX SPEED)</b>	U - 2 PUMPS 2P HH (FIX SPEED)
-	Not available

## HYDRONIC GROUP

### Hydronic kit positioning

	Version	U - 1 PUMP 2P LH (FIX SPEED) (4736)				U - 1 PUMP 2P HH (FIX SPEED) (4737)				U - 2 PUMPS 2P LH (FIX SPEED) (4741)				U - 2 PUMPS 2P HH (FIX SPEED) (4742)			
		extra L [mm]	extra W [mm]	extra H [mm]	extra WGT [kg]	extra L [mm]	extra W [mm]	extra H [mm]	extra WGT [kg]	extra L [mm]	extra W [mm]	extra H [mm]	extra WGT [kg]	extra L [mm]	extra W [mm]	extra H [mm]	extra WGT [kg]
0602	K	/	/	/	41	/	/	/	47	/	/	/	88	/	/	/	100
	SL-K	/	/	/	41	/	/	/	47	/	/	/	88	/	/	/	100
0604	A	/	/	/	41	/	/	/	47	/	/	/	88	/	/	/	100
	K	/	/	/	41	/	/	/	47	/	/	/	88	/	/	/	100
	SL-K	/	/	/	41	/	/	/	47	/	/	/	88	/	/	/	100
0702	A	/	/	/	42	/	/	/	47	/	/	/	88	/	/	/	118
	K	/	/	/	42	/	/	/	47	/	/	/	88	/	/	/	118
	SL-K	/	/	/	42	/	/	/	47	/	/	/	88	/	/	/	118
0704	A	/	/	/	45	/	/	/	47	/	/	/	90	/	/	/	118
	K	/	/	/	45	/	/	/	47	/	/	/	90	/	/	/	118
	SL-K	/	/	/	45	/	/	/	47	/	/	/	90	/	/	/	118
0804	A	/	/	/	46	/	/	/	47	/	/	/	90	/	/	/	118
	K	/	/	/	46	/	/	/	47	/	/	/	90	/	/	/	118
	SL-K	/	/	/	46	/	/	/	47	/	/	/	90	/	/	/	118
0904	A	/	/	/	46	/	/	/	60	/	/	/	112	/	/	/	118
	K	/	/	/	46	/	/	/	60	/	/	/	112	/	/	/	118
	SL-K	/	/	/	46	/	/	/	60	/	/	/	112	/	/	/	118
1004	A	/	/	/	63	/	/	/	60	/	/	/	112	/	/	/	168
	K	/	/	/	63	/	/	/	60	/	/	/	112	/	/	/	168
	SL-K	/	/	/	63	/	/	/	60	/	/	/	112	/	/	/	168
1104	K	/	/	/	63	/	/	/	60	/	/	/	112	/	/	/	168

<b>extra L</b>	Unit's extra length
<b>extra W</b>	Unit's extra operating width (NOT to be considered for transport)
<b>extra H</b>	Unit's extra height
<b>extra WGT</b>	Unit's extra weight (pumps and piping)
<b>U - 1 PUMP 2P LH (FIX SPEED)</b>	U - 1 PUMP 2P LH (FIX SPEED)
<b>U - 1 PUMP 2P HH (FIX SPEED)</b>	U - 1 PUMP 2P HH (FIX SPEED)
<b>U - 2 PUMPS 2P LH (FIX SPEED)</b>	U - 2 PUMPS 2P LH (FIX SPEED)
<b>U - 2 PUMPS 2P HH (FIX SPEED)</b>	U - 2 PUMPS 2P HH (FIX SPEED)
<b>-</b>	Not available

# HYDRONIC GROUP

## Hydronic kit positioning

	Version	U - 1 PUMP 2P LH (VAR SPEED) (4747)				U - 2 PUMPS 2P LH (VAR SPEED) (4752)											
		extra L [mm]	extra W [mm]	extra H [mm]	extra WGT [kg]	extra L [mm]	extra W [mm]	extra H [mm]	extra WGT [kg]	extra L [mm]	extra W [mm]	extra H [mm]	extra WGT [kg]	extra L [mm]	extra W [mm]	extra H [mm]	extra WGT [kg]
0092	A	/	/	/	53	n.a.	n.a.	n.a.	n.a.								
	K	/	/	/	53	n.a.	n.a.	n.a.	n.a.								
	SL-K	/	/	/	53	n.a.	n.a.	n.a.	n.a.								
0102	A	/	/	/	53	/	/	/	102								
	K	/	/	/	53	n.a.	n.a.	n.a.	n.a.								
	SL-K	/	/	/	53	/	/	/	102								
0122	A	/	/	/	53	/	/	/	102								
	K	/	/	/	53	n.a.	n.a.	n.a.	n.a.								
	SL-K	/	/	/	53	/	/	/	102								
0152	A	/	/	/	55	/	/	/	107								
	K	/	/	/	55	/	/	/	107								
	SL-K	/	/	/	55	/	/	/	107								
0182	A	/	/	/	55	/	/	/	107								
	K	/	/	/	55	/	/	/	107								
	SL-K	/	/	/	55	/	/	/	107								
0202	A	/	/	/	55	/	/	/	107								
	K	/	/	/	55	/	/	/	107								
	SL-K	/	/	/	55	/	/	/	107								
0232	A	/	/	/	55	/	/	/	107								
	K	/	/	/	55	/	/	/	107								
	SL-K	/	/	/	55	/	/	/	107								
0272	A	/	/	/	55	/	/	/	107								
	K	/	/	/	55	/	/	/	107								
	SL-K	/	/	/	55	/	/	/	107								
0302	A	/	/	/	55	/	/	/	107								
	K	/	/	/	55	/	/	/	107								
	SL-K	/	/	/	55	/	/	/	107								
0352	A	/	/	/	55	/	/	/	107								
	K	/	/	/	55	/	/	/	107								
	SL-K	/	/	/	55	/	/	/	107								
0402	A	/	/	/	55	/	/	/	107								
	K	/	/	/	55	/	/	/	107								
	SL-K	/	/	/	55	/	/	/	107								
0452	A	/	/	/	65	/	/	/	137								
	K	/	/	/	65	/	/	/	137								
	SL-K	/	/	/	65	/	/	/	137								
0502	A	/	/	/	65	/	/	/	137								
	K	/	/	/	65	/	/	/	137								
	SL-K	/	/	/	65	/	/	/	137								
0524	A	/	/	/	66	/	/	/	137								
	K	/	/	/	66	/	/	/	137								
	SL-K	/	/	/	66	/	/	/	137								
0552	A	/	/	/	66	/	/	/	137								

**extra L** Unit's extra length  
**extra W** Unit's extra operating width (NOT to be considered for transport)  
**extra H** Unit's extra height  
**extra WGT** Unit's extra weight (pumps and piping)  
**U - 1 PUMP 2P LH (VAR SPEED)** U - 1 PUMP 2P LH (VAR SPEED)  
**U - 2 PUMPS 2P LH (VAR SPEED)** U - 2 PUMPS 2P LH (VAR SPEED)  
**-** Not available

## HYDRONIC GROUP

### Hydronic kit positioning

	Version	U - 1 PUMP 2P LH (VAR SPEED) (4747)				U - 2 PUMPS 2P LH (VAR SPEED) (4752)											
		extra L [mm]	extra W [mm]	extra H [mm]	extra WGT [kg]	extra L [mm]	extra W [mm]	extra H [mm]	extra WGT [kg]	extra L [mm]	extra W [mm]	extra H [mm]	extra WGT [kg]	extra L [mm]	extra W [mm]	extra H [mm]	extra WGT [kg]
0552	K	/	/	/	66	/	/	/	137								
	SL-K	/	/	/	66	/	/	/	137								
0602	A	/	/	/	66	/	/	/	137								
	K	/	/	/	66	/	/	/	137								
	SL-K	/	/	/	66	/	/	/	137								
0604	A	/	/	/	66	/	/	/	137								
	K	/	/	/	66	/	/	/	137								
	SL-K	/	/	/	66	/	/	/	137								
0702	A	/	/	/	66	/	/	/	137								
	K	/	/	/	66	/	/	/	137								
	SL-K	/	/	/	66	/	/	/	137								
0704	A	/	/	/	66	/	/	/	137								
	K	/	/	/	66	/	/	/	137								
	SL-K	/	/	/	66	/	/	/	137								
0804	A	/	/	/	99	/	/	/	192								
	K	/	/	/	99	/	/	/	192								
	SL-K	/	/	/	99	/	/	/	192								
0904	A	/	/	/	99	/	/	/	192								
	K	/	/	/	99	/	/	/	192								
	SL-K	/	/	/	99	/	/	/	192								
1004	A	/	/	/	99	/	/	/	192								
	K	/	/	/	99	/	/	/	192								
	SL-K	/	/	/	99	/	/	/	192								
1104	K	/	/	/	115	/	/	/	245								

<b>extra L</b>	Unit's extra length
<b>extra W</b>	Unit's extra operating width (NOT to be considered for transport)
<b>extra H</b>	Unit's extra height
<b>extra WGT</b>	Unit's extra weight (pumps and piping)
<b>U - 1 PUMP 2P LH (VAR SPEED)</b>	U - 1 PUMP 2P LH (VAR SPEED)
<b>U - 2 PUMPS 2P LH (VAR SPEED)</b>	U - 2 PUMPS 2P LH (VAR SPEED)
-	Not available



HYDRONIC GROUP

HEAT EXCHANGER USER SIDE - U - 1 PUMP 2P HH (FIX SPEED)

SIZE		CH		HP		Curve	PUMP				CH	HP
		Pfgross	Qfgross	Ptgross	Qcdgross		Model	N.	F.L.A.	F.L.I.	HU	HU
		[kW] (1)	[l/s] (1)	[kW] (1)	[l/s] (1)			Pole	[A]	[kW]	[kPa]	[kPa]
0122	A	30,93	1,479	32,28	1,558	A1	LNEE 32-160/15	2	3	1,500	191	188
	K	30,34	1,451	31,79	1,535						190	188
	SL-K	28,64	1,370	30,78	1,486						194	190
0152	A	38,29	1,831	41,76	2,016	B1	LNEE 32-160/22	2	5	2,200	244	239
	K	37,95	1,815	41,48	2,002						245	240
	SL-K	37,03	1,771	40,70	1,964						246	241
0182	A	45,37	2,170	48,86	2,358	B2					245	241
	K	44,87	2,146	48,41	2,337						246	242
	SL-K	43,88	2,098	47,57	2,296						247	243
0202	A	52,47	2,509	56,28	2,717	B3					242	237
	K	51,74	2,474	55,64	2,686						243	238
	SL-K	50,75	2,427	54,82	2,646						244	239
0232	A	58,35	2,790	62,60	3,022	B4					240	235
	K	57,71	2,760	61,74	2,980		241	236				
	SL-K	56,21	2,688	60,97	2,943		242	237				
0272	A	66,63	3,186	70,87	3,421	B5	240	235				
	K	66,12	3,162	70,72	3,414		240	235				
	SL-K	64,42	3,081	69,20	3,340		242	237				
0302	A	76,02	3,635	80,28	3,875	B6	234	228				
	K	74,94	3,584	79,49	3,837		235	229				
	SL-K	72,59	3,471	77,93	3,762		237	231				
0352	A	85,95	4,110	90,06	4,347	B7	224	218				
	K	85,04	4,067	89,35	4,313		225	219				
	SL-K	82,03	3,923	87,39	4,218		229	221				
0402	A	94,75	4,531	103,0	4,974	C1	249	241				
	K	94,47	4,518	102,2	4,932		249	242				
	SL-K	91,09	4,356	99,80	4,818		252	244				
0452	A	108,3	5,178	115,8	5,589	C2	246	238				
	K	106,8	5,107	114,6	5,532		242	234				
	SL-K	102,9	4,922	111,9	5,403		250	242				
0502	A	122,0	5,835	131,7	6,356	C3	237	226				
	K	121,1	5,791	131,1	6,328		238	227				
	SL-K	118,8	5,682	129,4	6,246		240	229				
0524	A	124,8	5,966	134,8	6,508	C4	229	216				
	K	124,8	5,966	135,0	6,518		229	216				
	SL-K	121,9	5,832	133,1	6,427		232	218				
0552	A	136,6	6,532	147,5	7,120	C5	225	210				
	K	135,9	6,500	146,9	7,091		225	211				
	SL-K	132,6	6,342	144,6	6,982		229	214				
0602	A	152,7	7,301	164,0	7,918	D1	295	281				
	K	151,4	7,240	162,9	7,864		295	281				
	SL-K	145,7	6,967	159,1	7,680		302	287				
0604	A	144,3	6,903	156,8	7,570	D2	297	282				
	K	144,0	6,887	156,7	7,564		296	280				
	SL-K	139,6	6,675	153,7	7,420		302	285				
0702	A	173,7	8,308	186,8	9,019	D3	279	261				
	K	173,1	8,277	187,1	9,034		276	257				
	SL-K	166,5	7,963	181,8	8,777		287	267				
0704	A	169,3	8,094	181,2	8,749	D4	277	260				
	K	167,2	7,998	179,9	8,685		278	260				
	SL-K	161,4	7,721	175,9	8,491		285	267				

## HYDRONIC GROUP

### HEAT EXCHANGER USER SIDE - U - 1 PUMP 2P HH (FIX SPEED)

SIZE		CH		HP		PUMP				CH	HP	
		Pfgross	Qfgross	Ptgross	Qcdgross	Curve	Model	N.	F.L.A.	F.L.I.	HU	HU
		[kW] (1)	[l/s] (1)	[kW] (1)	[l/s] (1)			Pole	[A]	[kW]	[kPa]	[kPa]
0804	A	187,2	8,952	199,6	9,635	E1	LNEE 40-160/40/2	2	8	4,000	259	240
	K	186,9	8,935	199,1	9,613						258	239
	SL-K	179,8	8,596	194,3	9,379						268	248
0904	A	216,9	10,37	230,8	11,14	F1	LNEE 50-160/55/2	2	11	5,500	268	257
	K	216,9	10,37	231,1	11,16						268	257
	SL-K	212,2	10,15	227,8	10,99						272	259
1004	A	238,0	11,38	253,9	12,26	F2	LNEE 50-160/55/2	2	11	5,500	262	249
	K	241,1	11,53	256,0	12,36						260	247
	SL-K	234,1	11,19	251,1	12,12						265	251
1104	K	265,3	12,69	283,1	13,67	F3					247	230

(1) Values refer to nominal conditions

CH Cooling mode

HP HP mode

Pf Cooling capacity unit (Cooling mode)

Pt Heating capacity unit (Heating mode)

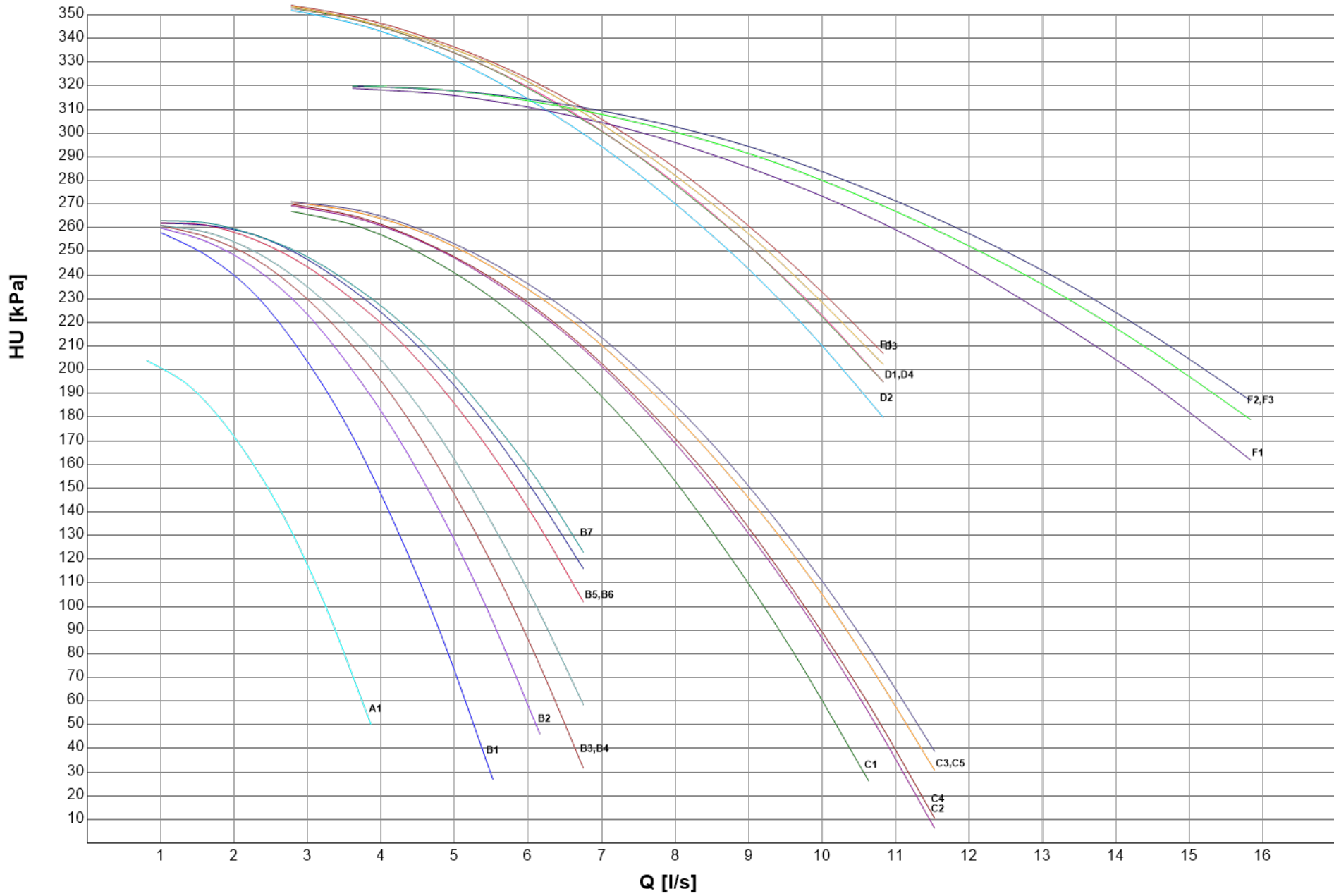
Q Plant (side) exchanger water flow

F.L.I. Pump power input

F.L.A. Pump running current

HU Pump residual pressure head (Units with hydronic group without mains filter)

HEAT EXCHANGER USER SIDE - U - 1 PUMP 2P HH (FIX SPEED)



HYDRONIC GROUP

HEAT EXCHANGER USER SIDE - U - 1 PUMP 2P LH (FIX SPEED)

SIZE		CH		HP		PUMP				CH	HP	
		Pfgross	Qfgross	Ptgross	Qcdgross	Curve	Model	N.	F.L.A.	F.L.I.	HU	HU
		[kW] (1)	[l/s] (1)	[kW] (1)	[l/s] (1)			Pole	[A]	[kW]	[kPa]	[kPa]
0122	A	30,93	1,479	32,28	1,558	A1	LNEE 32-160/07/2	2	2	0,750	107	105
	K	30,34	1,451	31,79	1,535						107	104
	SL-K	28,64	1,370	30,78	1,486						110	107
0152	A	38,29	1,831	41,76	2,016	B1	LNEE 32-160/11	2	2	1,100	144	139
	K	37,95	1,815	41,48	2,002						145	140
	SL-K	37,03	1,771	40,70	1,964						146	141
0182	A	45,37	2,170	48,86	2,358	B2	LNEE 32-160/11	2	2	1,100	145	140
	K	44,87	2,146	48,41	2,337						145	140
	SL-K	43,88	2,098	47,57	2,296						146	141
0202	A	52,47	2,509	56,28	2,717	B3	LNEE 32-160/11	2	2	1,100	140	135
	K	51,74	2,474	55,64	2,686						141	135
	SL-K	50,75	2,427	54,82	2,646						142	137
0232	A	58,35	2,790	62,60	3,022	B4	LNEE 32-160/15	2	3	1,500	137	130
	K	57,71	2,760	61,74	2,980						138	132
	SL-K	56,21	2,688	60,97	2,943						140	133
0272	A	66,63	3,186	70,87	3,421	B5	LNEE 32-160/15	2	3	1,500	135	129
	K	66,12	3,162	70,72	3,414						136	129
	SL-K	64,42	3,081	69,20	3,340						138	131
0302	A	76,02	3,635	80,28	3,875	B6	LNEE 32-160/15	2	3	1,500	127	119
	K	74,94	3,584	79,49	3,837						128	121
	SL-K	72,59	3,471	77,93	3,762						131	123
0352	A	85,95	4,110	90,06	4,347	C1	LNEE 32-160/15	2	3	1,500	162	155
	K	85,04	4,067	89,35	4,313						164	156
	SL-K	82,03	3,923	87,39	4,218						168	159
0402	A	94,75	4,531	103,0	4,974	C2	LNEE 32-160/15	2	3	1,500	155	140
	K	94,47	4,518	102,2	4,932						155	142
	SL-K	91,09	4,356	99,80	4,818						160	145
0452	A	108,3	5,178	115,8	5,589	C3	LNEE 32-160/15	2	3	1,500	141	127
	K	106,8	5,107	114,6	5,532						139	123
	SL-K	102,9	4,922	111,9	5,403						150	134
0502	A	122,0	5,835	131,7	6,356	D1	LNEE 40-125/22	2	5	2,200	175	163
	K	121,1	5,791	131,1	6,328						176	163
	SL-K	118,8	5,682	129,4	6,246						179	165
0524	A	124,8	5,966	134,8	6,508	D2	LNEE 40-125/22	2	5	2,200	167	152
	K	124,8	5,966	135,0	6,518						167	152
	SL-K	121,9	5,832	133,1	6,427						170	154
0552	A	136,6	6,532	147,5	7,120	D3	LNEE 40-125/22	2	5	2,200	161	144
	K	135,9	6,500	146,9	7,091						161	145
	SL-K	132,6	6,342	144,6	6,982						165	148
0602	A	152,7	7,301	164,0	7,918	D4	LNEE 40-125/22	2	5	2,200	143	124
	K	151,4	7,240	162,9	7,864						144	124
	SL-K	145,7	6,967	159,1	7,680						153	132
0604	A	144,3	6,903	156,8	7,570	D5	LNEE 40-125/22	2	5	2,200	148	128
	K	144,0	6,887	156,7	7,564						147	126
	SL-K	139,6	6,675	153,7	7,420						155	133
0702	A	173,7	8,308	186,8	9,019	E1	LNEE 40-125/30	2	6	3,000	187	165
	K	173,1	8,277	187,1	9,034						185	161
	SL-K	166,5	7,963	181,8	8,777						198	173
0704	A	169,3	8,094	181,2	8,749	F1	LNEE 50-125/22/2	2	5	2,200	123	111
	K	167,2	7,998	179,9	8,685						123	111
	SL-K	161,4	7,721	175,9	8,491						129	116

## HYDRONIC GROUP

### HEAT EXCHANGER USER SIDE - U - 1 PUMP 2P LH (FIX SPEED)

SIZE		CH		HP		PUMP				CH	HP					
		Pfgross	Qfgross	Ptgross	Qcdgross	Curve	Model	N.	F.L.A.	F.L.I.	HU	HU				
		[kW] (1)	[l/s] (1)	[kW] (1)	[l/s] (1)			Pole	[A]	[kW]	[kPa]	[kPa]				
0804	A	187,2	8,952	199,6	9,635	G1	LNEE 50-125/30/2	2	6	3,000	157	146				
	K	186,9	8,935	199,1	9,613						156	144				
	SL-K	179,8	8,596	194,3	9,379						163	150				
0904	A	216,9	10,37	230,8	11,14	G2					LNEE 50-125/30/2	2	6	3,000	138	124
	K	216,9	10,37	231,1	11,16										138	123
	SL-K	212,2	10,15	227,8	10,99										142	127
1004	A	238,0	11,38	253,9	12,26	H1	LNEE 65-125/40/2	2	8	4,000					166	157
	K	241,1	11,53	256,0	12,36										165	156
	SL-K	234,1	11,19	251,1	12,12										168	159
1104	K	265,3	12,69	283,1	13,67	H2					LNEE 65-125/40/2	2	8	4,000	158	146

(1) Values refer to nominal conditions

CH Cooling mode

HP HP mode

Pf Cooling capacity unit (Cooling mode)

Pt Heating capacity unit (Heating mode)

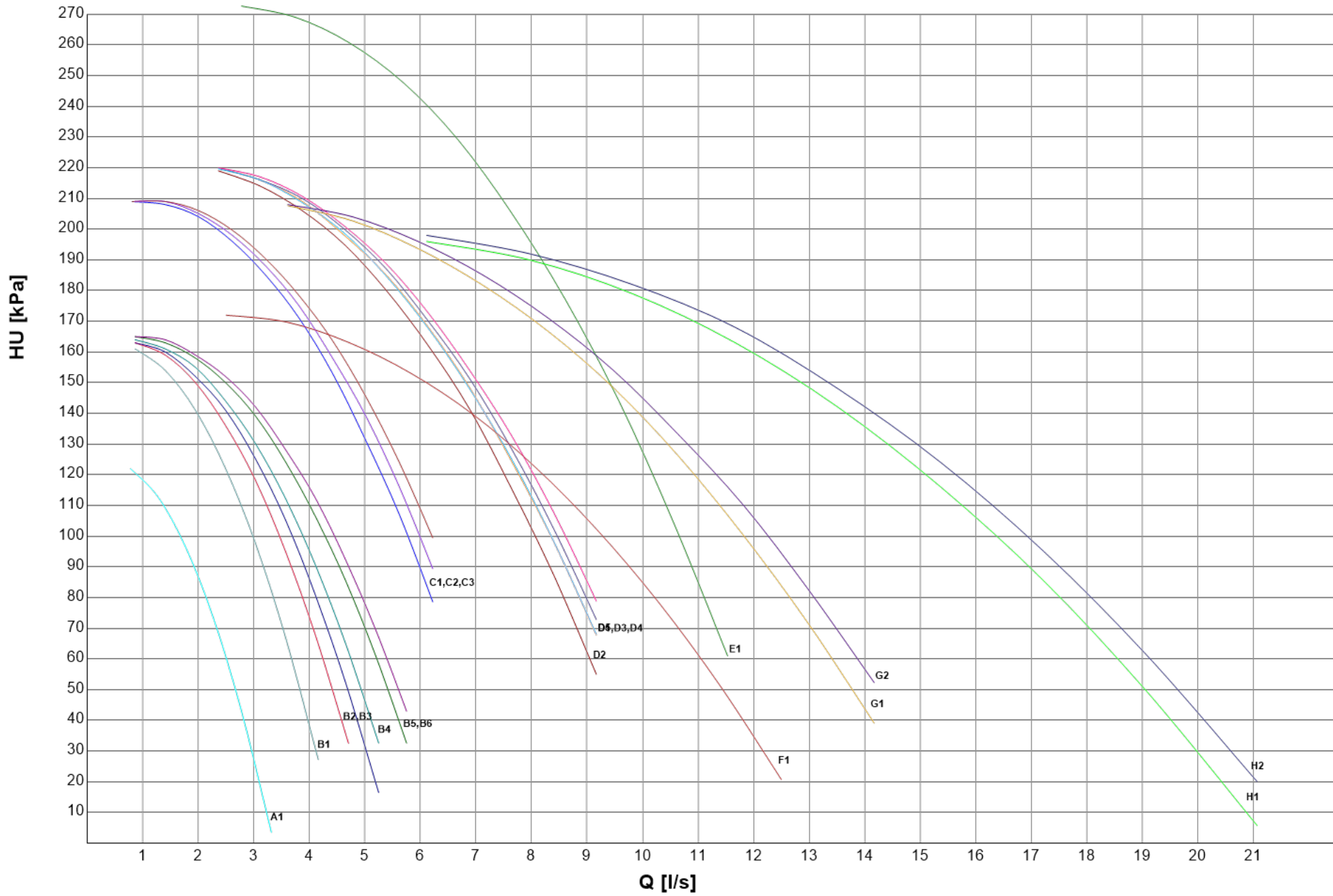
Q Plant (side) exchanger water flow

F.L.I. Pump power input

F.L.A. Pump running current

HU Pump residual pressure head (Units with hydronic group without mains filter)

HEAT EXCHANGER USER SIDE - U - 1 PUMP 2P LH (FIX SPEED)



**HYDRONIC GROUP**

**HEAT EXCHANGER USER SIDE - U - 1 PUMP 2P LH (VAR SPEED)**

SIZE		CH		HP		PUMP				CH	HP													
		Pfgross	Qfgross	Ptgross	Qcdgross	Curve	Model	N.	F.L.A.	F.L.I.	HU	HU												
		[kW] (1)	[l/s] (1)	[kW] (1)	[l/s] (1)			Pole	[A]	[kW]	[kPa]	[kPa]												
0092	A	23,01	1,100	24,20	1,168	A1	TPE 32-250/2	2	3	1,500	219	217												
	K	22,60	1,081	23,87	1,152						220	217												
	SL-K	22,02	1,053	23,48	1,133						221	218												
0102	A	26,05	1,246	28,26	1,364	A2					TPE 32-250/2	2	3	1,500	221	218								
	K	25,76	1,232	28,02	1,352										221	217								
	SL-K	24,45	1,169	27,08	1,307										223	220								
0122	A	30,93	1,479	32,28	1,558	A3									TPE 32-250/2	2	3	1,500	219	217				
	K	30,34	1,451	31,79	1,535														219	216				
	SL-K	28,64	1,370	30,78	1,486														222	219				
0152	A	38,29	1,831	41,76	2,016	B1													TPE 32-320/2	2	4	2,200	279	273
	K	37,95	1,815	41,48	2,002																		280	274
	SL-K	37,03	1,771	40,70	1,964																		281	275
0182	A	45,37	2,170	48,86	2,358	B2	TPE 32-320/2	2	4	2,200													279	273
	K	44,87	2,146	48,41	2,337																		279	274
	SL-K	43,88	2,098	47,57	2,296																		280	275
0202	A	52,47	2,509	56,28	2,717	B3					TPE 32-320/2	2	4	2,200									274	267
	K	51,74	2,474	55,64	2,686																		274	268
	SL-K	50,75	2,427	54,82	2,646																		276	270
0232	A	58,35	2,790	62,60	3,022	B4									TPE 32-320/2	2	4	2,200					270	262
	K	57,71	2,760	61,74	2,980																		270	264
	SL-K	56,21	2,688	60,97	2,943																		272	265
0272	A	66,63	3,186	70,87	3,421	B5													TPE 32-320/2	2	4	2,200	266	259
	K	66,12	3,162	70,72	3,414																		267	260
	SL-K	64,42	3,081	69,20	3,340																		269	262
0302	A	76,02	3,635	80,28	3,875	B6	TPE 32-320/2	2	4	2,200													256	248
	K	74,94	3,584	79,49	3,837																		258	250
	SL-K	72,59	3,471	77,93	3,762																		262	252
0352	A	85,95	4,110	90,06	4,347	B7					TPE 32-320/2	2	4	2,200									243	234
	K	85,04	4,067	89,35	4,313																		244	235
	SL-K	82,03	3,923	87,39	4,218																		249	239
0402	A	94,75	4,531	103,0	4,974	B8									TPE 32-320/2	2	4	2,200					232	214
	K	94,47	4,518	102,2	4,932																		233	216
	SL-K	91,09	4,356	99,80	4,818																		239	221
0452	A	108,3	5,178	115,8	5,589	C1													TPE 40-300/2	2	6	3,000	246	236
	K	106,8	5,107	114,6	5,532																		242	231
	SL-K	102,9	4,922	111,9	5,403																		251	240
0502	A	122,0	5,835	131,7	6,356	C2	TPE 40-300/2	2	6	3,000													234	221
	K	121,1	5,791	131,1	6,328																		235	221
	SL-K	118,8	5,682	129,4	6,246																		237	223
0524	A	124,8	5,966	134,8	6,508	D1					TPE 50-290/2	2	6	3,000									235	224
	K	124,8	5,966	135,0	6,518																		235	224
	SL-K	121,9	5,832	133,1	6,427																		237	226
0552	A	136,6	6,532	147,5	7,120	D2									TPE 50-290/2	2	6	3,000					233	222
	K	135,9	6,500	146,9	7,091																		233	222
	SL-K	132,6	6,342	144,6	6,982																		236	225
0602	A	152,7	7,301	164,0	7,918	D3													TPE 50-290/2	2	6	3,000	223	210
	K	151,4	7,240	162,9	7,864																		222	209
	SL-K	145,7	6,967	159,1	7,680																		229	215
0604	A	144,3	6,903	156,8	7,570	D4	TPE 50-290/2	2	6	3,000													224	210
	K	144,0	6,887	156,7	7,564																		223	208
	SL-K	139,6	6,675	153,7	7,420																		228	213

## HYDRONIC GROUP

### HEAT EXCHANGER USER SIDE - U - 1 PUMP 2P LH (VAR SPEED)

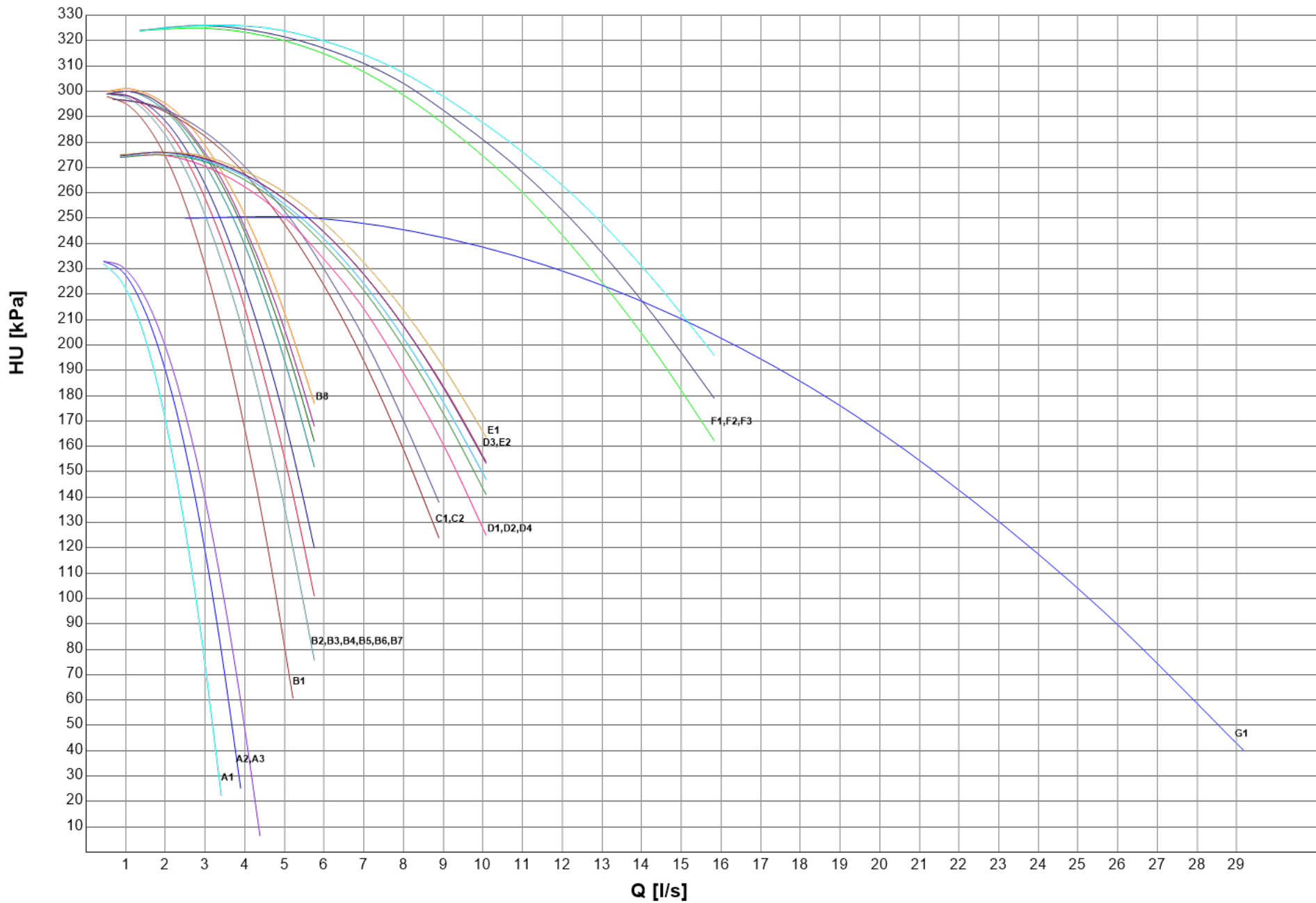
SIZE		CH		HP		PUMP				CH	HP	
		Pfgross	Qfgross	Ptgross	Qcdgross	Curve	Model	N.	F.L.A.	F.L.I.	HU	HU
		[kW] (1)	[l/s] (1)	[kW] (1)	[l/s] (1)			Pole	[A]	[kW]	[kPa]	[kPa]
0702	A	173,7	8,308	186,8	9,019	E1	TPE 50-290/2	2	6	3,000	208	192
	K	173,1	8,277	187,1	9,034						206	188
	SL-K	166,5	7,963	181,8	8,777						215	198
0704	A	169,3	8,094	181,2	8,749	E2					206	190
	K	167,2	7,998	179,9	8,685						206	190
	SL-K	161,4	7,721	175,9	8,491						214	196
0804	A	187,2	8,952	199,6	9,635	F1	TPE 65-340/2	2	10	5,500	289	280
	K	186,9	8,935	199,1	9,613						287	279
	SL-K	179,8	8,596	194,3	9,379						293	283
0904	A	216,9	10,37	230,8	11,14	F2					277	266
	K	216,9	10,37	231,1	11,16						277	266
	SL-K	212,2	10,15	227,8	10,99						279	268
1004	A	238,0	11,38	253,9	12,26	F3					271	259
	K	241,1	11,53	256,0	12,36						269	257
	SL-K	234,1	11,19	251,1	12,12						274	261
1104	K	265,3	12,69	283,1	13,67	G1	TPE 80-250/2	2	14	7,500	226	220

(1) Values refer to nominal conditions  
 CH Cooling mode  
 HP HP mode  
 Pf Cooling capacity unit (Cooling mode)  
 Pt Heating capacity unit (Heating mode)

Q Plant (side) exchanger water flow  
 F.L.I. Pump power input  
 F.L.A. Pump running current  
 HU Pump residual pressure head (Units with hydronic group without mains filter)



HEAT EXCHANGER USER SIDE - U - 1 PUMP 2P LH (VAR SPEED)



HYDRONIC GROUP

HEAT EXCHANGER USER SIDE - U - 2 PUMPS 2P HH (FIX SPEED)

SIZE		CH		HP		PUMP				CH	HP	
		Pfgross	Qfgross	Ptgross	Qcdgross	Curve	Model	N.	F.L.A.	F.L.I.	HU	HU
		[kW] (1)	[l/s] (1)	[kW] (1)	[l/s] (1)			Pole	[A]	[kW]	[kPa]	[kPa]
0152	A	38,29	1,831	41,76	2,016	A1	LNTE 32-160/22/2	2	5	2,200	245	239
	K	37,95	1,815	41,48	2,002						245	240
	SL-K	37,03	1,771	40,70	1,964						247	241
0182	A	45,37	2,170	48,86	2,358	A2					244	239
	K	44,87	2,146	48,41	2,337						245	240
	SL-K	43,88	2,098	47,57	2,296						246	241
0202	A	52,47	2,509	56,28	2,717	A3					239	233
	K	51,74	2,474	55,64	2,686						240	234
	SL-K	50,75	2,427	54,82	2,646						242	235
0232	A	58,35	2,790	62,60	3,022	A4					236	229
	K	57,71	2,760	61,74	2,980						237	230
	SL-K	56,21	2,688	60,97	2,943						238	231
0272	A	66,63	3,186	70,87	3,421	A5	233	227				
	K	66,12	3,162	70,72	3,414		234	227				
	SL-K	64,42	3,081	69,20	3,340		236	229				
0302	A	76,02	3,635	80,28	3,875	A6	224	217				
	K	74,94	3,584	79,49	3,837		226	218				
	SL-K	72,59	3,471	77,93	3,762		229	221				
0352	A	85,95	4,110	90,06	4,347	B1	245	241				
	K	85,04	4,067	89,35	4,313		246	241				
	SL-K	82,03	3,923	87,39	4,218		249	243				
0402	A	94,75	4,531	103,0	4,974	B2	243	233				
	K	94,47	4,518	102,2	4,932		243	234				
	SL-K	91,09	4,356	99,80	4,818		246	237				
0452	A	108,3	5,178	115,8	5,589	B3	237	229				
	K	106,8	5,107	114,6	5,532		234	224				
	SL-K	102,9	4,922	111,9	5,403		242	233				
0502	A	122,0	5,835	131,7	6,356	B4	227	215				
	K	121,1	5,791	131,1	6,328		228	216				
	SL-K	118,8	5,682	129,4	6,246		231	218				
0524	A	124,8	5,966	134,8	6,508	B5	219	205				
	K	124,8	5,966	135,0	6,518		219	204				
	SL-K	121,9	5,832	133,1	6,427		222	207				
0552	A	136,6	6,532	147,5	7,120	C1	237	229				
	K	135,9	6,500	146,9	7,091		237	230				
	SL-K	132,6	6,342	144,6	6,982		239	231				
0602	A	152,7	7,301	164,0	7,918	C2	231	223				
	K	151,4	7,240	162,9	7,864		231	222				
	SL-K	145,7	6,967	159,1	7,680		235	226				
0604	A	144,3	6,903	156,8	7,570	C3	230	220				
	K	144,0	6,887	156,7	7,564		229	219				
	SL-K	139,6	6,675	153,7	7,420		233	223				
0702	A	173,7	8,308	186,8	9,019	D1	294	285				
	K	173,1	8,277	187,1	9,034		292	281				
	SL-K	166,5	7,963	181,8	8,777		298	288				
0704	A	169,3	8,094	181,2	8,749	D2	290	280				
	K	167,2	7,998	179,9	8,685		290	280				
	SL-K	161,4	7,721	175,9	8,491		294	284				
0804	A	187,2	8,952	199,6	9,635	D3	282	272				
	K	186,9	8,935	199,1	9,613		281	270				
	SL-K	179,8	8,596	194,3	9,379		287	276				

## HYDRONIC GROUP

### HEAT EXCHANGER USER SIDE - U - 2 PUMPS 2P HH (FIX SPEED)

SIZE		CH		HP		PUMP				CH	HP	
		Pfgross	Qfgross	Ptgross	Qcdgross	Curve	Model	N.	F.L.A.	F.L.I.	HU	HU
		[kW] (1)	[l/s] (1)	[kW] (1)	[l/s] (1)			Pole	[A]	[kW]	[kPa]	[kPa]
0904	A	216,9	10,37	230,8	11,14	E1	LNTE 50-160/55/2	2	11	5,500	265	252
	K	216,9	10,37	231,1	11,16						265	252
	SL-K	212,2	10,15	227,8	10,99						269	255
1004	A	238,0	11,38	253,9	12,26	F1	LNTE 65-125/75/2	2	14	7,500	250	242
	K	241,1	11,53	256,0	12,36						249	241
	SL-K	234,1	11,19	251,1	12,12						252	243
1104	K	265,3	12,69	283,1	13,67	F2					243	233

(1) Values refer to nominal conditions

CH Cooling mode

HP HP mode

Pf Cooling capacity unit (Cooling mode)

Pt Heating capacity unit (Heating mode)

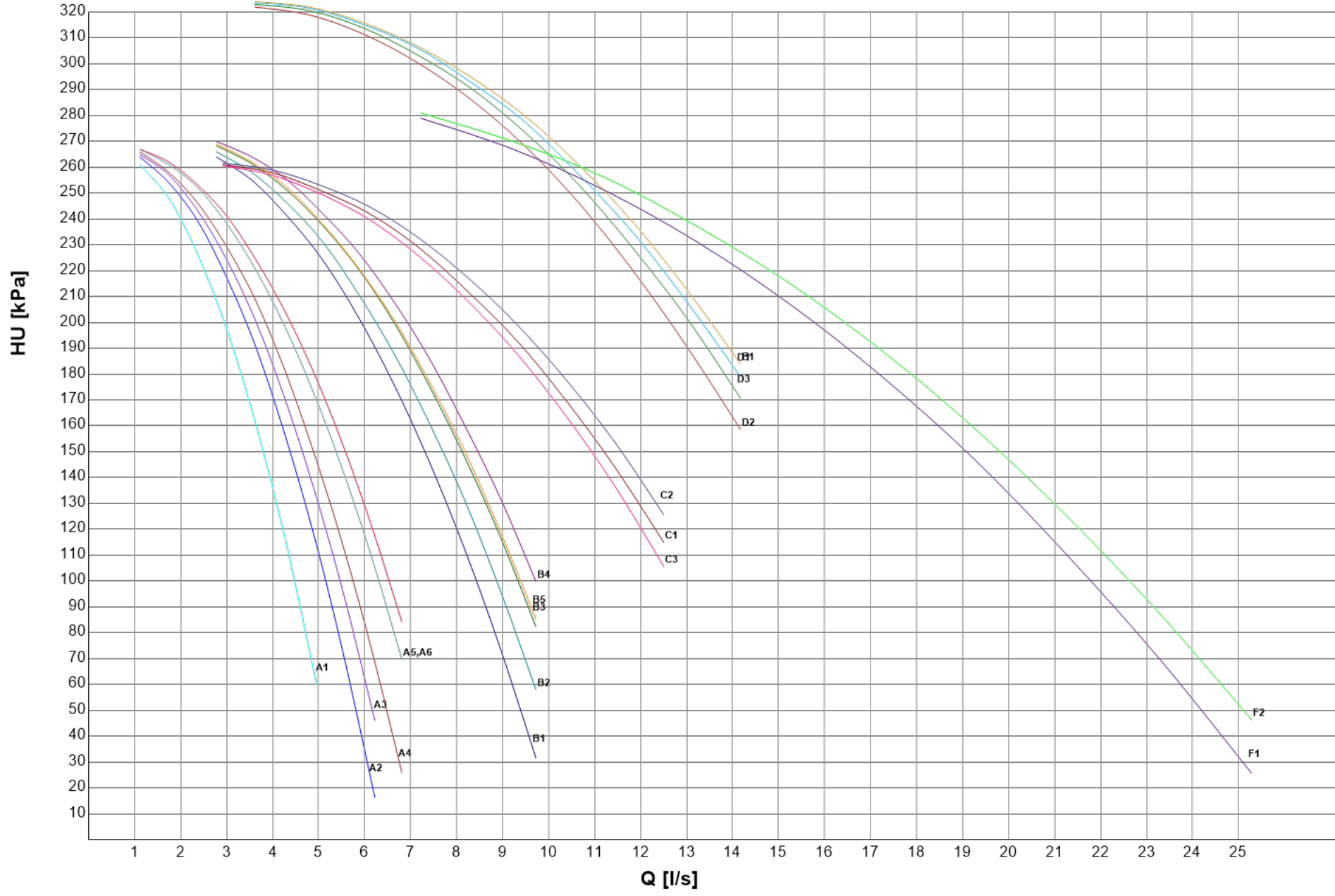
Q Plant (side) exchanger water flow

F.L.I. Pump power input

F.L.A. Pump running current

HU Pump residual pressure head (Units with hydronic group without mains filter)

HEAT EXCHANGER USER SIDE - U - 2 PUMPS 2P HH (FIX SPEED)



HYDRONIC GROUP

HEAT EXCHANGER USER SIDE - U - 2 PUMPS 2P LH (FIX SPEED)

SIZE		CH		HP		PUMP				CH	HP	
		Pfgross	Qfgross	Ptgross	Qcdgross	Curve	Model	N.	F.L.A.	F.L.I.	HU	HU
		[kW] (1)	[l/s] (1)	[kW] (1)	[l/s] (1)			Pole	[A]	[kW]	[kPa]	[kPa]
0122	A	30,93	1,479	32,28	1,558	A1	LNTE 32/160/07/2	2	0	0,750	107	104
	SL-K	28,64	1,370	30,78	1,486						111	107
0152	A	38,29	1,831	41,76	2,016	B1					143	137
	K	37,95	1,815	41,48	2,002						144	138
	SL-K	37,03	1,771	40,70	1,964						145	139
0182	A	45,37	2,170	48,86	2,358	B2					142	137
	K	44,87	2,146	48,41	2,337						143	138
	SL-K	43,88	2,098	47,57	2,296						144	139
0202	A	52,47	2,509	56,28	2,717	B3	LNTE 32-160/11/2	2	2	1,100	137	131
	K	51,74	2,474	55,64	2,686						138	132
	SL-K	50,75	2,427	54,82	2,646						139	133
0232	A	58,35	2,790	62,60	3,022	B4					133	125
	K	57,71	2,760	61,74	2,980						134	127
	SL-K	56,21	2,688	60,97	2,943						136	128
0272	A	66,63	3,186	70,87	3,421	B5					129	122
	K	66,12	3,162	70,72	3,414						130	122
	SL-K	64,42	3,081	69,20	3,340						132	124
0302	A	76,02	3,635	80,28	3,875	C1					145	139
	K	74,94	3,584	79,49	3,837						146	140
	SL-K	72,59	3,471	77,93	3,762						149	142
0352	A	85,95	4,110	90,06	4,347	C2	LNTE 40-125/15 /2	2	3	1,500	135	128
	K	85,04	4,067	89,35	4,313						136	129
	SL-K	82,03	3,923	87,39	4,218						140	132
0402	A	94,75	4,531	103,0	4,974	C3					128	115
	K	94,47	4,518	102,2	4,932						129	117
	SL-K	91,09	4,356	99,80	4,818						133	120
0452	A	108,3	5,178	115,8	5,589	C4					117	105
	K	106,8	5,107	114,6	5,532						114	101
	SL-K	102,9	4,922	111,9	5,403						125	110
0502	A	122,0	5,835	131,7	6,356	D1					157	141
	K	121,1	5,791	131,1	6,328						159	142
	SL-K	118,8	5,682	129,4	6,246						162	145
0524	A	124,8	5,966	134,8	6,508	D2	LNTE 40-125/22	2	5	2,200	148	130
	K	124,8	5,966	135,0	6,518						148	130
	SL-K	121,9	5,832	133,1	6,427						152	133
0552	A	136,6	6,532	147,5	7,120	D3					138	119
	K	135,9	6,500	146,9	7,091						139	120
	SL-K	132,6	6,342	144,6	6,982						144	123
0602	A	152,7	7,301	164,0	7,918	E1					124	114
	K	151,4	7,240	162,9	7,864						123	113
	SL-K	145,7	6,967	159,1	7,680						129	118
0604	A	144,3	6,903	156,8	7,570	E2	LNTE 50-125/22/2	2	5	2,200	124	112
	K	144,0	6,887	156,7	7,564						123	111
	SL-K	139,6	6,675	153,7	7,420						127	115
0702	A	173,7	8,308	186,8	9,019	E3					114	102
	K	173,1	8,277	187,1	9,034						111	97,7
	SL-K	166,5	7,963	181,8	8,777						119	106
0704	A	169,3	8,094	181,2	8,749	F1	LNTE 50-125/30/2	2	6	3,000	153	142
	K	167,2	7,998	179,9	8,685						153	142
	SL-K	161,4	7,721	175,9	8,491						159	146
0804	A	187,2	8,952	199,6	9,635	F2					143	131

## HYDRONIC GROUP

### HEAT EXCHANGER USER SIDE - U - 2 PUMPS 2P LH (FIX SPEED)

SIZE		CH		HP		PUMP				CH	HP	
		Pfgross	Qfgross	Ptgross	Qcdgross	Curve	Model	N.	F.L.A.	F.L.I.	HU	HU
		[kW] (1)	[l/s] (1)	[kW] (1)	[l/s] (1)			Pole	[A]	[kW]	[kPa]	[kPa]
0804	K	186,9	8,935	199,1	9,613	G1	LNTE 50-125/30/2	2	6	3,000	142	129
	SL-K	179,8	8,596	194,3	9,379						149	135
0904	A	216,9	10,37	230,8	11,14	H1	LNTE 65-125/40/2	2	8	4,000	162	153
	K	216,9	10,37	231,1	11,16						162	153
	SL-K	212,2	10,15	227,8	10,99						164	155
1004	A	238,0	11,38	253,9	12,26	H2	LNTE 65-125/40/2	2	8	4,000	159	149
	K	241,1	11,53	256,0	12,36						157	148
	SL-K	234,1	11,19	251,1	12,12						161	151
1104	K	265,3	12,69	283,1	13,67	H3					149	138

(1) Values refer to nominal conditions

CH Cooling mode

HP HP mode

Pf Cooling capacity unit (Cooling mode)

Pt Heating capacity unit (Heating mode)

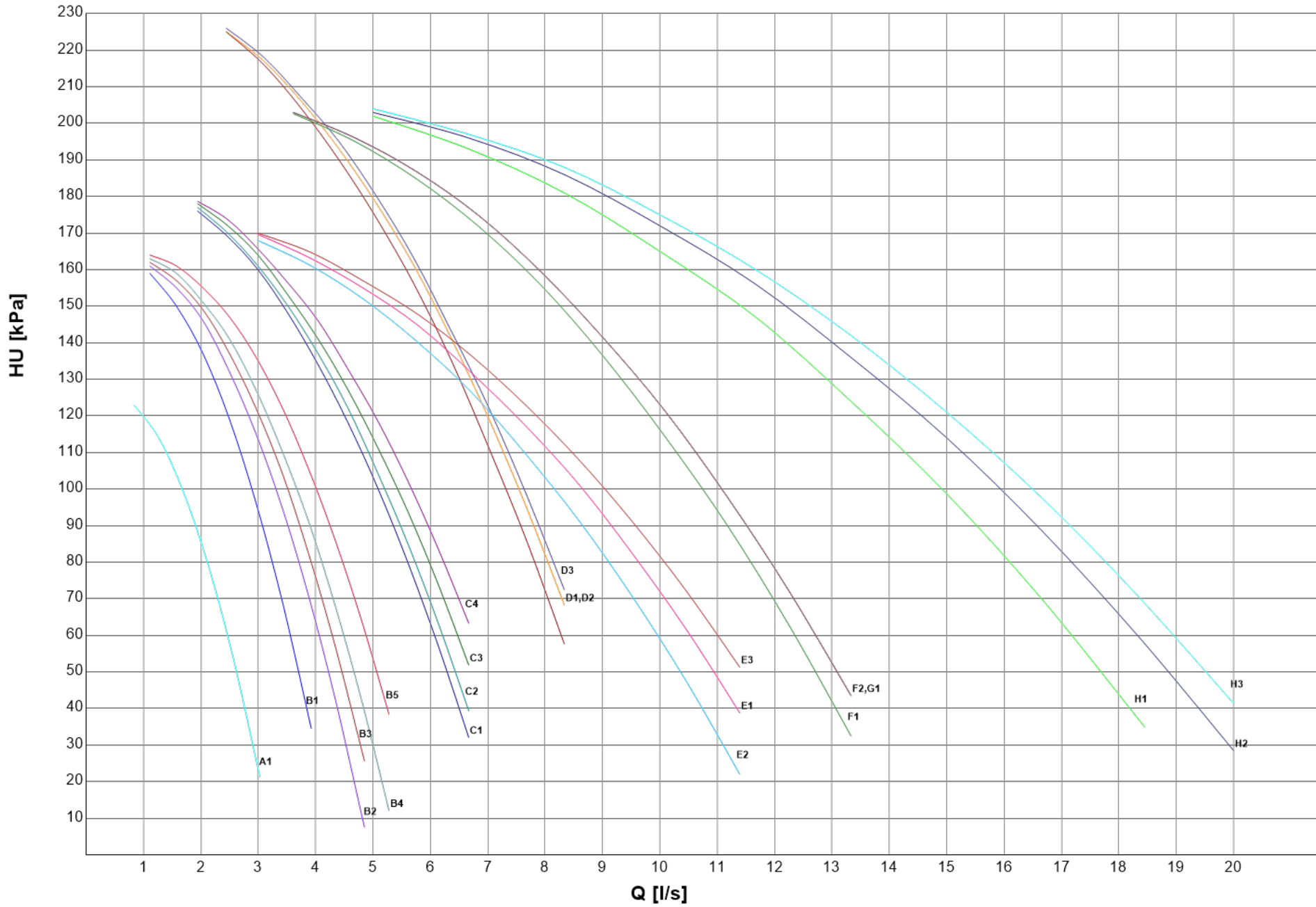
Q Plant (side) exchanger water flow

F.L.I. Pump power input

F.L.A. Pump running current

HU Pump residual pressure head (Units with hydronic group without mains filter)

HEAT EXCHANGER USER SIDE - U - 2 PUMPS 2P LH (FIX SPEED)



**HYDRONIC GROUP**

**HEAT EXCHANGER USER SIDE - U - 2 PUMPS 2P LH (VAR SPEED)**

SIZE		CH		HP		PUMP				CH	HP					
		Pfgross	Qfgross	Ptgross	Qcdgross	Curve	Model	N.	F.L.A.	F.L.I.	HU	HU				
		[kW] (1)	[l/s] (1)	[kW] (1)	[l/s] (1)			Pole	[A]	[kW]	[kPa]	[kPa]				
0102	A	26,05	1,246	28,26	1,364	A1	TPED 32-250/2	2	3	1,500	220	215				
	SL-K	24,45	1,169	27,08	1,307						223	218				
0122	A	30,93	1,479	32,28	1,558	A2					215	212				
	SL-K	28,64	1,370	30,78	1,486						219	215				
0152	A	38,29	1,831	41,76	2,016	B1					TPED 32-320/2	2	4	2,200	275	267
	K	37,95	1,815	41,48	2,002										275	268
	SL-K	37,03	1,771	40,70	1,964			277	269							
0182	A	45,37	2,170	48,86	2,358	B2		271	264							
	K	44,87	2,146	48,41	2,337			272	265							
	SL-K	43,88	2,098	47,57	2,296			274	266							
0202	A	52,47	2,509	56,28	2,717	B3		263	255							
	K	51,74	2,474	55,64	2,686			264	256							
	SL-K	50,75	2,427	54,82	2,646		266	258								
0232	A	58,35	2,790	62,60	3,022	B4	256	247								
	K	57,71	2,760	61,74	2,980		257	249								
	SL-K	56,21	2,688	60,97	2,943		260	250								
0272	A	66,63	3,186	70,87	3,421	B5	249	240								
	K	66,12	3,162	70,72	3,414		250	240								
	SL-K	64,42	3,081	69,20	3,340		253	243								
0302	A	76,02	3,635	80,28	3,875	B6	235	224								
	K	74,94	3,584	79,49	3,837		237	226								
	SL-K	72,59	3,471	77,93	3,762		242	229								
0352	A	85,95	4,110	90,06	4,347	B7	216	204								
	K	85,04	4,067	89,35	4,313		218	206								
	SL-K	82,03	3,923	87,39	4,218		225	211								
0402	A	94,75	4,531	103,0	4,974	B8	201	178								
	K	94,47	4,518	102,2	4,932		201	180								
	SL-K	91,09	4,356	99,80	4,818		209	186								
0452	A	108,3	5,178	115,8	5,589	C1	TPED 40-300/2	2	6	3,000	226	214				
	K	106,8	5,107	114,6	5,532						223	210				
	SL-K	102,9	4,922	111,9	5,403						233	220				
0502	A	122,0	5,835	131,7	6,356	C2					211	195				
	K	121,1	5,791	131,1	6,328						212	196				
	SL-K	118,8	5,682	129,4	6,246						215	198				
0524	A	124,8	5,966	134,8	6,508	D1					TPED 50-290/2	2	6	3,000	213	200
	K	124,8	5,966	135,0	6,518										213	200
	SL-K	121,9	5,832	133,1	6,427										216	202
0552	A	136,6	6,532	147,5	7,120	D2									208	195
	K	135,9	6,500	146,9	7,091										209	195
	SL-K	132,6	6,342	144,6	6,982										213	198
0602	A	152,7	7,301	164,0	7,918	E1	TPED 65-340/2	2	10	5,500					298	291
	K	151,4	7,240	162,9	7,864										298	290
	SL-K	145,7	6,967	159,1	7,680										302	294
0604	A	144,3	6,903	156,8	7,570	E2									296	288
	K	144,0	6,887	156,7	7,564										295	286
	SL-K	139,6	6,675	153,7	7,420										299	290
0702	A	173,7	8,308	186,8	9,019	E3					293	284				
	K	173,1	8,277	187,1	9,034						290	281				
	SL-K	166,5	7,963	181,8	8,777						297	287				
0704	A	169,3	8,094	181,2	8,749	E4					288	279				
	K	167,2	7,998	179,9	8,685						288	279				



## HYDRONIC GROUP

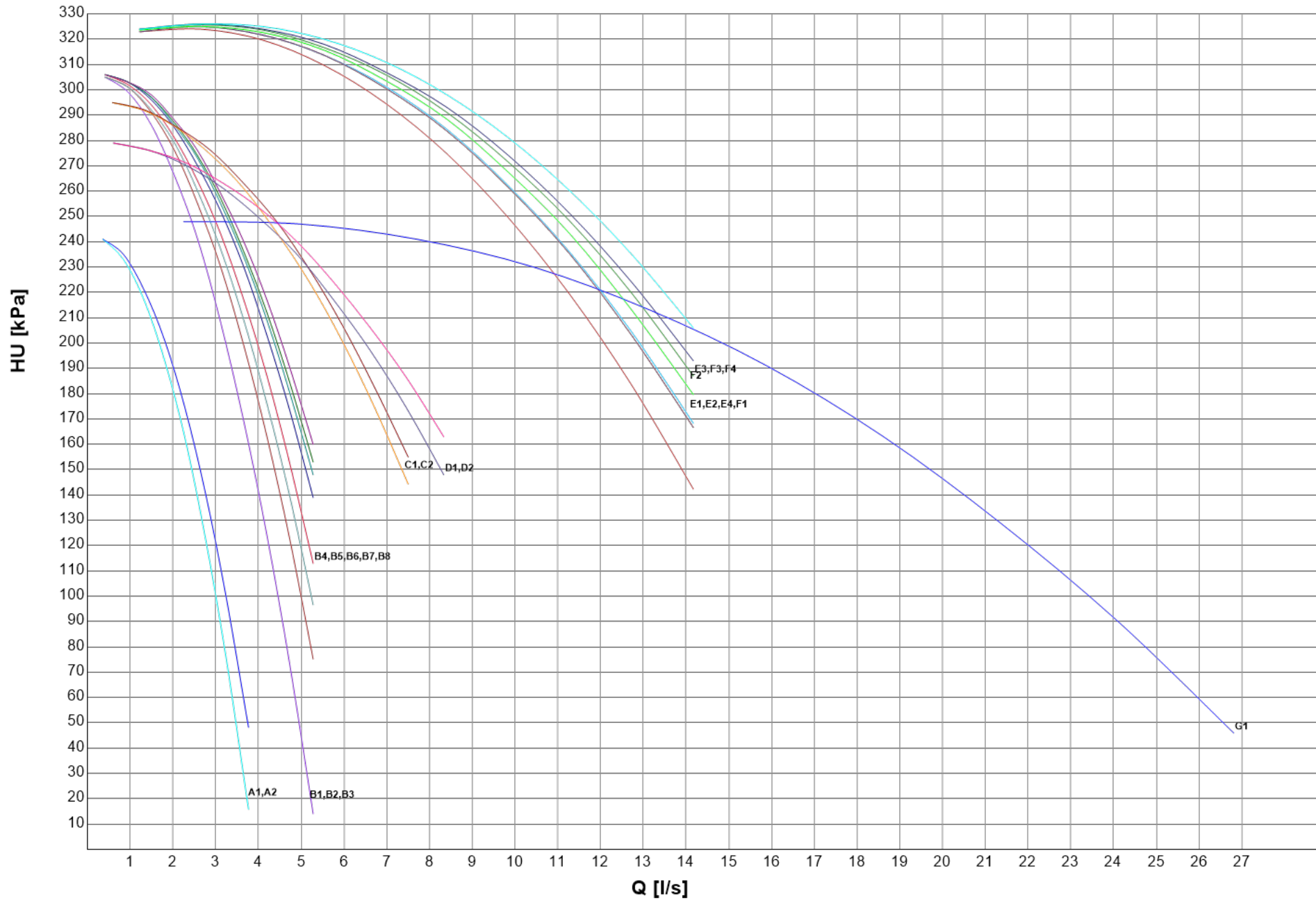
### HEAT EXCHANGER USER SIDE - U - 2 PUMPS 2P LH (VAR SPEED)

SIZE		CH		HP		PUMP				CH	HP					
		Pfgross	Qfgross	Ptgross	Qcdgross	Curve	Model	N.	F.L.A.	F.L.I.	HU	HU				
		[kW] (1)	[l/s] (1)	[kW] (1)	[l/s] (1)			Pole	[A]	[kW]	[kPa]	[kPa]				
0704	SL-K	161,4	7,721	175,9	8,491	F1	TPED 65-340/2	2	10	5,500	293	283				
0804	A	187,2	8,952	199,6	9,635	F2					281	272				
	K	186,9	8,935	199,1	9,613						280	270				
	SL-K	179,8	8,596	194,3	9,379						286	275				
0904	A	216,9	10,37	230,8	11,14	F3					266	254				
	K	216,9	10,37	231,1	11,16						266	253				
	SL-K	212,2	10,15	227,8	10,99						270	256				
1004	A	238,0	11,38	253,9	12,26	F4					258	244				
	K	241,1	11,53	256,0	12,36						256	242				
	SL-K	234,1	11,19	251,1	12,12						261	246				
1104	K	265,3	12,69	283,1	13,67	G1					TPED 80-250/2	2	14	7,500	216	209

(1) Values refer to nominal conditions  
 CH Cooling mode  
 HP HP mode  
 Pf Cooling capacity unit (Cooling mode)  
 Pt Heating capacity unit (Heating mode)

Q Plant (side) exchanger water flow  
 F.L.I. Pump power input  
 F.L.A. Pump running current  
 HU Pump residual pressure head (Units with hydronic group without mains filter)

HEAT EXCHANGER USER SIDE - U - 2 PUMPS 2P LH (VAR SPEED)





for a greener tomorrow

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