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

Data Book

Data Book
DB_CV_i-FX2-G01 0522 - 1863_122023_EN_rev00 R134a
ELCA_Engine ver.4.8.2.0

COOLING

i-FX2-G01 0522 - 1863

507-1859 kW
Chiller, air source for outdoor installation

R HFC R-134a
SCREW
INV.DRIVEN COMP.
T SHELL & TUBES



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

- REDUCED FOOTPRINT
- SILENT OPERATION
- HIGH EFFICIENCY
- PATENTED TECHNOLOGY
- ALUMINIUM MICRO-CHANNEL HEAT EXCHANGERS
- SMART CONTROL FUNCTIONS
- INTEGRATED HYDRONIC GROUP

CLIMAVENETA®

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The units highlighted in this publication contain R134a [GWP_{100} 1300] fluorinated greenhouse gases.

LEGEND

Functions



Cooling

Refrigerant



R-134a

Compressors



Screw compressor



VSD Screw compressors

Fan



Axial fan

Exchangers



Shell & Tubes

Other features



Eurovent



VPF

1.1 Product certifications

1.2 Voluntary product certifications

Check ongoing validity of certificate:
www.eurovent-certification.com
or
www.certifl ash.com

1.3 System certifications

Quality System complying with the requirements of UNI EN ISO 9001 regulation

Occupational Health and Safety Management System complying with the requirements of UNI ISO 45001

Environmental Management System complying with the requirements of UNI EN ISO 14001 regulation

2.1 Green certification relevant

FOCUS ON 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/

2.2 Unit Description

Outdoor unit for the production of chilled water with semi-hermetic variable-speed screw compressors optimized for R134a, axial-flow fans, micro-channel full-aluminum condensing coils, single-pass shell and tubes evaporator designed by Mitsubishi Electric Hydronics & IT Cooling Systems S.p.A. and electronic expansion valve.
Base and supporting structure and panels are made of galvanized epoxy powder coated steel with increased thickness. Eurovent certification.
The screw compressors feature the variable speed technology thanks to the integrated refrigerant cooled inverter, for the maximum compactness and operating flexibility. Moreover, they feature the Variable Vi (compression ratio) technology, to change the internal geometry according to the operating conditions.
Thanks to the accurate sizing of all internal components and the use of variable speed technology, the unit ensures flexibility, reliability, and maximum efficiency in every operating condition.

2.3 Key Features

REDUCED FOOTPRINT

These new units have a reduced footprint, making them the best solution both for new plants (thanks to high efficiency) and for the replacement of obsolete units in existing plants, offering a very high efficiency increase with the same dimensions and cooling capacity.

SILENT OPERATION

Low noise emissions of the unit in the Super Low Noise (-SL) version guaranteed by the careful and dedicated design of all parts of the unit.

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.

PATENTED TECHNOLOGY

The innovative patented technology, R.E.D. cooler (Reduced Exergy Depletion), allows to increase both the cooling capacity and the efficiency of the unit.

ALUMINIUM MICRO-CHANNEL HEAT EXCHANGERS

The full aluminium micro-channel condenser coils deliver high efficiency while ensuring a reduced refrigerant volume and a lower unit weight. The e-coating protection (optional) grants the highest level of corrosion resistance in any condition, even in the most aggressive environments.

SMART CONTROL FUNCTIONS

Wide choice of smart functions available: night mode, limitation of current consumption, control of refrigerant leaks without devices.

INTEGRATED HYDRONIC GROUP

The built-in hydronic module includes the main water circuit components; it is available in various configurations with one or two pumps with high or low head.

TOTAL HEAT RECOVERY

An additional heat exchanger allows the complete recovery of condensation heat that can then be used in heating applications.

UNIT AND PLANT HARMONY

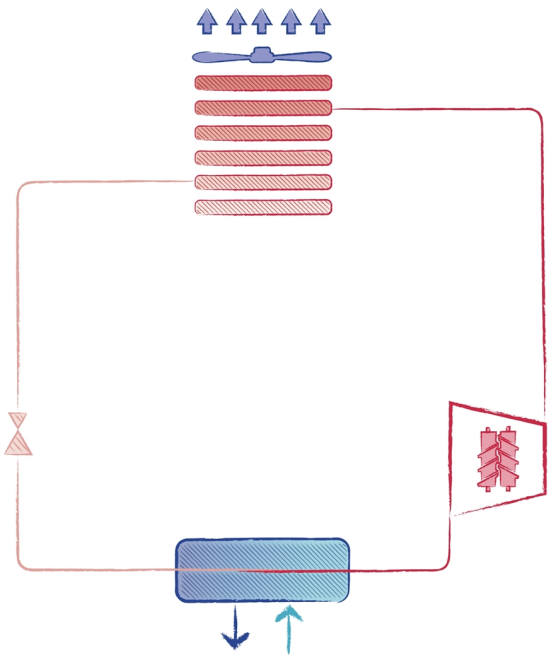
Low inrush current and a higher power factor than similar fixed speed units, provide an easy electrical installation which is not stressed during start-up nor are extra devices for power factor correction needed. The use of VSD technology allows the unit to partialize in a stepless way, with consequent lower leaving water temperature fluctuations.

2.4 Operating principles

CONFIGURATIONS

- , standard unit

No heat recovery is possible.

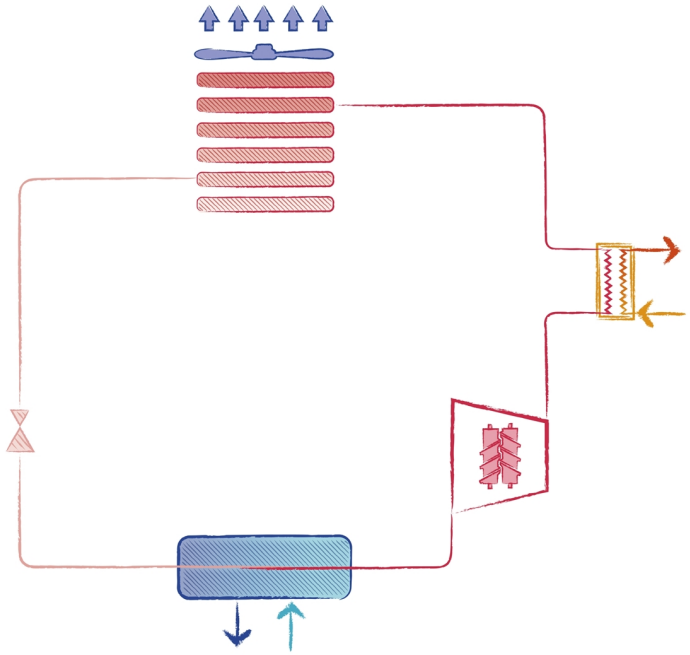


-D, unit with partial heat recovery

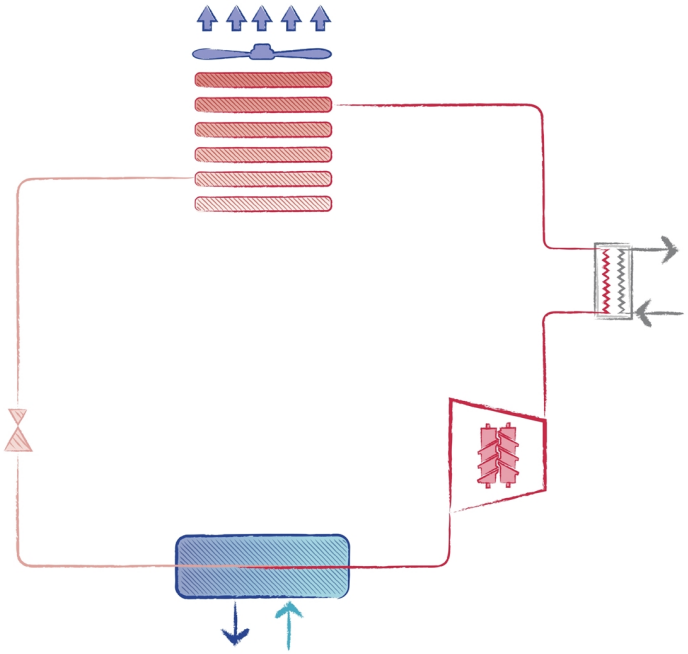
Each refrigerant circuit is fitted with a desuperheater.
The superheating heat recovery is only possible when the temperature of the hot water circuit is lower than the compressor discharge temperature. The heat recovery and its amount depends on the unit's operating conditions, in particular the outdoor 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.

Heat recovery: ON



Heat recovery: OFF (water flow stopped)

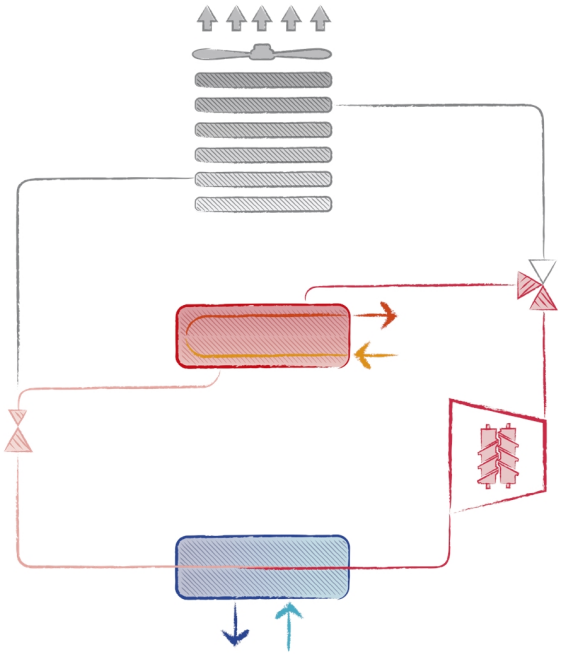


/R, unit with total heat recovery

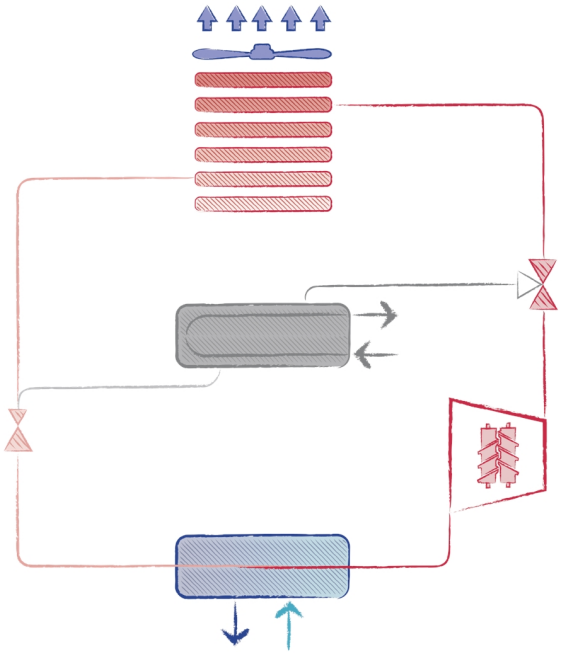
The unit is provided with a dual-condenser with two hydraulic connections (water inlet/outlet) for the condenser and two hydraulic connections for the total heat recovery. When the heat recovery mode is active, the condensation takes place in the devoted refrigerant/water heat exchanger instead of in the standard condenser.
Each refrigerant circuit is fitted with a total heat recovery exchanger.

The heat recovery mode is managed in accordance with the hot water temperature set-point and has to be managed on site.

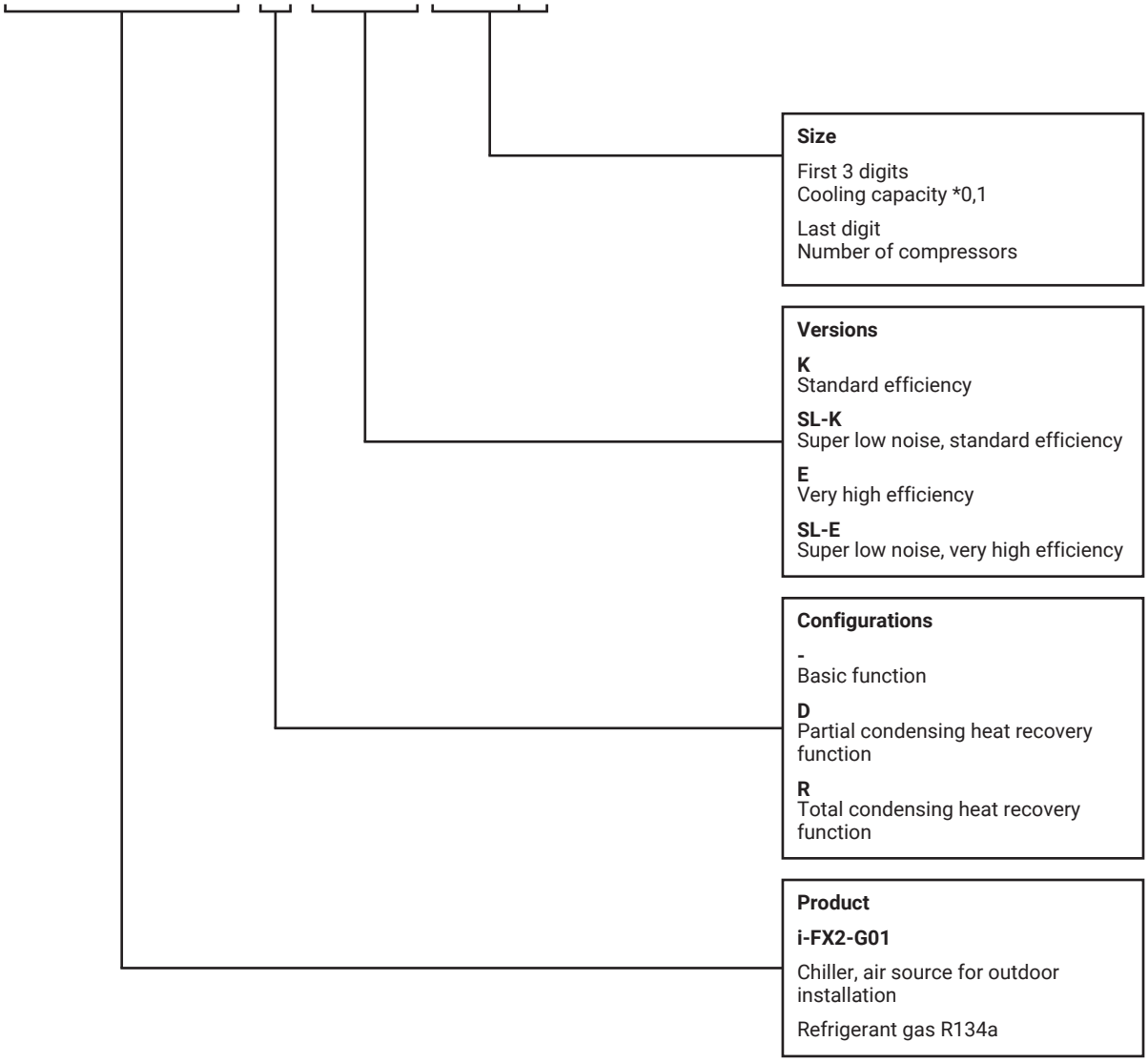
Total heat recovery



Heat recovery: OFF (water flow stopped)



i-FX2-G01-R-SL-E 1482



4.1 Standard unit composition

Chiller, air source for outdoor installation

Outdoor unit for the production of chilled water with semi-hermetic variable-speed screw compressors optimized for R134a, axial-flow fans, micro-channel full-aluminum condensing coils, single-pass shell and tubes evaporator designed by Mitsubishi Electric Hydronics & IT Cooling Systems S.p.A. and electronic expansion valve.
Base and supporting structure and panels are of galvanized epoxy powder coated steel with increased thickness. Eurovent certification.
The screw compressors feature the variable speed technology thanks to the integrated refrigerant cooled inverter, for the maximum compactness and operating flexibility. Moreover, they feature the Variable Vi (compression ratio) technology, to change the internal geometry according to the operating conditions.
Thanks to the accurate sizing of all internal components and the use of variable speed technology, the unit ensures flexibility, reliability and maximum efficiency in every operating condition.

Installation note

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

Structure

Structure specifically designed for outdoor installation. Base and frame in hot-galvanised steel sheet of suitable thickness. All parts polyester-powder painted to assure total weather resistance. Painting: RAL 7035 textured finish.

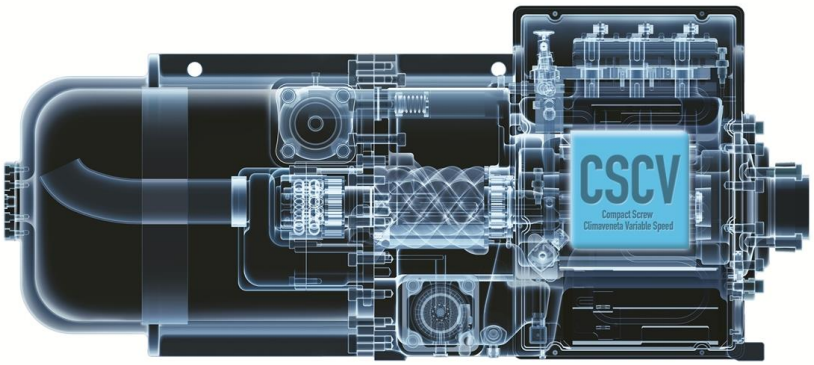
Refrigerant circuit

Unit designed with separate and independent refrigerant circuits in order to ensure continuous operation and easy maintenance. In addition to the main components described in the following sections, each refrigerant circuit is fitted as standard with:

- Electronic expansion valves
- non -return valve in compressor´s discharge line integrated in the compressor
- compressor’s discharge valve
- liquid line shut-off valve
- differential pressure switch on evaporator
- antifreeze electric heater for heat exchangers
- drier filter with replaceable cartridge
- refrigerant line sight glass with humidity indicator
- liquid line shut-off device (function performed by electronic expansion valve with ultracap)
- High and low pressure safety valve
- High pressure switches
- high and low pressure transducers
- compressor oil level check
- crankcase heater on each compressor

Inverter-screw compressors

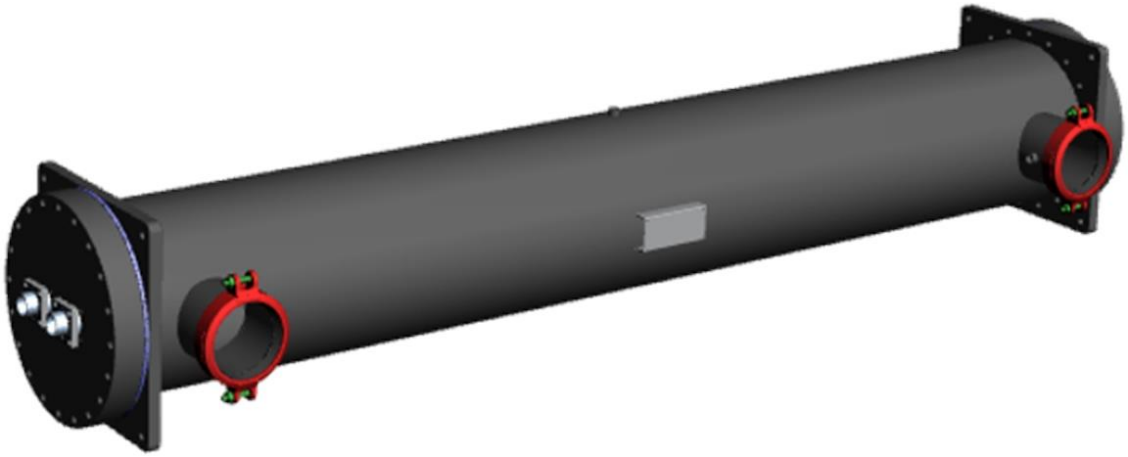
CSCV screw-compressors designed according to Mitsubishi Electric Hydronics & IT Cooling Systems S.p.A. specifications and for its exclusive use.
Extremely compact compressors, with oil separator, frequency modulation inverter and inverter cooling system integrated in a single casing.
Semi-hermetic screw-compressors with 2 five and six-lobe rotors: the fivelobe rotor is directly splined onto the motor, without the use of overgears. The motor activates the male screw at a speed varying from 1 to 6 thanks to the coupling with the dedicated inverter.
The cooling of the inverter is performed by an integrated plate: a coolant passes through and its flow is controlled by special valves. Only a connection with the refrigerant liquid line is necessary. The presence of additional heat exchangers is not required.
The bearings placed on the axle of the rotors in a special chamber, separated from the compression chamber, are made of carbon steel to obtain maximum strength and ensure long lifetime (> 150.000 h) at any speed. Lubrication: the oil is distributed to the mechanic components without using an oil pump so that compression is optimised. The oil separator is incorporated to achieve maximum compactness. It performs a three-stage separation using a 10 micron steel mesh filter that ensures the constant presence of oil in the compressor.
Innovative mechanic design with inner slider, managed according to specific proprietary parameters, for the variation of Vi depending on the different operating conditions. This allows to achieve maximum efficiency even in case of considerable load partialization.
High reliability ensured by the continuous control of the operating parameters and by automatic functions that bring the compressor back into the envelope in case the unit gets too close to operating limit values.
Each compressor is fitted with manual-reset motor thermal protection, delivery gas temperature control, oil level and an electric heater for heating the oil when the compressor is stopped.
The inverter power circuit is equipped with a line reactor used to control the emissions of the power line and ensure conformity to standard EN 61000-6-4 for industrial environments.
Check valve fitted on the refrigerant delivery line to prevent the rotor from reversing after stopping. Shut off valve fitted on the delivery line of each compressor in order to confine the coolant charge in the exchangers, if required.
Liquid injection circuit.
Compressor soft-start function with steady current increase without peaks.



The minimum percentage of cooling capacity delivered by the unit (referred to the conditions of water produced at 7 °C, air 35 °C) is:
- 13% per unit 2 compressors
- 9% per unit 3 compressors

Plant side heat exchanger

Direct expansion type shell and tube heat exchanger; it acts as an evaporator with refrigerant flow inside the pipes and water flow on the shell side. Fully developed and manufactured by Mitsubishi Electric Hydronics & IT Cooling Systems S.p.A., the heat exchanger is a single-step type to provide almost perfect countercurrent heat exchange. The water flow on the shell side is fitted with baffles to increase turbulence and therefore the efficiency of exchange. The steel shell has insulation lining made of flexible closed cells elastomeric foam (thermal conductivity 0.033W/mK at 0°C) coupled with 3 mm layer of crosslinked PE foam with a surface film of embossed PE for a total thickness of 9 mm. The tube nest is manufactured using copper tubes with internal grooves to improve heat exchange and each pipe is mechanically expanded onto the tube plates. The heat exchanger is fitted with a differential pressure switch which controls the flow of water when the unit is working, in this way preventing the formation of ice inside; when pumps stop, the antifreeze control is up to an electrical resistance. The heat exchanger is made in compliance with PED standard work pressure requisites. NSW certification for Australian market is available.



User-side heat exchanger connections H type accessible with grooved coupling with weld end counter-pipe user side (supplied separately). The connections are on the left side of the machine looking at the electrical panel of the unit.

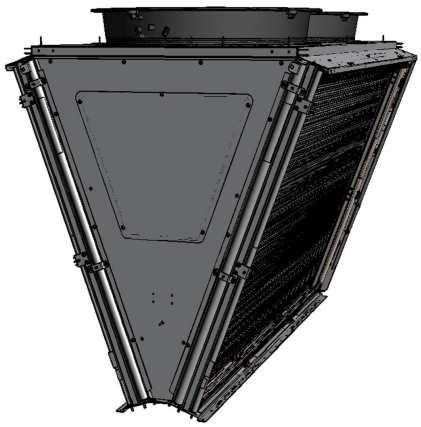
Source side heat exchanger

Microchannel coils ideally positioned on a “V” block structure to optimize airflow and heat transfer. Made entirely in aluminum, the coils are not subjected to galvanic corrosion.
Fins and manifolds are made of aluminum AA3003 while the channels are made of a new aluminum alloy so defined Long Life Alloy (LLA). LLA alloy has a very fine grain microstructure that guarantees higher mechanical properties and a higher resistance to the inter-granular corrosion.
Channel small section favor refrigerant fluid turbulence, which enhances the heat exchange. Tube geometry maximize the surface touched by the air, thus allowing compact dimension and refrigerant charge reduction.



Fan section source side

K, SL-K versions: Axial electric fans, protected to IP 54 and with insulation class ´F´, featuring an external rotor and profiled blades. Housed in an aerodynamic hood complete with safety guard. The fan + outlet set satisfies the efficiency requirements provided for by EcoDesign directive 327/11.
6-pole electric motor with built-in thermal protection. Variable Speed Device (DVVF) for controlling condensation by adjusting the speed of rotation with voltage steps (auto-transformer), fitted with a ventilation distribution system in case of external air low temperature. In conformity with the adjustment logic, each condenser circuit has a totally independent ventilation system.
E, SL-E, K+EC fans (opt. 808), SL-K+EC fans (opt. 808) versions: Axial electronically commutated fans (EC fans), with external rotor, profiled die-cast aluminium blades, housed in aeodynamic hoods complete with guard grille. 6-poles electric motor with built-in thermal protection. The brushless motor, governed by a special controller, continuously adjust fans' speed to minimize energy consumption, electromagnetic noises and current's absorption even during start-up phase. The fans are fitted with a ventilation distribution system to allow the operation with low external air temperature.



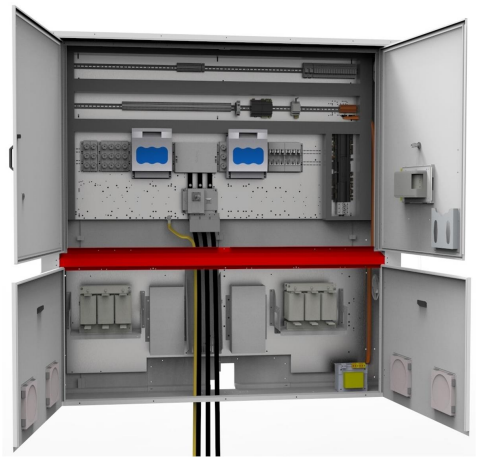
Super Low noise version features

The Super Low noise units (version SL) feature:

- Reduced fan speed (the speed is automatically increased in case of particularly tough environmental conditions).
- Condensing section larger than the corresponding standard version's one (few sizes only)
- Special soundproofing insulation of the compressors enclosure (multilayer lining of polyurethane foam and double sound-insulating gaiter, total thickness 52 mm)
- Soundproofing lining of suction and delivery pipes of the compressors with 9mm anti-condensation mat, 1mm insulating viscous coating and 8mm cross-linked polyethylene foam coating.
- Covering of the exposed pipes between the V-blocks with painted metal sheets with a special soundproofing insulation (multilayer lining of polyurethane foam and sound-insulating gaiter, total thickness 30 mm)
- If the hydronic is present, the pump enclosure is acoustically insulated by a 30 mm thick lining of polyester fibres (Fiberform)

Electrical and control panel

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



- general door lock isolator
- power circuit with electric bus bar distribution system
- control circuit transformer
- unit ON / OFF
- enabling unit LOC. -0- REM. via parameter
- terminals for cumulative alarm block
- compressors protection with internal thermal overload
- sectionable extra-rapid fuses to protect compressors
- spring-type control circuit terminal board
- integrated discharge temperature probe on compressor
- electronic controller
- fluid temperature control on the discharge probe
- forced ventilation of the electrical board
- bottom cable entry
- kit on the power circuits of the compressors for conducted emissions on the power line compliant with EN61000-6-4 for industrial environments
- Pump control relay + 0-10V modulating signal to control an external variable speed pump with the VPF.E control logic (plant-side constant ΔT for plants with primary circuit only and terminals with bypass)

Certification and applicable directives

The unit complies with the following directives and relative amendments:

- Machine directive 2006/42/EC
- PED Directive 2014/68/EC
- ElectroMagnetic compatibility directive 2004/108/EC
- 2014/53/EU Radio Equipment Directive
- 2011/65/EU Restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS 2)
- F-Gas Regulation 517/2014/EC
- WEEE (Waste Electrical and Electronic Equipment) Directive
- 1907/2006 REACH
- ErP Directive 2009/125/EC

- CE - Declaration of conformity certificate for the European Union
- EUROVENT Certification program
- ISO 9001 - Company Quality Management System certification
- ISO 14001 - Company Environmental Management System certification

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.

4.2 Unit standard composition – Additional information

Noise reduction in part load conditions

Units are table to modulate in a stepless way the capacity, thanks to the variable speed drive compressors and variable speed fans. This means that when working at partial loads, the units will produce less noise compared to the nominal condition capacity.

In the following table there are the reductions in terms of dB(A) in part load conditions versus the nominal condition (point A) of the several versions. The part load conditions taken into consideration (point B, C, D) for the comparison are the conditions defined by EN14825 standard for the SEER parameter calculation (air source units, fan coil application, variable outlet).

SEER points	LOAD	K, SL-K versions	K + kit NR, E+ kit NR, SL-K, SL-E versions
A	100%	-	-
B	74%	-5 dB(A)	-4 dB(A)
C	47%	-10 dB(A)	-9 dB(A)
D	21%	-14 dB(A)	-13 dB(A)

4.3 Versions

-K - Key efficiency

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

-E - Very high efficiency

Very high efficiency units for the minimum investment payback time. High performing heat exchangers and generous heat exchanger's surfaces
The oversized condensing section ensures an appropriate heat exchange even in case of extremely high outdoor air temperature.
The EC fans as standard reduce the electrical power consumption and thus increase the overall efficiency of the unit.

-SL-K - Super low noise, standard efficiency

Key efficiency units that grant the best cooling capacity/footprint ratio.
This version features a special soundproofing for the compressor compartment and the pumps (if present), a reduced fan speed and an oversized condensing section.
The fan speed is automatically increased in case of particularly tough environmental conditions.

-SL-E - Super low noise, very high efficiency

Very high efficiency units for the minimum investment payback time. High performing heat exchangers and generous heat exchanger's surfaces
The oversized condensing section ensures an appropriate heat exchange even in case of extremely high outdoor air temperature.
This version features a special soundproofing for the compressor compartment and the pumps (if present) and a reduced fan speed.
EC fans as standard equipment. The fan speed is automatically increased in case of particularly tough environmental conditions.

4.4 Configurations

- , standard unit

Standard unit for production of chilled water

-D, unit with partial heat recovery

Unit for the production of chilled water, equipped with an auxiliary heat exchanger (desuperheater) on the compressor discharge for superheat recovery. The recovered heat is approximately the 20% of the total cooling capacity and can be used for domestic hot water production or other secondary uses, such as the integration of an existing boiler.

-R, unit with total heat recovery

Unit for the production of chilled water, with a dedicated heat exchanger refrigerant/water for the condensation heat reclaim. The heat reclaim is managed to reach the set-point. This function is used for air treatment in applications with AHU or for domestic hot water production together with an auxiliary boiler.

4.5 Electronic controller

Electronic control W3000+

W3000+ control is available with the new KIPlink (Keyboard In your Pocket) user interface. Based on WiFi technology, it allows one to operate on the unit directly from the smartphone or tablet.Using KIPlink, it is possible to turn the unit on and off, adjust the set-point, plot the main operating variables, monitor in detail the status of the refrigerant circuits, the compressors, the fans and the pumps (if present) and display and reset the possible alarms. The regulation features the continuous modulation of capacity, based on sequential adjustment + DIP referring to the leaving water temperature. Diagnostics include complete alarm management, with “blackbox” functions (via PC) and alarm log (display or PC) for best analysis of unit behaviour. 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. Optional proprietary devices can perform the adjustment of the resources in systems made of several units. Consumption metering and performance measurement are possible as well. The variable primary flow control is always available as per standard (VPF.E function). Supervision is available with different options, using proprietary devices or by integration into third party systems using ModBus, BACnet, BACnet-over-IP, Konnex, SNMP protocols. A dedicated wall-mounted keypad can be used for remote control of all the functions. Variable hydraulic flow control is standard (VPF.E function).



OPTIONS	DESCRIPTIONS	BENEFITS	AVAILABLE FOR MODELS
2440 **VOLTAGE PRESENCE RELAY**			
2441 VOLTAGE PRESENCE RELAY	Contacts providing a remote signal for voltage presence.	Allows remote signalling of voltage presence.	ALL
1020 **REGULATIONS**			
1015 HEAT EXCHANGERS NSW CERTIFIED	Heat exchangers with SafeWork NSW certificate		ALL
380 **NUMBERED WIRING**			
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 maintainance interventions to the electrical board connections.	ALL
383 NUMBERED WIRINGS+UK REQUESTS	Electrical board wires are identified by numbered labels. The reference numbers are indicated in the unit's wiring scheme.	Facilitate maintainance interventions to the electrical board connections.	ALL
3410 **AUTOMATIC CIRCUIT BREAKERS**			
3414 AUTOM. CIRCUIT BREAK. ON LOADS (INVERTER COMPR. EXCL.)	Over-current switch on the major electrical loads, inverter compressors excluded.	In case of overcurrent allows resetting of the switch without the replacement of relative fuses.	ALL
3600 **COMPRESSOR RUN STATUS SIGNAL**			
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
4180 **REMOTE CONNECTION ARRANGEMENT**			
4181 SERIAL CARD MODBUS	Interface module for ModBUS protocols.	Allows integration with BMS operating with ModBUS protocol.	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
4186 SERIAL CARD FOR KONNEX	Protocol for KNX system	Allows integration with BMS operating with KNX protocol	ALL
4188 SERIAL CARD MODBUS TCP/IP	Interface module for ModBus TCP/IP protocol	Allows integration with BMS operating with ModBus TCP/IP protocol.	ALL
4189 SERIAL CARD SNMP	Interface module for SNMP protocol	Allows integration with BMS operating with SNMP protocol.	ALL
6160 **AUXILIARY INPUT**			
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
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

OPTIONS	DESCRIPTIONS	BENEFITS	AVAILABLE FOR MODELS
6170 **DEMAND LIMIT**			
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
6172 SIGNAL EXTERNAL CAPACITY CAP	Limits the unit cooling capacity to a specific % value, by acting on active resources and their operating frequencies. The unit can exceed this limit in specific conditions (e.g. start-up phase, oil recovery procedures).		ALL
6173 SMART CURRENT LIMIT	It keeps the absorbed current (and power) of the unit below a predetermined value, by acting on active resources and their operating frequencies. The unit can exceed this limit in specific conditions (oil recovery procedures).		ALL
6180 **REMOTE RECOVERY COMMAND**			
6181 ON/OFF REMOTE RECOVERY SIGNAL	Digital input (voltage free)	Relay to remotely control the operation of the total heat recovery option.	ALL
1500 **FREE-CONTACT FOR GENERAL ALARM**			
1502 2-LEVEL ALARM MANAGEMENT	This option allows the management of a second level alarm. The accessory provides for an expansion of the controller.	It allows the management of a second alarm level. The types of alarm that can be parameterized are those with manual reset or only those locking for the unit. By standard both alarms are parameterized with contact NO (Normally Open) but can be set in NC (Normally Close) configuration.	ALL
1470 **MULTIFUNCTION CARD**			
1431 NIGHT MODE	The option includes a related controller expansion board and dedicated terminal block.	Night mode is a system setting to limit maximum noise level of the unit. Noise level is reduced limiting maximum compressor frequency and fan speed.	ALL
1477 4962 + 4951 + 1431	The option includes a related controller expansion board and dedicated terminal block (it is necessary to install a 3 way valve).	Enables the functions corresponding to the indicated accessory codes.	ALL
4951 WITH HYDRAULIC DECOUPLER PROBE	Water temperature probe on hydraulic decoupler.	The pump activation can be set by parameter according to the water temperature on buffer tank measuring by the sensor (in the systems with the primary and secondary circuits separated by a hydraulic decoupler), thus bringing significant pump consumption reduction during unit’s stand-by.	ALL

OPTIONS	DESCRIPTIONS	BENEFITS	AVAILABLE FOR MODELS
4962 U.L.C.F. - WITH VARIABLE WATER FLOW	Option to be selected with the unit with variable speed pump/s (4713,4714,4717,4718,4722,4723). The option includes a related controller expansion board and dedicated terminal block.	Guaranteed the start-up of the units with the option U.L.C. even when the critical working condition could generate an alarm. The controller can manage a 3 way mixing valve (not provided from MEHITS) by 0-10V signal for ensuring a dynamic control of the water temperature on user heat exchanger according to the operating limits allowed. This ensures the start-up and correct functioning of the unit into the envelope, also even critical whether condition.	ALL
1440 **USER INTERFACE**			
1442 KIPlink +7 INCH TOUCH SCREEN	In addition to KIPlink, the innovative user interface based on WiFi technology, the unit is equipped with the Touch interface, with a 7” WVGA colour display and a front USB port (WARNING: with outdoor temperature below 0°C the display response time may visibly increase).		ALL
1444 KIPlink + LARGE KEYBOARD	The unit is equipped with KIPlink, the innovative user interface based on WiFi technology, and, in addition, the physical LCD keyboard.		ALL
6194 LARGE KEYBOARD	The unit is equipped with the Large keyboard with a wide LCD display and led icons.		ALL
6195 7 INCH TOUCH SCREEN	The unit is equipped with the Touch interface, with a 7” WVGA colour display and a front USB port (WARNING: with outdoor temperature below 0°C the display response time may visibly increase).	The touch-screen's technology is characterized by an easy-to-access data, and it allows an effective graphical representation of the main figures protecting the access through 3 privilege levels.	ALL
3420 **LIGHTS ON ELECTRIC BOARD**			
3422 LIGHTS EL. BOARD+POWER SOCKET	230V power socket in the electrical board, CEE 7/3 type (Schuko). The maximum power available is 500VA. Electrical board equipped with lights.	It allows to power small electrical/electronic devices (lights, notebooks, tablets, etc.) during maintenance operations. The interior lighting simplifies maintenance and operations to the electrical panel.	ALL
3390 **ANTICONDENSATE HEATER EL.BOARD**			
3391 ELECTRIC HEATER ON EL. BOARD	Electrical heater fed directly from the unit, is automatically activated at temperatures internal QE below 30 ° C (off state at T higher than 40 ° C).	It avoids the risk of humidity condensation on the electrical panel.	ALL

OPTIONS	DESCRIPTIONS	BENEFITS	AVAILABLE FOR MODELS
5920 **MANAGEMENT & CONTROL SYSTEMS**			
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), 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
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 accesory 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
5925 ENERGY METER FOR W3000	This option includes all following devices on-board the unit panel: - network analyzer with display, already cabled to unit's controller - current transformers.	This option allows to acquire the electrical data and the power absorbed by the unit. The figures are accessible through the unit's W3000 interface, and be sent to the BMS via several protocols by selecting the dedicated serial card in the option list.	ALL
3430 **REFRIGERANT LEAK DETECTOR**			
3431 REFRIG. LEAK DETECTOR	Refrigerant leak detection system, supplied factory mounted and wired in the electrical board. In case of leak detection it will raise an alarm.	It promptly detects gas leakages	ALL
3432 REFRIG. LEAK DETECTOR+MIGR.	Refrigerant leak detection and migration system. In case the device detects a leakage the unit stops and stores the remaining refrigerant inside the evaporator, waiting for the intervention of a technician.	It promptly detects gas leakages, stops the unit and stores the remaining refrigerant.	ALL
3433 GAS LEAK CONTACT + COMPR. OFF	Refrigerant leak detection system, supplied factory mountedand wired in the electrical board. In case of leak detection it will raise an alarm and stop the unit.	It promptly detects gas leakages and stops the unit	ALL
3480 **FUNCTION CONTROL REFRIGERANT**			
3481 WITH INTERNAL LEAK DETECTOR	Proprietary control logic that is able to detect a refrigerant leak, without needing external devices, by reading and interpretation of internal cycle parameters.		ALL

OPTIONS	DESCRIPTIONS	BENEFITS	AVAILABLE FOR MODELS
820 **FAN CONTROL**			
808 EC FANS	Electronically commutated fans (EC fans). The brushless motor, governed by a special controller, continuously adjust fans' speed.	Reduced energy consumption and minimized current's absorption during start-up phase with a connected increased efficiency. The noise reduces proportionally to the unit's partialization.	ALL
818 OVERSIZED EC FANS	Fans with oversized EC motor	Extends the operating limits of the unit. Further information in the dedicated databook section.	ALL
1960 **PRESSURE RELIEF VALVES**			
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
1400 **HP AND LP GAUGES**			
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
1900 **COMPRESSOR SUCTION VALVE**			
1901 COMPRESSOR SUCTION VALVE	Shut-off valve on compressor's suction circuit.	Simplifies maintenance activities	ALL
2840 **EVAPORATOR WATER DELTA T**			
2842			ALL
2630 **INSULATION ON EXCHANGERS**			
2631 DOUBLE INSULATION ON EXCHANGERS	Thermal insulation in closed-cell flexible elastomeric foam (FEF) of 16 mm coupled with a 3 mm layer of reticulated foam in PE and an exterior embossed finishing PE film. This option is mandatory if the unit is supposed to work with outdoor temperature below -10°C.	Reduces heat losses and prevent from condensate problems.	ALL
2633 DOUBLE INSULATION ON EXCH+PIPES+PUMPS	Thermal insulation on heat exchangers in closed-cell flexible elastomeric foam (FEF) of 16 mm coupled with a 3 mm layer of reticulated foam in PE and an exterior embossed finishing PE film. Thermal insulation on pumps and pipes in closed-cell reticulated foam in PE of 20 mm. This option is mandatory if the unit is supposed to work with outdoor temperature below -10°C.	Reduces heat losses and prevent from condensate problems.	ALL
1800 **EVAPORATOR WATER FLOW SWITCH**			
1801 EVAPORATOR WATER FLOW SWITCH	Flow switch with stainless scoop AISI 316L and IP65 protection suitable for installation in industrial plant pipes. It should be installed in a straight pipe without filters, valves, etc., long at least 5 times its diameter, both upstream and downstream.	Signaling of lack of or excessive reduction of flow, it generates an alarm that is in automatic or manual reset depending on n ° alarms per hour and the maximum time of operation of the pump under conditions of low flow rate.	ALL

OPTIONS	DESCRIPTIONS	BENEFITS	AVAILABLE FOR MODELS
1803 ELECTRONIC EV H2O FLOW SWITCH	Electronic flow switch in stainless steel with IP67 protection and 2 digital outputs, suitable for installation in industrial plant pipes. It's supplied with a temperature sensor, a led bar display and a setting button. It must be installed in a straight pipe section without filters, valves, elbows, etc., at least 5 times the pipe diameter in legth, both upstream and downstream from the switch for reliable measurement.	It measures the heat dissipation between two points and allows to calculate the flow rate of the fluid using the calorimetric measuring principle. It can provide different output depending on whether the stream exceeds the SP1 or SP2 set switch points.	ALL
990 **CONDENSING COIL**			
876 E-COATING MICROCHANNEL COILS	The heat exchanger is completely treated by electrolysis so as to create a protective layer of epoxy polymer on the surface, with the following characteristics: - over 3120 hours of salt spray protection as per ASTM G85-02 A3 (SWAAT); - polyurethane surface protection against UV rays.	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 www.melcohit.com/EN/Download/Corporate/GUIDELINES or contact our sales department.	ALL
894 Cu PIPES/PREPAINTED ALL. FINS	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 www.melcohit.com/EN/Download /Corporate/GUIDELINES or contact our sales department.	ALL
4700 **EV - HYDRONIC MODULE**			
4711 EV - 2 PUMPS 2P LH (FIX SPEED)	Evaporator 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
4712 EV - 2 PUMPS 2P HH (FIX SPEED)	Evaporator 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

OPTIONS	DESCRIPTIONS	BENEFITS	AVAILABLE FOR MODELS
4714 EV - RELAY 2 PUMPS + 0-10V SIG	Evaporator 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
4722 EV - 2 PUMPS 2P LH (VAR SPEED)	Evaporator 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
4723 EV - 2 PUMPS 2P HH (VAR SPEED)	Evaporator 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 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
4860 **EV - PRIMARY FLOW CONTROL**			
4861 EV - CONSTANT FLOW	Evaporator 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: 4701, 4702, 4703, 4704, 4705, 4706, 4707, 4708, 4709, 4711, 4712 - 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/FF regulation devices or fixed speed pumps, the unit controller manages the pump activation to reduce pump consumption.	ALL
4862 EV - CONSTANT FLOW (PARAMETER)	Evaporator 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: 4713, 4714, 4715, 4716, 4717, 4718, 4719, 4721, 4722, 4723 - 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

OPTIONS	DESCRIPTIONS	BENEFITS	AVAILABLE FOR MODELS
4864 EV – VPF (w/o DP)(SU, MM_PR)	Evaporator water flow control (plant primary circuit): variable flow (delta P control). Only for single unit systems or unit with option 1541 (Multi Manager - Priority Master) if available. Compatible with hydronic modules with modulating regulation devices (0-10V signal) or with variable speed pumps (codes: 4713, 4714, 4715, 4716, 4717, 4718, 4719, 4721, 4722, 4723 - 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
4865 EV – VPF (w DP)(SU, MM_PR)	Evaporator water flow control (plant primary circuit): variable flow (delta P control). Only for single unit systems or unit with option 1541 (Multi Manager - Priority Master) if available. Compatible with hydronic modules with modulating regulation devices (0-10V signal) or with variable speed pumps (codes: 4713, 4714, 4715, 4716, 4717, 4718, 4719, 4721, 4722, 4723 - 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.	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	DESCRIPTIONS	BENEFITS	AVAILABLE FOR MODELS
4866 EV – VPF (M3000, CPRO, MM_N-PR)	Evaporator water flow control (plant primary circuit): variable flow (delta P control). Only for multi-unit systems with external controller (Manager3000 or ClimaPRO) or unit with option 1542 (Multi Manager - Non Priority Master) if available. Compatible with hydronic modules with modulating regulation devices (0-10V signal) or with variable speed pumps (codes: 4713, 4714, 4715, 4716, 4717, 4718, 4719, 4721, 4722, 4723 - 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, ClimaPRO or Multi Manager Priority Master) with option VPF.	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
4867 EV - VPF.D (SU, MM_PR)	Evaporator water flow control (plant primary circuit): variable flow (delta T control). Only for single unit systems or unit with option 1541 (Multi Manager - Priority Master) if available. Compatible with hydronic modules with modulating regulation devices (0-10V signal) or with variable speed pumps (codes: 4713, 4714, 4715, 4716, 4717, 4718, 4719, 4721, 4722, 4723 - hydronic modules availability depends on unit model). The option includes: 2 plant side NTC temperature sensors (installation by others).	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.	ALL
4868 EV - VPF.D(M3000, CPRO, MM_N-PR)	Evaporator water flow control (plant primary circuit): variable flow (delta T control). Only for multi-unit systems with external controller (Manager3000 or ClimaPRO) or unit with option 1542 (Multi Manager - Non Priority Master) if available. Compatible with hydronic modules with modulating regulation devices (0-10V signal) or with variable speed pumps (codes: 4713, 4714, 4715, 4716, 4717, 4718, 4719, 4721, 4722, 4723 - hydronic modules availability depends on unit model). It shall be the customer responsibility to configure the multi-unit control system (Manager3000, ClimaPRO or Multi Manager - Priority Master) with option VPF.D.	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.	ALL
2910 **HYDRAULIC CONNECTIONS**			
2911 FLANGED HYDRAULIC CONNECTIONS	Grooved coupling with flanged counter-pipe user/source side.		ALL

OPTIONS	DESCRIPTIONS	BENEFITS	AVAILABLE FOR MODELS
3370 **D - HYDRONIC MODULE**			
3371 D - RELAY 1 PUMP (ON/OFF)	Desuperheater hydronic module. The unit is provided with 1 relay to control the activation of 1 external pump via single ON/OFF signal.	The hydronic module allows to control the external pumps with the unit controller logic. The partial heat recovery pumps are activated only when heat recovery is actually possible: compressors on, hot storage tank temperature lower than set-point and than compressor outlet gas temperature. The option minimizes pump consumption.	ALL
2410 **PHASE SEQUENCE RELAY**			
2411 WITH EXTERNAL PHASE SEQUENCE RELAY	Relay for checking mains phase-sequence	Protects loads against faults due to incorrect connection of mains	ALL
4800 **R - HYDRONIC MODULE**			
4802 R - RELAY 1 PUMP (ON/OFF)	Total heat recovery 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
4803 R - RELAY 2 PUMPS (ON/OFF)	Total heat recovery 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
4880 **R - PRIMARY FLOW CONTROL**			
4881 R - CONSTANT FLOW	Total heat recovery 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: 4801, 4802, 4803, 4804, 4805, 4806, 4807, 4808, 4809, 4811, 4812 - 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/FF regulation devices or fixed speed pumps, the unit controller manages the pump activation to reduce pump consumption.	ALL

OPTIONS	DESCRIPTIONS	BENEFITS	AVAILABLE FOR MODELS
4970 **FLOW METER x THERMAL ENERGY :**			
4971 FLOW METER DN40 PN16 4-20mA	Flow meter, supplied loose, not installed, for water flow measurement. The device must be mounted on the supply line. The supply does not provide for an adaptation between the diameter of the flow meter and that of the water supply pipe, if these are different. Different flow meters are available depending on the diameter, which allow different flow ranges: - 4971 - FLOW METER ND 40 (1"1/2) - 4972 - FLOW METER ND 50 (2") - 4973 - FLOWMETER ND 65 (2"1/2) - 4974 - FLOW METER ND 80 (3") - 4975 - FLOW METER ND 100 (4") - 4976 - FLOW METER ND 125 (5") - 4977 - FLOWMETER ND 150 (6") - 4978 - FLOWMETER ND 200 (8")		ALL
4972 FLOW METER DN50 PN16 4-20mA	Flow meter, supplied loose, not installed, for water flow measurement. The device must be mounted on the supply line. The supply does not provide for an adaptation between the diameter of the flow meter and that of the water supply pipe, if these are different. Different flow meters are available depending on the diameter, which allow different flow ranges: - 4971 - FLOW METER ND 40 (1"1/2) - 4972 - FLOW METER ND 50 (2") - 4973 - FLOWMETER ND 65 (2"1/2) - 4974 - FLOW METER ND 80 (3") - 4975 - FLOW METER ND 100 (4") - 4976 - FLOW METER ND 125 (5") - 4977 - FLOWMETER ND 150 (6") - 4978 - FLOWMETER ND 200 (8")		ALL
4973 FLOW METER DN65 PN16 4-20mA	Flow meter, supplied loose, not installed, for water flow measurement. The device must be mounted on the supply line. The supply does not provide for an adaptation between the diameter of the flow meter and that of the water supply pipe, if these are different. Different flow meters are available depending on the diameter, which allow different flow ranges: - 4971 - FLOW METER ND 40 (1"1/2) - 4972 - FLOW METER ND 50 (2") - 4973 - FLOWMETER ND 65 (2"1/2) - 4974 - FLOW METER ND 80 (3") - 4975 - FLOW METER ND 100 (4") - 4976 - FLOW METER ND 125 (5") - 4977 - FLOWMETER ND 150 (6") - 4978 - FLOWMETER ND 200 (8")		ALL

OPTIONS	DESCRIPTIONS	BENEFITS	AVAILABLE FOR MODELS
4974 FLOW METER DN 80 PN16 4-20mA	Flow meter, supplied loose, not installed, for water flow measurement. The device must be mounted on the supply line. The supply does not provide for an adaptation between the diameter of the flow meter and that of the water supply pipe, if these are different. Different flow meters are available depending on the diameter, which allow different flow ranges: - 4971 - FLOW METER ND 40 (1"1/2) - 4972 - FLOW METER ND 50 (2") - 4973 - FLOWMETER ND 65 (2"1/2) - 4974 - FLOW METER ND 80 (3") - 4975 - FLOW METER ND 100 (4") - 4976 - FLOW METER ND 125 (5") - 4977 - FLOWMETER ND 150 (6") - 4978 - FLOWMETER ND 200 (8")		ALL
4975 FLOW METER DN100 PN16 4-20mA	Flow meter, supplied loose, not installed, for water flow measurement. The device must be mounted on the supply line. The supply does not provide for an adaptation between the diameter of the flow meter and that of the water supply pipe, if these are different. Different flow meters are available depending on the diameter, which allow different flow ranges: - 4971 - FLOW METER ND 40 (1"1/2) - 4972 - FLOW METER ND 50 (2") - 4973 - FLOWMETER ND 65 (2"1/2) - 4974 - FLOW METER ND 80 (3") - 4975 - FLOW METER ND 100 (4") - 4976 - FLOW METER ND 125 (5") - 4977 - FLOWMETER ND 150 (6") - 4978 - FLOWMETER ND 200 (8")		ALL
4976 FLOW METER DN125 PN16 4-20mA	Flow meter, supplied loose, not installed, for water flow measurement. The device must be mounted on the supply line. The supply does not provide for an adaptation between the diameter of the flow meter and that of the water supply pipe, if these are different. Different flow meters are available depending on the diameter, which allow different flow ranges: - 4971 - FLOW METER ND 40 (1"1/2) - 4972 - FLOW METER ND 50 (2") - 4973 - FLOWMETER ND 65 (2"1/2) - 4974 - FLOW METER ND 80 (3") - 4975 - FLOW METER ND 100 (4") - 4976 - FLOW METER ND 125 (5") - 4977 - FLOWMETER ND 150 (6") - 4978 - FLOWMETER ND 200 (8")		ALL

OPTIONS	DESCRIPTIONS	BENEFITS	AVAILABLE FOR MODELS
4977 FLOW METER DN150 PN16 4-20mA	Flow meter, supplied loose, not installed, for water flow measurement. The device must be mounted on the supply line. The supply does not provide for an adaptation between the diameter of the flow meter and that of the water supply pipe, if these are different. Different flow meters are available depending on the diameter, which allow different flow ranges: - 4971 - FLOW METER ND 40 (1"1/2) - 4972 - FLOW METER ND 50 (2") - 4973 - FLOWMETER ND 65 (2"1/2) - 4974 - FLOW METER ND 80 (3") - 4975 - FLOW METER ND 100 (4") - 4976 - FLOW METER ND 125 (5") - 4977 - FLOWMETER ND 150 (6") - 4978 - FLOWMETER ND 200 (8")		ALL
4978 FLOW METER DN200 PN16 4-20mA	Flow meter, supplied loose, not installed, for water flow measurement. The device must be mounted on the supply line. The supply does not provide for an adaptation between the diameter of the flow meter and that of the water supply pipe, if these are different. Different flow meters are available depending on the diameter, which allow different flow ranges: - 4971 - FLOW METER ND 40 (1"1/2) - 4972 - FLOW METER ND 50 (2") - 4973 - FLOWMETER ND 65 (2"1/2) - 4974 - FLOW METER ND 80 (3") - 4975 - FLOW METER ND 100 (4") - 4976 - FLOW METER ND 125 (5") - 4977 - FLOWMETER ND 150 (6") - 4978 - FLOWMETER ND 200 (8")		ALL
5820 **THERMAL ENERGY METER**			
5821 THERMAL ENERGY METER	Device for measuring the capacity delivered by the unit. The accessory consists of: - 2 temperature probes, supplied loose, to be installed on the supply and return water pipes respectively - 1 heat meter, installed on board the machine (inside the electrical panel if space is sufficient), for the calculation of the capacity produced by the unit. the value is made visible both to counter unit and, if present, to BMS.	It allows to calculate the cooling power produced by the unit. The data can be viewed in the controller on board the unit or at BMS (if present).	ALL

OPTIONS	DESCRIPTIONS	BENEFITS	AVAILABLE FOR MODELS
1540 **ON BOARD MULTI MANAGER**			
1541 MM PRIORITY MASTER MM_PR	Multi Manager - Priority Master: integrated control of a group of chillers and chillers with free-cooling with up to 8 units with LAN logics and dynamic master. The unit is identified and parameterized as a Priority Master; therefore it is given preference in case of election of a new Master (in case of a failure of the current Master). At least one Priority Master must be present in the group. The maximum number of Priority Master units coincides with the number of connected units (up to 8). If you want to equip the group of chiller with auxiliary functions (e.g. 4-20 mA set point variation, pressure transducer for VPF system), each Priority Master requires auxiliary input signals. Consequently, for each Priority Master it is necessary to select these accessories from the price list and proceed with their wiring onsite. More details can be found in the data book and in the controls technical documentation.	It allows the management of a group of chillers and chillers with free-cooling (up to 8 units) via LAN with master/slave operating logic with dynamic master which always guarantees a back-up function to the network. The system makes other functions available such as load and stand-by unit management, resource use priority, unit start-up in sequence and group fast restart (when Fast Restart option is available). For more details refer to the dedicated section of the data book.	ALL
1542 MM NON PRIORITY MASTER MM_N-PR	Multi Manager - Non Priority Master: integrated control of a group of chillers and chillers with free-cooling with up to 8 units with LAN logics and dynamic master. The unit is identified and parameterized as a Non-Priority Master. Non-Priority Master units can become Masters (in case of a failure of the current Master) if there are no more Priority Master units available. In this case, the functions provided by the auxiliary signals are suspended (e.g. 4-20 mA set point variation, VPF); these signals can only be processed by Priority Master units. More details can be found in the data book and in the controls technical documentation.	It allows the management of a group of chillers and chillers with free-cooling (up to 8 units) via LAN with master/slave operating logic with dynamic master which always guarantees a back-up function to the network. The system makes other functions available such as load and stand-by unit management, resource use priority, unit start-up in sequence and group fast restart (when Fast Restart option is available). For more details refer to the dedicated section of the data book.	ALL
2430 **PIPING KIT ANTIFREEZE HEATER**			
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
2680 **WATER CONNECTIONS ORIENTATION**			
2685 EVAP. CONNECTION RIGHT HAND SIDE			ALL
2340 **UNIT ENCLOSURE**			
2301 COMPRESS .ACOUSTICAL ENCLOSURE	Enclosure made from hot galvanised metal plate and painted with epoxy powder coat. The acoustic insulation availability depends on unit model, see the dedicated description in "Accessories notes".	It reduces the noise emissions and improves aesthetics.	ALL

OPTIONS	DESCRIPTIONS	BENEFITS	AVAILABLE FOR MODELS
2315 NOISE REDUCER	The option includes the reduction of the rotational speed of the fans and a dedicated coating of the whole refigerant circuit and pumps (if any).	The dedicated fans' speed calibration together with the soundproofing of the most critical components permit a significant noise reduction (for the precise performance of the unit with the Noise Reducer kit please refer to the selection software).	ALL
2020 **ANTI-INTRUSION GRILLS**			
2021 ANTI-INTRUSION GRILLS	Anti-intrusions grills	Avoid the intrusion of solid bodies into the unit's structure.	ALL
2100 **ANTIVIBRATION MOUNTING**			
2101 RUBBER TYPE ANTIVIBR.MOUNTING			ALL
2102 SPRING TYPE ANTIVIBR.MOUNTING			ALL
1970 **LONG DISTANCE TRANSPORTATION**			
1971 REINFORCING BARS	Bars used to reinforce the structure	Improve resistance during long transportation	ALL

5.2 Options - Additional information

1541 – Multi Manager – Priority Master
1542 – Multi Manager – Non-Priority Master

These options are not compatible with option:
5922 - ClimaPRO ModBUS RS485 – MID

1541 – Multi Manager – Priority Master

This option is not compatible with options:
4866 – EV-VPF (M3000, CPRO, MM N-PR) (VPF option for plants with Manager3000, ClimaPro and Non-Priority Master)
4868 – EV-VPF.D(M3000, CPRO, MM N-PR) (VPF option for plants with Manager3000, ClimaPro and Non-Priority Master).

1542 – Multi Manager – Non-Priority Master

This option is not compatible with options:
4864 – EV-VPF (w/o DP)(SU, MM PR) (VPF option for plants with a Single Unit or for Priority Master units – plant side differential pressure transducer excluded).
4865 – EV-VPF (w DP)(SU, MM PR) (VPF option for plants with a Single Unit or for Priority Master units – plant side differential pressure transducer included).
4867 – EV-VPF.D (SU, MM PR) (VPF.D option for plants with a Single Unit or for Priority Master units).

6173 - Smart current limit

This option gives the possibility to control the maximum current absorbed by the unit.
It keeps the absorbed current (and power) below a predetermined value.

This accessory necessarily requires one of the following options:
5922 - ClimaPRO ModBUS RS485 - MID
5924 - Energy meter for BMS
5925 - Energy meter for W3000+

1015 – Heat exchangers NSW certified

The certification is available for evaporator and desusuperheater (for -D versions).

2301 – Compressor acoustical enclosure

The option includes the metal cover of the compressor compartment.
Sound power reduction: -2 dB(A).
This option is not compatible with opt. 2315 – Noise Reducer.

3481 – With internal leak detector

This function constantly checks the refrigerant cycle parameters without needing external devices, in case of gas leaks these values will go outside the predetermined limits and an alarm will be raised.

3432 - Refrigerant leak detector + migration

This accessory involves the installation of a motorized valve in the delivery of the compressor.
If leaks are detected in the compressor compartment, the gas is stored inside the condensing coils.

3431 - Refrigerant leak detector
3432 - Refrigerant leak detector + migration
3433 - Refrigerant leak detector + compressors off

The accessory requires the compressor enclosure. The compressor enclosure the standard in the silenced units (versions: SL-K; SL-E).
For the not-silenced units (versions: K; E), please select one of the following accessories:
2301 - Compressor acoustical enclosure
2315 - Noise Reducer.

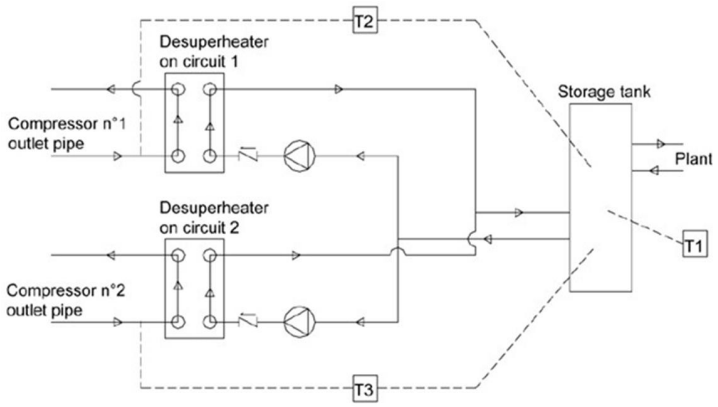
1431 – Night mode

With factory settings, the noise reduction achieved is:
-5 dB(A) for -K and -E versions.
-4 dB(A) for the following configurations: -K + -NR kit, -E + NR kit, -SL-K and -SL-E.

3371 - D - Relay 1 pump (ON/OFF)

The operating diagram of the device is provided below:

Note: the thermostats T1, T2 and T3 are supplied cabled. It is the customer's responsibility to place the temperature probes in the storage tank.
The option leads to an extension of the lead time, contact our sales department for information



Operating diagram of the "partial heat recovery control" function for a unit with two refrigerant circuits.

4711 - EV - 2 PUMPS 2P LH (FIX SPEED)
4712 - EV - 2 PUMPS 2P HH (FIX SPEED)
4722 - EV - 2 PUMPS 2P LH (VAR SPEED)
4723 - EV - 2 PUMPS 2P HH (VAR SPEED)

The pump group may increase the unit's length up to 1250 mm. Refer to the selection software for more information.

2631 – Double insulation on evaporator

19mm thickness of the insulation.

5821 - Thermal energy meter
4971 - Flow meter ND40
4972 - Flow meter ND50
4973 - Flow meter ND65
4974 - Flow meter ND80
4975 - Flow meter ND100
4976 - Flow meter ND125
4977 - Flow meter ND150
4978 - Flow meter ND200

There is a bond of mutual inclusion between the accessories "thermal energy meter" and "flow meter". The combination of the two accessories allows you to view the cooling capacity produced by the unit. This data is available both to onboard controller units and to BMS (if any).
Communication is via Modbus RS485 protocol. Protocols other than this are available as custom execution.
Additional analog or digital outputs are available as custom solutions.
The correct selection of the flow meter depends on the working conditions of the unit. Flow meters with different diameters allow to cover different range of flow. Verify that the flowmeter selected is able to cover the operating water flow range of the unit.

The installation of these accessories provides that:
- where space is available, the thermal energy meter shall be installed inside the electrical panel. If the space is not sufficient, it will still be installed on the unit;
- the two temperature probes and the flow meter will be supplied loose. The flow meter and a probe will be installed on the water supply of the unit, while the second probe, on the return. Any adaptation between the diameter of the flow meter and the diameter of the delivery pipe is not provided for in the delivery.

OPTIONS		Pipe internal diameter		Minimum water flow rate		Maximum water flow rate	
		ND [pollici]	ND [mm]	Q_{min} [m^3/h]	Q_{min} [l/s]	Q_{max} [m^3/h]	Q_{max} [l/s]
4971	FLOW METER ND 40	1"1/2	40	4,5	16,3	13,6	48,9
4972	FLOW METER ND 50	2"	50	7,1	25,4	21,2	76,3
4973	FLOW METER ND 65	2"1/2	65	11,9	43,0	35,8	129,0
4974	FLOW METER ND 80	3"	80	18,1	65,1	54,3	195,4
4975	FLOW METER ND 100	4"	100	28,3	101,8	84,8	305,4
4976	FLOW METER ND 125	5"	125	44,2	159,0	132,5	477,1
4977	FLOW METER ND 150	6"	150	63,6	229,0	190,9	687,1
4978	FLOW METER ND 200	8"	200	113,1	407,1	339,3	1221,4

Minimum and maximum water flow rates for each available flow meter

1801 - Evaporator water flow switch
1803 - Electronic evaporator flow switch

The accessory is supplied loose.

9979 – Container packing

The selection of this option is mandatory to let the units be shippable via container. This option provides low-profiled fans which can reduce the height of the units and permits the transport via container. The selection of this option increases the sound power level of the units of 1 dB(A).

1540 - LAN Multi Manager

Up to 8 units (chillers or free-cooling chillers, with the same firmware version) can communicate via serial connection.
All the group functions are implemented with master/slave logic, with dynamic master.
Hereunder is a brief description of the main group functions, further details are available in the dedicated user manual.

- Load management
There are two possible load management logics: load sharing and sequencing.
- Load sharing: the load is distributed equally among the active units of the group.
- Sequencing: the units are activated one after the other. When the first unit is saturated (all the available resources are used), the second unit is activated, and so forth unit the load is fully covered.

- Dynamic master
In case of disconnection of the master unit, a new master is automatically elected among the other units, and the group functions remain active. The dynamic master function grants a backup solution to the net, overcoming the single point of failure typical of the static master architecture. Besides, it is possible to set the "master succession priority": in case of the master unit disconnection, the new master is elected among the units set as priority.

- Stand-by unit management
It is possible to set the number of unit that remain in stand-by, the load will be managed (with load sharing or sequencing) among the other units of the group. The stand-by unit rotation is automatic, according to the running hours equalization. A stand-by unit is immediately activated in case of total failure or disconnection of one of the active units of the group, or in case the water temperature exceeds the safety threshold.

- Restart in sequence
After a power black-out, this group function coordinates the compressor activation time of the different units and prevents from dangerous current picks due to simultaneous start-ups. Besides, it is possible to set the activation sequence of the units.

- Resource priority management
To make the most of the available cooling resources, it is possible to set the usage priority of each unit. The load management function will be adjusted accordingly. When available, the free-cooling is always given priority and is fully exploited before activating any compressor. Then the activation of the compressors follows the priority level assigned to the units.

- Auxiliary input
The auxiliary inputs are applied at a group level:
- 4-20 mA: remote set-point adjustments (analog input).
- Double set-point: remote switch between 2 set-points (digital input).
- Demand limit: remote signal to limit the unit's activable resources (digital input).

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 branche, 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.



[SI System]

i-FX2-G01-K			0532	0602	0622	0672	0732	0802	0892	0972	1032	1082
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
PERFORMANCE												
COOLING ONLY (GROSS VALUE)												
Cooling capacity	(1)	**kW**	**533,6**	**597,5**	**623,9**	**674,5**	**726,0**	**800,9**	**889,8**	**967,2**	**1034**	**1079**
Total power input	(1)	kW	175,8	195,6	201,1	216,5	238,4	271,5	296,8	314,3	332,9	346,1
EER	(1)	kW/kW	3,035	3,055	3,102	3,115	3,045	2,950	2,998	3,077	3,106	3,118
COOLING ONLY (EN14511 VALUE)												
Cooling capacity		**kW**	**533,1**	**596,9**	**623,4**	**673,8**	**725,4**	**800,3**	**889,1**	**966,5**	**1033**	**1079**
EER		kW/kW	3,000	3,010	3,070	3,070	3,000	2,920	2,960	3,050	3,070	3,070
Cooling energy class			-	-	-	-	-	-	-	-	-	-
COOLING WITH PARTIAL RECOVERY												
Cooling capacity	(3)	kW	553,6	619,9	647,3	699,8	753,3	831,0	923,2	1003	1073	1120
Total power input	(3)	kW	170,1	189,3	194,6	209,5	230,6	262,6	287,1	304,0	322,0	334,8
Desuperheater heating capacity	(3)	**kW**	**146,8**	**162,8**	**167,7**	**179,7**	**199,3**	**227,1**	**248,0**	**261,9**	**276,8**	**288,6**
COOLING WITH TOTAL HEAT RECOVERY												
Cooling capacity	(4)	kW	511,0	568,2	593,2	637,0	690,6	766,1	847,2	906,9	962,3	1017
Total power input	(4)	kW	142,6	161,3	164,3	180,2	194,4	219,1	242,0	259,3	274,2	278,3
Recovery heat exchanger capacity	(4)	**kW**	**645,0**	**719,8**	**747,6**	**806,4**	**873,3**	**972,0**	**1075**	**1151**	**1220**	**1278**
EXCHANGERS												
HEAT EXCHANGER USER SIDE IN COOLING												
Water flow		l/s	25,52	28,57	29,84	32,25	34,72	38,30	42,55	46,25	49,45	51,62
Pressure drop at the heat exchanger		kPa	43,4	54,4	45,8	53,5	56,4	46,3	57,2	42,5	48,6	64,5
PARTIAL RECOVERY USER SIDE IN REFRIGERATION												
Water flow	(3)	l/s	7,084	7,857	8,093	8,674	9,618	10,96	11,97	12,64	13,36	13,93
Pressure drop at the heat exchanger	(3)	kPa	47,5	40,0	42,4	35,1	43,2	42,0	39,0	43,5	48,6	37,2
HEAT EXCHANGER RECOVERY USER SIDE IN REFRIGERATION												
Water flow	(4)	l/s	31,14	34,75	36,09	38,92	42,16	46,92	51,87	55,55	58,89	61,71
Pressure drop at the heat exchanger	(4)	kPa	31,4	34,4	37,1	37,3	39,2	25,7	31,4	36,0	27,0	24,7
REFRIGERANT CIRCUIT												
Compressors nr.		N°	2	2	2	2	2	2	2	2	2	2
Number of capacity steps		N°	0	0	0	0	0	0	0	0	0	0
No. Circuits		N°	2	2	2	2	2	2	2	2	2	2
Regulation			STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS
Min. capacity step		%	12	11	10	12	12	14	13	12	13	13
Refrigerant			R134a	R134a	R134a	R134a	R134a	R134a	R134a	R134a	R134a	R134a
Theoretical refrigerant charge		kg	79,0	88,0	90,0	97,0	107	126	137	150	160	161
Oil charge		kg	36,0	36,0	36,0	36,0	36,0	36,0	36,0	36,0	36,0	53,0
Rc (ASHRAE)	(5)	kg/kW	0,15	0,15	0,15	0,15	0,15	0,16	0,16	0,16	0,16	0,15
FANS												
Quantity		N°	6	7	7	8	8	9	10	11	12	12
Air flow		m³/s	30,87	36,02	36,02	41,16	41,16	46,31	51,45	56,60	61,75	61,75
Total fans power input		kW	11,40	13,30	13,30	15,20	15,20	17,10	19,00	20,90	22,80	22,80
NOISE LEVEL												
Total sound Pressure		dB(A)	68	69	69	69	70	69	70	71	71	71
Total sound power level in cooling		dB(A)	100	101	101	101	102	102	103	104	104	104
SIZE AND WEIGHT												
A	(9)	mm	4150	5400	5400	5400	5400	6650	6650	7900	7900	7900
B	(9)	mm	2260	2260	2260	2260	2260	2260	2260	2260	2260	2260
H	(9)	mm	2640	2640	2640	2640	2640	2640	2640	2640	2640	2640
Operating weight	(9)	kg	4500	5000	5007	5106	5388	5863	5974	6464	6584	7031

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) 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.
4 Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°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 Average sound pressure level at 10m distance, unit in a free field on a reflective surface; non-binding value calculated from the sound power level.
7 Sound power on the basis of measurements taken in compliance with ISO 9614.
8 Sound power level in cooling, outdoors.
9 Unit in standard configuration, without optional accessories.
- Not available
Data certified in EUROVENT

[SI System]

i-FX2-G01-K			1122	1192	1242	1382	1452	1552	1633	1703	1863
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
PERFORMANCE											
COOLING ONLY (GROSS VALUE)											
Cooling capacity	(1)	**kW**	**1123**	**1186**	**1243**	**1383**	**1450**	**1551**	**1628**	**1702**	**1859**
Total power input	(1)	kW	370,2	375,3	398,6	437,6	477,4	483,4	530,6	558,4	599,2
EER	(1)	kW/kW	3,033	3,160	3,118	3,160	3,037	3,209	3,068	3,048	3,102
COOLING ONLY (EN14511 VALUE)											
Cooling capacity		**kW**	**1122**	**1185**	**1243**	**1383**	**1449**	**1550**	**1627**	**1702**	**1858**
EER		kW/kW	2,990	3,110	3,070	3,120	2,990	3,170	3,030	3,000	3,070
Cooling energy class			-	-	-	-	-	-	-	-	-
COOLING WITH PARTIAL RECOVERY											
Cooling capacity	(3)	kW	1165	1230	1290	1435	1504	1609	1689	1766	1929
Total power input	(3)	kW	358,0	363,1	385,6	423,4	461,8	467,7	513,2	540,0	579,6
Desuperheater heating capacity	(3)	**kW**	**310,1**	**311,3**	**332,0**	**363,5**	**399,0**	**401,0**	**443,1**	**467,9**	**500,9**
COOLING WITH TOTAL HEAT RECOVERY											
Cooling capacity	(4)	kW	1073	1115	1177	1305	1371	1452	1541	1626	1770
Total power input	(4)	kW	292,9	310,4	325,4	364,6	398,5	415,7	424,9	442,8	480,6
Recovery heat exchanger capacity	(4)	**kW**	**1348**	**1407**	**1483**	**1647**	**1745**	**1843**	**1941**	**2042**	**2222**
EXCHANGERS											
HEAT EXCHANGER USER SIDE IN COOLING											
Water flow		l/s	53,72	56,69	59,46	66,16	69,32	74,19	77,86	81,42	88,91
Pressure drop at the heat exchanger		kPa	69,9	67,7	69,9	61,4	67,5	58,6	69,5	75,9	52,7
PARTIAL RECOVERY USER SIDE IN REFRIGERATION											
Water flow	(3)	l/s	14,97	15,03	16,03	17,55	19,26	19,36	21,39	22,58	24,18
Pressure drop at the heat exchanger	(3)	kPa	31,9	32,2	36,6	33,9	40,9	41,3	35,0	32,4	37,1
HEAT EXCHANGER RECOVERY USER SIDE IN REFRIGERATION											
Water flow	(4)	l/s	65,07	67,92	71,58	79,52	84,25	88,97	93,68	98,57	107,2
Pressure drop at the heat exchanger	(4)	kPa	22,0	23,9	26,6	24,6	27,6	30,8	22,7	25,2	29,8
REFRIGERANT CIRCUIT											
Compressors nr.		N°	2	2	2	2	2	2	2	3	3
Number of capacity steps		N°	0	0	0	0	0	0	0	0	0
No. Circuits		N°	2	2	2	2	2	2	3	3	3
Regulation			STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS
Min. capacity step		%	13	12	12	12	13	12	9	8	8
Refrigerant			R134a	R134a	R134a	R134a	R134a	R134a	R134a	R134a	R134a
Theoretical refrigerant charge		kg	161	180	200	234	234	253	253	258	275
Oil charge		kg	70,0	70,0	70,0	70,0	70,0	70,0	105	105	105
Rc (ASHRAE)	(5)	kg/kW	0,14	0,15	0,16	0,17	0,16	0,16	0,16	0,15	0,15
FANS											
Quantity		N°	12	14	14	16	16	18	18	18	20
Air flow		m³/s	61,75	72,04	72,04	82,33	82,33	92,62	92,62	92,62	102,91
Total fans power input		kW	22,80	26,60	26,60	30,40	30,40	34,20	34,20	34,20	38,00
NOISE LEVEL											
Total sound Pressure		dB(A)	72	72	73	73	73	73	73	73	74
Total sound power level in cooling		dB(A)	105	105	106	106	106	106	106	106	107
SIZE AND WEIGHT											
A	(9)	mm	7900	9150	9150	10400	10400	11650	11650	11650	12900
B	(9)	mm	2260	2260	2260	2260	2260	2260	2260	2260	2260
H	(9)	mm	2640	2640	2640	2640	2640	2640	2640	2640	2640
Operating weight	(9)	kg	7409	8243	8249	9008	9008	10165	11301	11679	12284

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) 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.
4 Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°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 Average sound pressure level at 10m distance, unit in a free field on a reflective surface; non-binding value calculated from the sound power level.
7 Sound power on the basis of measurements taken in compliance with ISO 9614.
8 Sound power level in cooling, outdoors.
9 Unit in standard configuration, without optional accessories.
- Not available
Data certified in EUROVENT

[SI System]

i-FX2-G01-SL-K			0532	0602	0622	0672	0732	0802	0892	0972	1032	1082
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
PERFORMANCE												
COOLING ONLY (GROSS VALUE)												
Cooling capacity	(1)	**kW**	**517,6**	**560,8**	**604,9**	**627,6**	**719,3**	**772,0**	**840,2**	**917,4**	**979,4**	**1057**
Total power input	(1)	kW	165,1	174,8	193,4	207,8	224,9	258,3	290,0	312,1	330,4	342,9
EER	(1)	kW/kW	3,135	3,208	3,128	3,020	3,198	2,989	2,897	2,939	2,964	3,083
COOLING ONLY (EN14511 VALUE)												
Cooling capacity		**kW**	**517,1**	**560,2**	**604,4**	**627,0**	**718,6**	**771,4**	**839,5**	**916,8**	**978,7**	**1056**
EER		kW/kW	3,100	3,170	3,090	2,990	3,150	2,960	2,860	2,910	2,940	3,040
Cooling energy class			-	-	-	-	-	-	-	-	-	-
COOLING WITH PARTIAL RECOVERY												
Cooling capacity	(3)	kW	537,0	581,8	627,6	651,1	746,2	800,9	871,7	951,8	1016	1097
Total power input	(3)	kW	159,7	169,1	187,0	200,9	217,5	249,8	280,4	301,7	319,4	331,5
Desuperheater heating capacity	(3)	**kW**	**138,7**	**146,1**	**162,6**	**175,5**	**188,3**	**218,1**	**246,4**	**264,9**	**279,9**	**289,8**
COOLING WITH TOTAL HEAT RECOVERY												
Cooling capacity	(4)	kW	503,3	559,7	584,3	627,4	680,2	754,6	834,5	893,3	947,9	1017
Total power input	(4)	kW	139,0	157,3	160,2	175,7	189,6	213,6	235,9	252,8	267,3	278,3
Recovery heat exchanger capacity	(4)	**kW**	**634,0**	**707,5**	**734,9**	**792,6**	**858,4**	**955,4**	**1056**	**1131**	**1199**	**1278**
EXCHANGERS												
HEAT EXCHANGER USER SIDE IN COOLING												
Water flow		l/s	24,75	26,82	28,93	30,01	34,40	36,92	40,18	43,87	46,84	50,56
Pressure drop at the heat exchanger		kPa	40,8	47,9	43,1	46,4	55,4	43,0	51,0	38,3	43,6	61,9
PARTIAL RECOVERY USER SIDE IN REFRIGERATION												
Water flow	(3)	l/s	6,693	7,051	7,848	8,470	9,087	10,53	11,89	12,79	13,51	13,99
Pressure drop at the heat exchanger	(3)	kPa	42,4	47,0	39,9	33,5	38,5	38,8	38,5	44,5	49,7	37,5
HEAT EXCHANGER RECOVERY USER SIDE IN REFRIGERATION												
Water flow	(4)	l/s	30,60	34,15	35,47	38,26	41,44	46,12	50,98	54,59	57,88	61,71
Pressure drop at the heat exchanger	(4)	kPa	34,0	37,8	35,9	36,0	37,8	24,8	30,3	34,8	26,1	24,7
REFRIGERANT CIRCUIT												
Compressors nr.		N°	2	2	2	2	2	2	2	2	2	2
Number of capacity steps		N°	0	0	0	0	0	0	0	0	0	0
No. Circuits		N°	2	2	2	2	2	2	2	2	2	2
Regulation			STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS
Min. capacity step		%	13	14	15	14	14	16	15	14	15	15
Refrigerant			R134a	R134a	R134a	R134a	R134a	R134a	R134a	R134a	R134a	R134a
Theoretical refrigerant charge		kg	84,0	93,0	95,0	97,0	117	131	137	150	160	166
Oil charge		kg	36,0	36,0	36,0	36,0	36,0	36,0	36,0	36,0	36,0	53,0
Rc (ASHRAE)	(5)	kg/kW	0,16	0,17	0,16	0,16	0,16	0,17	0,16	0,17	0,17	0,16
FANS												
Quantity		N°	7	8	8	8	10	10	10	11	12	13
Air flow		m³/s	32,44	37,07	37,07	37,07	46,34	46,34	46,34	50,98	55,61	60,24
Total fans power input		kW	9,80	11,20	11,20	11,20	14,00	14,00	14,00	15,40	16,80	18,20
NOISE LEVEL												
Total sound Pressure		dB(A)	59	60	60	60	60	60	60	61	62	63
Total sound power level in cooling		dB(A)	91	92	92	92	93	93	93	94	95	96
SIZE AND WEIGHT												
A	(9)	mm	5400	5400	5400	5400	6650	6650	6650	7900	7900	9150
B	(9)	mm	2260	2260	2260	2260	2260	2260	2260	2260	2260	2260
H	(9)	mm	2640	2640	2640	2640	2640	2640	2640	2640	2640	2640
Operating weight	(9)	kg	5570	5661	5676	5686	6520	6543	6563	7053	7173	8205

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) 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.
4 Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°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 Average sound pressure level at 10m distance, unit in a free field on a reflective surface; non-binding value calculated from the sound power level.
7 Sound power on the basis of measurements taken in compliance with ISO 9614.
8 Sound power level in cooling, outdoors.
9 Unit in standard configuration, without optional accessories.
- Not available
Data certified in EUROVENT

[SI System]

i-FX2-G01-SL-K			1122	1192	1242	1382	1452	1552	1633	1703	1863
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
PERFORMANCE											
COOLING ONLY (GROSS VALUE)											
Cooling capacity	(1)	**kW**	**1119**	**1164**	**1222**	**1303**	**1403**	**1476**	**1603**	**1677**	**1774**
Total power input	(1)	kW	360,9	363,5	386,5	426,5	454,6	476,4	527,0	551,8	611,3
EER	(1)	kW/kW	3,101	3,202	3,162	3,055	3,086	3,098	3,042	3,039	2,902
COOLING ONLY (EN14511 VALUE)											
Cooling capacity		**kW**	**1118**	**1163**	**1221**	**1302**	**1402**	**1476**	**1602**	**1676**	**1773**
EER		kW/kW	3,050	3,150	3,120	3,020	3,050	3,060	3,000	3,000	2,870
Cooling energy class			-	-	-	-	-	-	-	-	-
COOLING WITH PARTIAL RECOVERY											
Cooling capacity	(3)	kW	1161	1207	1268	1352	1456	1532	1663	1740	1841
Total power input	(3)	kW	348,9	351,6	373,8	412,3	439,6	460,6	509,5	533,5	590,9
Desuperheater heating capacity	(3)	**kW**	**304,6**	**304,5**	**325,0**	**360,7**	**383,3**	**402,8**	**445,4**	**467,6**	**520,7**
COOLING WITH TOTAL HEAT RECOVERY											
Cooling capacity	(4)	kW	1073	1110	1171	1285	1350	1431	1541	1626	1770
Total power input	(4)	kW	292,9	307,3	322,1	355,5	388,5	405,3	424,9	442,8	480,6
Recovery heat exchanger capacity	(4)	**kW**	**1348**	**1399**	**1474**	**1619**	**1715**	**1812**	**1941**	**2042**	**2222**
EXCHANGERS											
HEAT EXCHANGER USER SIDE IN COOLING											
Water flow		l/s	53,51	55,64	58,44	62,30	67,09	70,61	76,66	80,21	84,84
Pressure drop at the heat exchanger		kPa	69,3	65,2	67,5	54,5	63,2	53,0	67,3	73,7	47,9
PARTIAL RECOVERY USER SIDE IN REFRIGERATION											
Water flow	(3)	l/s	14,70	14,70	15,69	17,41	18,50	19,44	21,50	22,57	25,13
Pressure drop at the heat exchanger	(3)	kPa	30,8	30,8	35,1	33,4	37,7	41,6	35,3	32,4	40,1
HEAT EXCHANGER RECOVERY USER SIDE IN REFRIGERATION											
Water flow	(4)	l/s	65,07	67,51	71,15	78,16	82,80	87,45	93,68	98,57	107,2
Pressure drop at the heat exchanger	(4)	kPa	22,0	23,6	26,2	23,8	26,7	29,7	22,7	25,2	29,8
REFRIGERANT CIRCUIT											
Compressors nr.		N°	2	2	2	2	2	2	3	3	3
Number of capacity steps		N°	0	0	0	0	0	0	0	0	0
No. Circuits		N°	2	2	2	2	2	2	3	3	3
Regulation			STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS
Min. capacity step		%	14	14	14	14	14	15	10	9	9
Refrigerant			R134a	R134a	R134a	R134a	R134a	R134a	R134a	R134a	R134a
Theoretical refrigerant charge		kg	171	190	210	234	244	253	263	268	275
Oil charge		kg	70,0	70,0	70,0	70,0	70,0	70,0	105	105	105
Rc (ASHRAE)	(5)	kg/kW	0,15	0,17	0,17	0,18	0,18	0,17	0,17	0,16	0,16
FANS											
Quantity		N°	14	16	16	16	18	18	20	20	20
Air flow		m³/s	64,88	74,15	74,15	74,15	83,41	83,41	92,68	92,68	92,68
Total fans power input		kW	19,60	22,40	22,40	22,40	25,20	25,20	28,00	28,00	28,00
NOISE LEVEL											
Total sound Pressure		dB(A)	63	63	63	63	63	63	63	63	64
Total sound power level in cooling		dB(A)	96	96	96	96	96	96	96	96	97
SIZE AND WEIGHT											
A	(9)	mm	9150	10400	10400	10400	11650	11650	12900	12900	12900
B	(9)	mm	2260	2260	2260	2260	2260	2260	2260	2260	2260
H	(9)	mm	2640	2640	2640	2640	2640	2640	2640	2640	2640
Operating weight	(9)	kg	8674	9378	9383	9607	10217	10773	12753	13131	13177

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) 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.
4 Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°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 Average sound pressure level at 10m distance, unit in a free field on a reflective surface; non-binding value calculated from the sound power level.
7 Sound power on the basis of measurements taken in compliance with ISO 9614.
8 Sound power level in cooling, outdoors.
9 Unit in standard configuration, without optional accessories.
- Not available
Data certified in EUROVENT

[SI System]

i-FX2-G01-K+EC			0532	0602	0622	0672	0732	0802	0892	0972	1032	1082
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
PERFORMANCE												
COOLING ONLY (GROSS VALUE)												
Cooling capacity	(1)	**kW**	**533,6**	**597,5**	**623,9**	**674,5**	**726,0**	**800,9**	**889,8**	**967,2**	**1034**	**1079**
Total power input	(1)	kW	174,6	194,2	199,7	214,9	236,8	269,7	294,8	312,1	330,5	343,7
EER	(1)	kW/kW	3,056	3,077	3,124	3,139	3,066	2,970	3,018	3,099	3,129	3,139
COOLING ONLY (EN14511 VALUE)												
Cooling capacity		**kW**	**533,1**	**596,9**	**623,4**	**673,8**	**725,4**	**800,3**	**889,1**	**966,5**	**1033**	**1079**
EER		kW/kW	3,020	3,030	3,090	3,100	3,020	2,940	2,980	3,070	3,090	3,100
Cooling energy class			-	-	-	-	-	-	-	-	-	-
COOLING WITH PARTIAL RECOVERY												
Cooling capacity	(3)	kW	553,6	619,9	647,3	699,8	753,3	831,0	923,2	1003	1073	1120
Total power input	(3)	kW	168,9	187,9	193,2	207,9	229,0	260,8	285,1	301,8	319,6	332,4
Desuperheater heating capacity	(3)	**kW**	**146,8**	**162,8**	**167,7**	**179,7**	**199,3**	**227,1**	**248,0**	**261,9**	**276,8**	**288,6**
COOLING WITH TOTAL HEAT RECOVERY												
Cooling capacity	(4)	kW	511,0	568,2	593,2	637,0	690,6	766,1	847,2	906,9	962,3	1017
Total power input	(4)	kW	142,6	161,3	164,3	180,2	194,4	219,1	242,0	259,3	274,2	278,3
Recovery heat exchanger capacity	(4)	**kW**	**645,0**	**719,8**	**747,6**	**806,4**	**873,3**	**972,0**	**1075**	**1151**	**1220**	**1278**
EXCHANGERS												
HEAT EXCHANGER USER SIDE IN COOLING												
Water flow		l/s	25,52	28,57	29,84	32,25	34,72	38,30	42,55	46,25	49,45	51,62
Pressure drop at the heat exchanger		kPa	43,4	54,4	45,8	53,5	56,4	46,3	57,2	42,5	48,6	64,5
PARTIAL RECOVERY USER SIDE IN REFRIGERATION												
Water flow	(3)	l/s	7,084	7,857	8,093	8,674	9,618	10,96	11,97	12,64	13,36	13,93
Pressure drop at the heat exchanger	(3)	kPa	47,5	40,0	42,4	35,1	43,2	42,0	39,0	43,5	48,6	37,2
HEAT EXCHANGER RECOVERY USER SIDE IN REFRIGERATION												
Water flow	(4)	l/s	31,14	34,75	36,09	38,92	42,16	46,92	51,87	55,55	58,89	61,71
Pressure drop at the heat exchanger	(4)	kPa	31,4	34,4	37,1	37,3	39,2	25,7	31,4	36,0	27,0	24,7
REFRIGERANT CIRCUIT												
Compressors nr.		N°	2	2	2	2	2	2	2	2	2	2
Number of capacity steps		N°	0	0	0	0	0	0	0	0	0	0
No. Circuits		N°	2	2	2	2	2	2	2	2	2	2
Regulation			STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS
Min. capacity step		%	12	11	10	12	12	14	13	12	13	13
Refrigerant			R134a	R134a	R134a	R134a	R134a	R134a	R134a	R134a	R134a	R134a
Theoretical refrigerant charge		kg	79,0	88,0	90,0	97,0	107	126	137	150	160	161
Oil charge		kg	36,0	36,0	36,0	36,0	36,0	36,0	36,0	36,0	36,0	53,0
Rc (ASHRAE)	(5)	kg/kW	0,15	0,15	0,15	0,15	0,15	0,16	0,16	0,16	0,16	0,15
FANS												
Quantity		N°	6	7	7	8	8	9	10	11	12	12
Air flow		m³/s	30,90	36,05	36,05	41,20	41,20	46,35	51,50	56,65	61,80	61,80
Total fans power input		kW	10,20	11,90	11,90	13,60	13,60	15,30	17,00	18,70	20,40	20,40
NOISE LEVEL												
Total sound Pressure		dB(A)	68	69	69	69	70	69	70	71	71	71
Total sound power level in cooling		dB(A)	100	101	101	101	102	102	103	104	104	104
SIZE AND WEIGHT												
A	(9)	mm	4150	5400	5400	5400	5400	6650	6650	7900	7900	7900
B	(9)	mm	2260	2260	2260	2260	2260	2260	2260	2260	2260	2260
H	(9)	mm	2640	2640	2640	2640	2640	2640	2640	2640	2640	2640
Operating weight	(9)	kg	4500	5000	5007	5106	5388	5863	5974	6464	6584	7031

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) 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.
4 Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°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 Average sound pressure level at 10m distance, unit in a free field on a reflective surface; non-binding value calculated from the sound power level.
7 Sound power on the basis of measurements taken in compliance with ISO 9614.
8 Sound power level in cooling, outdoors.
9 Unit in standard configuration, without optional accessories.
- Not available
Data certified in EUROVENT

[SI System]

i-FX2-G01-K+EC			1122	1192	1242	1382	1452	1552	1633	1703	1863
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
PERFORMANCE											
COOLING ONLY (GROSS VALUE)											
Cooling capacity	(1)	**kW**	**1123**	**1186**	**1243**	**1383**	**1450**	**1551**	**1628**	**1702**	**1859**
Total power input	(1)	kW	367,8	372,5	395,8	434,4	474,2	479,8	527,0	554,8	595,2
EER	(1)	kW/kW	3,053	3,184	3,140	3,184	3,058	3,233	3,089	3,068	3,123
COOLING ONLY (EN14511 VALUE)											
Cooling capacity		**kW**	**1122**	**1185**	**1243**	**1383**	**1449**	**1550**	**1627**	**1702**	**1858**
EER		kW/kW	3,010	3,140	3,090	3,140	3,010	3,190	3,050	3,020	3,090
Cooling energy class			-	-	-	-	-	-	-	-	-
COOLING WITH PARTIAL RECOVERY											
Cooling capacity	(3)	kW	1165	1230	1290	1435	1504	1609	1689	1766	1929
Total power input	(3)	kW	355,6	360,3	382,8	420,2	458,6	464,1	509,6	536,4	575,6
Desuperheater heating capacity	(3)	**kW**	**310,1**	**311,3**	**332,0**	**363,5**	**399,0**	**401,0**	**443,1**	**467,9**	**500,9**
COOLING WITH TOTAL HEAT RECOVERY											
Cooling capacity	(4)	kW	1073	1115	1177	1305	1371	1452	1541	1626	1770
Total power input	(4)	kW	292,9	310,4	325,4	364,6	398,5	415,7	424,9	442,8	480,6
Recovery heat exchanger capacity	(4)	**kW**	**1348**	**1407**	**1483**	**1647**	**1745**	**1843**	**1941**	**2042**	**2222**
EXCHANGERS											
HEAT EXCHANGER USER SIDE IN COOLING											
Water flow		l/s	53,72	56,69	59,46	66,16	69,32	74,19	77,86	81,42	88,91
Pressure drop at the heat exchanger		kPa	69,9	67,7	69,9	61,4	67,5	58,6	69,5	75,9	52,7
PARTIAL RECOVERY USER SIDE IN REFRIGERATION											
Water flow	(3)	l/s	14,97	15,03	16,03	17,55	19,26	19,36	21,39	22,58	24,18
Pressure drop at the heat exchanger	(3)	kPa	31,9	32,2	36,6	33,9	40,9	41,3	35,0	32,4	37,1
HEAT EXCHANGER RECOVERY USER SIDE IN REFRIGERATION											
Water flow	(4)	l/s	65,07	67,92	71,58	79,52	84,25	88,97	93,68	98,57	107,2
Pressure drop at the heat exchanger	(4)	kPa	22,0	23,9	26,6	24,6	27,6	30,8	22,7	25,2	29,8
REFRIGERANT CIRCUIT											
Compressors nr.		N°	2	2	2	2	2	2	2	3	3
Number of capacity steps		N°	0	0	0	0	0	0	0	0	0
No. Circuits		N°	2	2	2	2	2	2	3	3	3
Regulation			STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS
Min. capacity step		%	13	12	12	12	13	12	9	8	8
Refrigerant			R134a	R134a	R134a	R134a	R134a	R134a	R134a	R134a	R134a
Theoretical refrigerant charge		kg	161	180	200	234	234	253	253	258	275
Oil charge		kg	70,0	70,0	70,0	70,0	70,0	70,0	105	105	105
Rc (ASHRAE)	(5)	kg/kW	0,14	0,15	0,16	0,17	0,16	0,16	0,16	0,15	0,15
FANS											
Quantity		N°	12	14	14	16	16	18	18	18	20
Air flow		m³/s	61,80	72,10	72,10	82,40	82,40	92,70	92,70	92,70	103,00
Total fans power input		kW	20,40	23,80	23,80	27,20	27,20	30,60	30,60	30,60	34,00
NOISE LEVEL											
Total sound Pressure		dB(A)	72	72	73	73	73	73	73	73	74
Total sound power level in cooling		dB(A)	105	105	106	106	106	106	106	106	107
SIZE AND WEIGHT											
A	(9)	mm	7900	9150	9150	10400	10400	11650	11650	11650	12900
B	(9)	mm	2260	2260	2260	2260	2260	2260	2260	2260	2260
H	(9)	mm	2640	2640	2640	2640	2640	2640	2640	2640	2640
Operating weight	(9)	kg	7409	8243	8249	9008	9008	10165	11301	11679	12284

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) 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.
4 Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°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 Average sound pressure level at 10m distance, unit in a free field on a reflective surface; non-binding value calculated from the sound power level.
7 Sound power on the basis of measurements taken in compliance with ISO 9614.
8 Sound power level in cooling, outdoors.
9 Unit in standard configuration, without optional accessories.
- Not available
Data certified in EUROVENT

[SI System]

i-FX2-G01-SL-K			0532	0602	0622	0672	0732	0802	0892	0972	1032	1082
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
PERFORMANCE												
COOLING ONLY (GROSS VALUE)												
Cooling capacity	(1)	**kW**	**517,6**	**560,8**	**604,9**	**627,6**	**719,3**	**772,0**	**840,2**	**917,4**	**979,4**	**1057**
Total power input	(1)	kW	163,0	172,4	191,0	205,4	221,9	255,3	287,0	308,8	326,8	339,0
EER	(1)	kW/kW	3,175	3,253	3,167	3,056	3,242	3,024	2,928	2,971	2,997	3,118
COOLING ONLY (EN14511 VALUE)												
Cooling capacity		**kW**	**517,1**	**560,2**	**604,4**	**627,0**	**718,6**	**771,4**	**839,5**	**916,8**	**978,7**	**1056**
EER		kW/kW	3,140	3,210	3,130	3,020	3,200	2,990	2,890	2,940	2,970	3,080
Cooling energy class			-	-	-	-	-	-	-	-	-	-
COOLING WITH PARTIAL RECOVERY												
Cooling capacity	(3)	kW	537,0	581,8	627,6	651,1	746,2	800,9	871,7	951,8	1016	1097
Total power input	(3)	kW	157,6	166,7	184,6	198,5	214,5	246,8	277,4	298,4	315,8	327,6
Desuperheater heating capacity	(3)	**kW**	**138,7**	**146,1**	**162,6**	**175,5**	**188,3**	**218,1**	**246,4**	**264,9**	**279,9**	**289,8**
COOLING WITH TOTAL HEAT RECOVERY												
Cooling capacity	(4)	kW	503,3	559,7	584,3	627,4	680,2	754,6	834,5	893,3	947,9	1017
Total power input	(4)	kW	139,0	157,3	160,2	175,7	189,6	213,6	235,9	252,8	267,3	278,3
Recovery heat exchanger capacity	(4)	**kW**	**634,0**	**707,5**	**734,9**	**792,6**	**858,4**	**955,4**	**1056**	**1131**	**1199**	**1278**
EXCHANGERS												
HEAT EXCHANGER USER SIDE IN COOLING												
Water flow		l/s	24,75	26,82	28,93	30,01	34,40	36,92	40,18	43,87	46,84	50,56
Pressure drop at the heat exchanger		kPa	40,8	47,9	43,1	46,4	55,4	43,0	51,0	38,3	43,6	61,9
PARTIAL RECOVERY USER SIDE IN REFRIGERATION												
Water flow	(3)	l/s	6,693	7,051	7,848	8,470	9,087	10,53	11,89	12,79	13,51	13,99
Pressure drop at the heat exchanger	(3)	kPa	42,4	47,0	39,9	33,5	38,5	38,8	38,5	44,5	49,7	37,5
HEAT EXCHANGER RECOVERY USER SIDE IN REFRIGERATION												
Water flow	(4)	l/s	30,60	34,15	35,47	38,26	41,44	46,12	50,98	54,59	57,88	61,71
Pressure drop at the heat exchanger	(4)	kPa	34,0	37,8	35,9	36,0	37,8	24,8	30,3	34,8	26,1	24,7
REFRIGERANT CIRCUIT												
Compressors nr.		N°	2	2	2	2	2	2	2	2	2	2
Number of capacity steps		N°	0	0	0	0	0	0	0	0	0	0
No. Circuits		N°	2	2	2	2	2	2	2	2	2	2
Regulation			STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS
Min. capacity step		%	13	14	15	14	14	16	15	14	15	15
Refrigerant			R134a	R134a	R134a	R134a	R134a	R134a	R134a	R134a	R134a	R134a
Theoretical refrigerant charge		kg	84,0	93,0	95,0	97,0	117	131	137	150	160	166
Oil charge		kg	36,0	36,0	36,0	36,0	36,0	36,0	36,0	36,0	36,0	53,0
Rc (ASHRAE)	(5)	kg/kW	0,16	0,17	0,16	0,16	0,16	0,17	0,16	0,17	0,17	0,16
FANS												
Quantity		N°	7	8	8	8	10	10	10	11	12	13
Air flow		m³/s	32,41	37,04	37,04	37,04	46,30	46,30	46,30	50,93	55,56	60,19
Total fans power input		kW	7,70	8,80	8,80	8,80	11,00	11,00	11,00	12,10	13,20	14,30
NOISE LEVEL												
Total sound Pressure		dB(A)	59	60	60	60	60	60	60	61	62	63
Total sound power level in cooling		dB(A)	91	92	92	92	93	93	93	94	95	96
SIZE AND WEIGHT												
A	(9)	mm	5400	5400	5400	5400	6650	6650	6650	7900	7900	9150
B	(9)	mm	2260	2260	2260	2260	2260	2260	2260	2260	2260	2260
H	(9)	mm	2640	2640	2640	2640	2640	2640	2640	2640	2640	2640
Operating weight	(9)	kg	5570	5661	5676	5686	6520	6543	6563	7053	7173	8205

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) 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.
4 Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°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 Average sound pressure level at 10m distance, unit in a free field on a reflective surface; non-binding value calculated from the sound power level.
7 Sound power on the basis of measurements taken in compliance with ISO 9614.
8 Sound power level in cooling, outdoors.
9 Unit in standard configuration, without optional accessories.
- Not available
Data certified in EUROVENT

[SI System]

i-FX2-G01-SL-K			1122	1192	1242	1382	1452	1552	1633	1703	1863
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
PERFORMANCE											
COOLING ONLY (GROSS VALUE)											
Cooling capacity	(1)	**kW**	**1119**	**1164**	**1222**	**1303**	**1403**	**1476**	**1603**	**1677**	**1774**
Total power input	(1)	kW	356,7	358,7	381,7	421,7	449,2	471,0	521,0	545,8	605,3
EER	(1)	kW/kW	3,137	3,245	3,201	3,090	3,123	3,134	3,077	3,073	2,931
COOLING ONLY (EN14511 VALUE)											
Cooling capacity		**kW**	**1118**	**1163**	**1221**	**1302**	**1402**	**1476**	**1602**	**1676**	**1773**
EER		kW/kW	3,090	3,200	3,150	3,050	3,080	3,100	3,030	3,030	2,900
Cooling energy class			-	-	-	-	-	-	-	-	-
COOLING WITH PARTIAL RECOVERY											
Cooling capacity	(3)	kW	1161	1207	1268	1352	1456	1532	1663	1740	1841
Total power input	(3)	kW	344,7	346,8	369,0	407,5	434,2	455,2	503,5	527,5	584,9
Desuperheater heating capacity	(3)	**kW**	**304,6**	**304,5**	**325,0**	**360,7**	**383,3**	**402,8**	**445,4**	**467,6**	**520,7**
COOLING WITH TOTAL HEAT RECOVERY											
Cooling capacity	(4)	kW	1073	1110	1171	1285	1350	1431	1541	1626	1770
Total power input	(4)	kW	292,9	307,3	322,1	355,5	388,5	405,3	424,9	442,8	480,6
Recovery heat exchanger capacity	(4)	**kW**	**1348**	**1399**	**1474**	**1619**	**1715**	**1812**	**1941**	**2042**	**2222**
EXCHANGERS											
HEAT EXCHANGER USER SIDE IN COOLING											
Water flow		l/s	53,51	55,64	58,44	62,30	67,09	70,61	76,66	80,21	84,84
Pressure drop at the heat exchanger		kPa	69,3	65,2	67,5	54,5	63,2	53,0	67,3	73,7	47,9
PARTIAL RECOVERY USER SIDE IN REFRIGERATION											
Water flow	(3)	l/s	14,70	14,70	15,69	17,41	18,50	19,44	21,50	22,57	25,13
Pressure drop at the heat exchanger	(3)	kPa	30,8	30,8	35,1	33,4	37,7	41,6	35,3	32,4	40,1
HEAT EXCHANGER RECOVERY USER SIDE IN REFRIGERATION											
Water flow	(4)	l/s	65,07	67,51	71,15	78,16	82,80	87,45	93,68	98,57	107,2
Pressure drop at the heat exchanger	(4)	kPa	22,0	23,6	26,2	23,8	26,7	29,7	22,7	25,2	29,8
REFRIGERANT CIRCUIT											
Compressors nr.		N°	2	2	2	2	2	2	3	3	3
Number of capacity steps		N°	0	0	0	0	0	0	0	0	0
No. Circuits		N°	2	2	2	2	2	2	3	3	3
Regulation			STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS
Min. capacity step		%	14	14	14	14	14	15	10	9	9
Refrigerant			R134a	R134a	R134a	R134a	R134a	R134a	R134a	R134a	R134a
Theoretical refrigerant charge		kg	171	190	210	234	244	253	263	268	275
Oil charge		kg	70,0	70,0	70,0	70,0	70,0	70,0	105	105	105
Rc (ASHRAE)	(5)	kg/kW	0,15	0,17	0,17	0,18	0,18	0,17	0,17	0,16	0,16
FANS											
Quantity		N°	14	16	16	16	18	18	20	20	20
Air flow		m³/s	64,82	74,08	74,08	74,08	83,34	83,34	92,60	92,60	92,60
Total fans power input		kW	15,40	17,60	17,60	17,60	19,80	19,80	22,00	22,00	22,00
NOISE LEVEL											
Total sound Pressure		dB(A)	63	63	63	63	63	63	63	63	64
Total sound power level in cooling		dB(A)	96	96	96	96	96	96	96	96	97
SIZE AND WEIGHT											
A	(9)	mm	9150	10400	10400	10400	11650	11650	12900	12900	12900
B	(9)	mm	2260	2260	2260	2260	2260	2260	2260	2260	2260
H	(9)	mm	2640	2640	2640	2640	2640	2640	2640	2640	2640
Operating weight	(9)	kg	8674	9378	9383	9607	10217	10773	12753	13131	13177

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) 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.
4 Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°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 Average sound pressure level at 10m distance, unit in a free field on a reflective surface; non-binding value calculated from the sound power level.
7 Sound power on the basis of measurements taken in compliance with ISO 9614.
8 Sound power level in cooling, outdoors.
9 Unit in standard configuration, without optional accessories.
- Not available
Data certified in EUROVENT

[SI System]

i-FX2-G01-E			0522	0572	0612	0642	0702	0792	0862	0922	0982	1062
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
PERFORMANCE												
COOLING ONLY (GROSS VALUE)												
Cooling capacity	(1)	**kW**	**523,4**	**566,2**	**605,1**	**642,8**	**701,5**	**786,8**	**861,4**	**922,4**	**983,9**	**1055**
Total power input	(1)	kW	155,0	168,5	179,5	192,0	210,6	242,9	269,8	286,1	302,9	320,0
EER	(1)	kW/kW	3,377	3,360	3,371	3,348	3,331	3,239	3,193	3,224	3,248	3,297
COOLING ONLY (EN14511 VALUE)												
Cooling capacity		**kW**	**522,9**	**565,7**	**604,6**	**642,2**	**700,9**	**786,2**	**860,7**	**921,8**	**983,2**	**1054**
EER		kW/kW	3,340	3,320	3,330	3,300	3,280	3,200	3,150	3,190	3,210	3,250
Cooling energy class			-	-	-	-	-	-	-	-	-	-
COOLING WITH PARTIAL RECOVERY												
Cooling capacity	(3)	kW	543,0	587,4	627,8	666,9	727,8	816,3	893,7	957,0	1021	1095
Total power input	(3)	kW	150,0	163,1	173,8	185,9	203,9	235,1	261,0	276,8	293,2	309,7
Desuperheater heating capacity	(3)	**kW**	**126,2**	**138,3**	**146,6**	**156,3**	**172,9**	**200,1**	**222,6**	**235,6**	**249,2**	**262,9**
COOLING WITH TOTAL HEAT RECOVERY												
Cooling capacity	(4)	kW	488,7	527,2	563,4	598,5	656,2	739,7	807,1	861,7	911,9	980,4
Total power input	(4)	kW	135,5	145,9	156,9	169,3	182,4	208,3	232,8	246,1	262,7	276,2
Recovery heat exchanger capacity	(4)	**kW**	**616,1**	**664,3**	**710,9**	**757,7**	**827,7**	**935,5**	**1026**	**1093**	**1159**	**1240**
EXCHANGERS												
HEAT EXCHANGER USER SIDE IN COOLING												
Water flow		l/s	25,03	27,08	28,94	30,74	33,55	37,62	41,20	44,11	47,05	50,46
Pressure drop at the heat exchanger		kPa	41,8	37,7	43,1	48,6	52,7	44,7	53,6	38,7	44,0	61,7
PARTIAL RECOVERY USER SIDE IN REFRIGERATION												
Water flow	(3)	l/s	6,091	6,676	7,075	7,542	8,344	9,660	10,74	11,37	12,03	12,69
Pressure drop at the heat exchanger	(3)	kPa	35,1	42,2	32,4	26,5	32,5	32,7	31,4	35,2	39,4	30,9
HEAT EXCHANGER RECOVERY USER SIDE IN REFRIGERATION												
Water flow	(4)	l/s	29,74	32,07	34,31	36,57	39,96	45,16	49,52	52,76	55,94	59,86
Pressure drop at the heat exchanger	(4)	kPa	28,7	33,3	33,6	32,9	35,2	23,8	28,6	21,6	24,3	23,2
REFRIGERANT CIRCUIT												
Compressors nr.		N°	2	2	2	2	2	2	2	2	2	2
Number of capacity steps		N°	0	0	0	0	0	0	0	0	0	0
No. Circuits		N°	2	2	2	2	2	2	2	2	2	2
Regulation			STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS
Min. capacity step		%	12	12	13	12	13	14	13	14	13	12
Refrigerant			R134a	R134a	R134a	R134a	R134a	R134a	R134a	R134a	R134a	R134a
Theoretical refrigerant charge		kg	94,0	100	110	117	120	146	154	163	185	194
Oil charge		kg	36,0	36,0	36,0	36,0	36,0	36,0	36,0	36,0	36,0	53,0
Rc (ASHRAE)	(5)	kg/kW	0,18	0,18	0,18	0,18	0,17	0,19	0,18	0,18	0,19	0,19
FANS												
Quantity		N°	8	8	9	10	10	11	12	13	14	15
Air flow		m³/s	41,16	41,16	46,31	51,45	51,45	56,60	61,75	66,89	72,04	77,18
Total fans power input		kW	13,60	13,60	15,30	17,00	17,00	18,70	20,40	22,10	23,80	25,50
NOISE LEVEL												
Total sound Pressure		dB(A)	68	69	68	68	69	69	70	71	71	71
Total sound power level in cooling		dB(A)	100	101	101	101	102	102	103	104	104	104
SIZE AND WEIGHT												
A	(9)	mm	5400	5400	6650	6650	6650	7900	7900	9150	9150	10400
B	(9)	mm	2260	2260	2260	2260	2260	2260	2260	2260	2260	2260
H	(9)	mm	2640	2640	2640	2640	2640	2640	2640	2640	2640	2640
Operating weight	(9)	kg	5078	5085	5548	5649	5931	6384	6500	7169	7291	8141

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) 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.
4 Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°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 Average sound pressure level at 10m distance, unit in a free field on a reflective surface; non-binding value calculated from the sound power level.
7 Sound power on the basis of measurements taken in compliance with ISO 9614.
8 Sound power level in cooling, outdoors.
9 Unit in standard configuration, without optional accessories.
- Not available
Data certified in EUROVENT

[SI System]

i-FX2-G01-E			1132	1202	1252	1402	1482
Power supply		V/ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
PERFORMANCE							
COOLING ONLY (GROSS VALUE)							
Cooling capacity	(1)	**kW**	**1130**	**1198**	**1248**	**1395**	**1483**
Total power input	(1)	kW	336,1	365,2	371,0	415,5	447,4
EER	(1)	kW/kW	3,362	3,280	3,364	3,357	3,315
COOLING ONLY (EN14511 VALUE)							
Cooling capacity		**kW**	**1129**	**1197**	**1247**	**1394**	**1482**
EER		kW/kW	3,310	3,240	3,320	3,320	3,270
Cooling energy class			-	-	-	-	-
COOLING WITH PARTIAL RECOVERY							
Cooling capacity	(3)	kW	1172	1243	1295	1447	1539
Total power input	(3)	kW	325,3	353,3	359,1	402,2	432,9
Desuperheater heating capacity	(3)	**kW**	**275,7**	**301,7**	**303,9**	**340,6**	**369,0**
COOLING WITH TOTAL HEAT RECOVERY							
Cooling capacity	(4)	kW	1053	1122	1161	1298	1378
Total power input	(4)	kW	289,9	309,8	322,9	365,0	393,0
Recovery heat exchanger capacity	(4)	**kW**	**1325**	**1413**	**1464**	**1641**	**1747**
EXCHANGERS							
HEAT EXCHANGER USER SIDE IN COOLING							
Water flow		l/s	54,02	57,29	59,67	66,70	70,92
Pressure drop at the heat exchanger		kPa	61,5	46,1	50,0	47,3	57,6
PARTIAL RECOVERY USER SIDE IN REFRIGERATION							
Water flow	(3)	l/s	13,31	14,56	14,67	16,44	17,81
Pressure drop at the heat exchanger	(3)	kPa	25,3	30,2	30,7	29,8	34,9
HEAT EXCHANGER RECOVERY USER SIDE IN REFRIGERATION							
Water flow	(4)	l/s	63,98	68,20	70,69	79,20	84,34
Pressure drop at the heat exchanger	(4)	kPa	21,2	24,1	25,9	24,4	27,7
REFRIGERANT CIRCUIT							
Compressors nr.		N°	2	2	2	2	2
Number of capacity steps		N°	0	0	0	0	0
No. Circuits		N°	2	2	2	2	2
Regulation			STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS
Min. capacity step		%	13	13	12	12	13
Refrigerant			R134a	R134a	R134a	R134a	R134a
Theoretical refrigerant charge		kg	209	229	268	302	302
Oil charge		kg	70,0	70,0	70,0	70,0	70,0
Rc (ASHRAE)	(5)	kg/kW	0,19	0,19	0,22	0,22	0,21
FANS							
Quantity		N°	16	16	18	20	20
Air flow		m³/s	82,33	82,33	92,62	102,91	102,91
Total fans power input		kW	27,20	27,20	30,60	34,00	34,00
NOISE LEVEL							
Total sound Pressure		dB(A)	72	73	73	73	73
Total sound power level in cooling		dB(A)	105	106	106	106	106
SIZE AND WEIGHT							
A	(9)	mm	10400	10400	11650	12900	12900
B	(9)	mm	2260	2260	2260	2260	2260
H	(9)	mm	2640	2640	2640	2640	2640
Operating weight	(9)	kg	8779	8983	9583	10708	10744

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) 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.
4 Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°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 Average sound pressure level at 10m distance, unit in a free field on a reflective surface; non-binding value calculated from the sound power level.
7 Sound power on the basis of measurements taken in compliance with ISO 9614.
8 Sound power level in cooling, outdoors.
9 Unit in standard configuration, without optional accessories.
- Not available
Data certified in EUROVENT

[SI System]

i-FX2-G01-SL-E			0522	0572	0612	0642	0702	0792	0862	0922	0982	1062
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
PERFORMANCE												
COOLING ONLY (GROSS VALUE)												
Cooling capacity	(1)	**kW**	**506,9**	**573,9**	**596,7**	**623,5**	**700,1**	**770,8**	**832,8**	**914,2**	**966,7**	**1043**
Total power input	(1)	kW	153,3	172,5	175,7	189,9	205,5	236,8	259,7	278,4	294,8	312,2
EER	(1)	kW/kW	3,307	3,327	3,396	3,283	3,407	3,255	3,207	3,284	3,279	3,341
COOLING ONLY (EN14511 VALUE)												
Cooling capacity		**kW**	**506,4**	**573,4**	**596,2**	**622,9**	**699,4**	**770,2**	**832,2**	**913,6**	**966,1**	**1042**
EER		kW/kW	3,270	3,290	3,360	3,240	3,360	3,220	3,170	3,250	3,240	3,290
Cooling energy class			-	-	-	-	-	-	-	-	-	-
COOLING WITH PARTIAL RECOVERY												
Cooling capacity	(3)	kW	525,9	595,4	619,1	646,8	726,3	799,7	864,1	948,5	1003	1082
Total power input	(3)	kW	148,3	166,8	169,9	183,6	198,8	229,0	251,1	269,2	285,1	301,9
Desuperheater heating capacity	(3)	**kW**	**129,0**	**145,2**	**147,0**	**159,7**	**171,6**	**199,6**	**218,1**	**233,8**	**247,4**	**262,0**
COOLING WITH TOTAL HEAT RECOVERY												
Cooling capacity	(4)	kW	488,7	535,1	563,4	598,5	656,2	739,7	807,1	861,7	911,9	980,4
Total power input	(4)	kW	135,5	149,6	156,9	169,3	182,4	208,3	232,8	246,1	262,7	276,2
Recovery heat exchanger capacity	(4)	**kW**	**616,1**	**675,7**	**710,9**	**757,7**	**827,7**	**935,5**	**1026**	**1093**	**1159**	**1240**
EXCHANGERS												
HEAT EXCHANGER USER SIDE IN COOLING												
Water flow		l/s	24,24	27,44	28,53	29,81	33,48	36,86	39,83	43,72	46,23	49,89
Pressure drop at the heat exchanger		kPa	39,2	38,8	41,9	45,7	52,4	42,9	50,1	38,0	42,5	60,3
PARTIAL RECOVERY USER SIDE IN REFRIGERATION												
Water flow	(3)	l/s	6,227	7,007	7,097	7,708	8,285	9,635	10,53	11,28	11,94	12,65
Pressure drop at the heat exchanger	(3)	kPa	36,7	31,8	32,6	27,7	32,0	32,5	30,2	34,7	38,8	30,7
HEAT EXCHANGER RECOVERY USER SIDE IN REFRIGERATION												
Water flow	(4)	l/s	29,74	32,62	34,31	36,57	39,96	45,16	49,52	52,76	55,94	59,86
Pressure drop at the heat exchanger	(4)	kPa	28,7	30,3	33,6	32,9	35,2	23,8	28,6	21,6	24,3	23,2
REFRIGERANT CIRCUIT												
Compressors nr.		N°	2	2	2	2	2	2	2	2	2	2
Number of capacity steps		N°	0	0	0	0	0	0	0	0	0	0
No. Circuits		N°	2	2	2	2	2	2	2	2	2	2
Regulation			STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS
Min. capacity step		%	12	13	13	12	13	14	13	12	13	13
Refrigerant			R134a	R134a	R134a	R134a	R134a	R134a	R134a	R134a	R134a	R134a
Theoretical refrigerant charge		kg	94,0	105	115	117	130	150	163	172	194	203
Oil charge		kg	36,0	36,0	36,0	36,0	36,0	36,0	36,0	36,0	36,0	53,0
Rc (ASHRAE)	(5)	kg/kW	0,19	0,19	0,19	0,19	0,19	0,20	0,20	0,19	0,20	0,20
FANS												
Quantity		N°	8	9	10	10	12	12	14	15	16	17
Air flow		m³/s	37,07	41,71	46,34	46,34	55,61	55,61	64,88	69,51	74,15	78,78
Total fans power input		kW	8,80	9,90	11,00	11,00	13,20	13,20	15,40	16,50	17,60	18,70
NOISE LEVEL												
Total sound Pressure		dB(A)	59	59	59	59	60	60	60	61	62	63
Total sound power level in cooling		dB(A)	91	92	92	92	93	93	93	94	95	96
SIZE AND WEIGHT												
A	(9)	mm	5400	6650	6650	6650	7900	7900	9150	10400	10400	11650
B	(9)	mm	2260	2260	2260	2260	2260	2260	2260	2260	2260	2260
H	(9)	mm	2640	2640	2640	2640	2640	2640	2640	2640	2640	2640
Operating weight	(9)	kg	5658	6135	6229	6239	7045	7063	7806	8287	8409	9347

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) 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.
4 Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°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 Average sound pressure level at 10m distance, unit in a free field on a reflective surface; non-binding value calculated from the sound power level.
7 Sound power on the basis of measurements taken in compliance with ISO 9614.
8 Sound power level in cooling, outdoors.
9 Unit in standard configuration, without optional accessories.
- Not available
Data certified in EUROVENT

[SI System]

i-FX2-G01-SL-E			1132	1202	1252	1402	1482
Power supply		V/ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
PERFORMANCE							
COOLING ONLY (GROSS VALUE)							
Cooling capacity	(1)	**kW**	**1115**	**1184**	**1230**	**1352**	**1436**
Total power input	(1)	kW	328,3	357,3	363,4	410,8	442,8
EER	(1)	kW/kW	3,396	3,314	3,385	3,291	3,243
COOLING ONLY (EN14511 VALUE)							
Cooling capacity		**kW**	**1115**	**1183**	**1229**	**1351**	**1436**
EER		kW/kW	3,350	3,280	3,350	3,260	3,200
Cooling energy class			-	-	-	-	-
COOLING WITH PARTIAL RECOVERY							
Cooling capacity	(3)	kW	1157	1228	1276	1402	1490
Total power input	(3)	kW	317,5	345,5	351,4	397,2	428,1
Desuperheater heating capacity	(3)	**kW**	**275,4**	**301,3**	**304,7**	**347,1**	**375,6**
COOLING WITH TOTAL HEAT RECOVERY							
Cooling capacity	(4)	kW	1053	1122	1161	1298	1378
Total power input	(4)	kW	289,9	309,8	322,9	365,0	393,0
Recovery heat exchanger capacity	(4)	**kW**	**1325**	**1413**	**1464**	**1641**	**1747**
EXCHANGERS							
HEAT EXCHANGER USER SIDE IN COOLING							
Water flow		l/s	53,34	56,60	58,83	64,64	68,69
Pressure drop at the heat exchanger		kPa	59,9	45,0	48,6	44,5	54,1
PARTIAL RECOVERY USER SIDE IN REFRIGERATION							
Water flow	(3)	l/s	13,29	14,54	14,71	16,75	18,13
Pressure drop at the heat exchanger	(3)	kPa	25,2	30,2	30,8	30,9	36,2
HEAT EXCHANGER RECOVERY USER SIDE IN REFRIGERATION							
Water flow	(4)	l/s	63,98	68,20	70,69	79,20	84,34
Pressure drop at the heat exchanger	(4)	kPa	21,2	24,1	25,9	24,4	27,7
REFRIGERANT CIRCUIT							
Compressors nr.		N°	2	2	2	2	2
Number of capacity steps		N°	0	0	0	0	0
No. Circuits		N°	2	2	2	2	2
Regulation			STEPLESS	STEPLESS	STEPLESS	STEPLESS	STEPLESS
Min. capacity step		%	12	13	12	12	13
Refrigerant			R134a	R134a	R134a	R134a	R134a
Theoretical refrigerant charge		kg	218	238	277	301	301
Oil charge		kg	70,0	70,0	70,0	70,0	70,0
Rc (ASHRAE)	(5)	kg/kW	0,20	0,20	0,23	0,23	0,21
FANS							
Quantity		N°	18	18	20	20	20
Air flow		m³/s	83,41	83,41	92,68	92,68	92,68
Total fans power input		kW	19,80	19,80	22,00	22,00	22,00
NOISE LEVEL							
Total sound Pressure		dB(A)	63	63	63	63	63
Total sound power level in cooling		dB(A)	96	96	96	96	96
SIZE AND WEIGHT							
A	(9)	mm	11650	11650	12900	12900	12900
B	(9)	mm	2260	2260	2260	2260	2260
H	(9)	mm	2640	2640	2640	2640	2640
Operating weight	(9)	kg	9985	10191	10738	11316	11352

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) 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.
4 Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°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 Average sound pressure level at 10m distance, unit in a free field on a reflective surface; non-binding value calculated from the sound power level.
7 Sound power on the basis of measurements taken in compliance with ISO 9614.
8 Sound power level in cooling, outdoors.
9 Unit in standard configuration, without optional accessories.
- Not available
Data certified in EUROVENT

[SI System]

ENERGY EFFICIENCY

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

i-FX2-G01-K			0532	0602	0622	0672	0732	0802	0892	0972	1032	1082
Prated,c	(1)	kW	533,1	596,9	623,4	673,8	725,4	800,3	889,1	966,5	1033,0	1079,0
SEER	(1) (2)	-	5,11	5,04	5,09	4,96	4,91	4,89	5,04	5,08	5,00	5,12
Performance ηs	(1) (3)	%	201,0	199,0	200,0	195,0	193,0	193,0	199,0	200,0	197,0	202,0
i-FX2-G01-K			**1122**	**1192**	**1242**	**1382**	**1452**	**1552**	**1633**	**1703**	**1863**	
Prated,c	(1)	kW	1122,0	1185,0	1243,0	1383,0	1449,0	1550,0	1627,0	1702,0	1858,0	
SEER	(1) (2)	-	5,10	5,14	5,15	5,22	5,13	5,25	5,09	5,13	5,22	
Performance ηs	(1) (3)	%	201,0	203,0	203,0	206,0	202,0	207,0	200,0	202,0	206,0	

i-FX2-G01-SL-K			0532	0602	0622	0672	0732	0802	0892	0972	1032	1082
Prated,c	(1)	kW	517,1	560,2	604,4	627,0	718,6	771,4	839,5	916,8	978,7	1056,0
SEER	(1) (2)	-	5,11	5,15	5,03	4,90	5,05	4,93	4,97	4,97	4,89	5,12
Performance ηs	(1) (3)	%	202,0	203,0	198,0	193,0	199,0	194,0	196,0	196,0	193,0	202,0
i-FX2-G01-SL-K			**1122**	**1192**	**1242**	**1382**	**1452**	**1552**	**1633**	**1703**	**1863**	
Prated,c	(1)	kW	1118,0	1163,0	1221,0	1302,0	1402,0	1476,0	1602,0	1676,0	1773,0	
SEER	(1) (2)	-	5,15	5,19	5,20	5,17	5,18	5,24	5,06	5,15	5,07	
Performance ηs	(1) (3)	%	203,0	204,0	205,0	204,0	204,0	207,0	199,0	203,0	200,0	

i-FX2-G01-K+EC			0532	0602	0622	0672	0732	0802	0892	0972	1032	1082
Prated,c	(1)	kW	533,1	596,9	623,4	673,8	725,4	800,3	889,1	966,5	1033,0	1079,0
SEER	(1) (2)	-	5,28	5,21	5,25	5,14	5,07	5,07	5,22	5,25	5,17	5,30
Performance ηs	(1) (3)	%	208,0	206,0	207,0	203,0	200,0	200,0	206,0	207,0	204,0	209,0
i-FX2-G01-K+EC			**1122**	**1192**	**1242**	**1382**	**1452**	**1552**	**1633**	**1703**	**1863**	
Prated,c	(1)	kW	1122,0	1185,0	1243,0	1383,0	1449,0	1550,0	1627,0	1702,0	1858,0	
SEER	(1) (2)	-	5,26	5,33	5,33	5,41	5,30	5,45	5,24	5,28	5,38	
Performance ηs	(1) (3)	%	207,0	210,0	210,0	213,0	209,0	215,0	207,0	208,0	212,0	

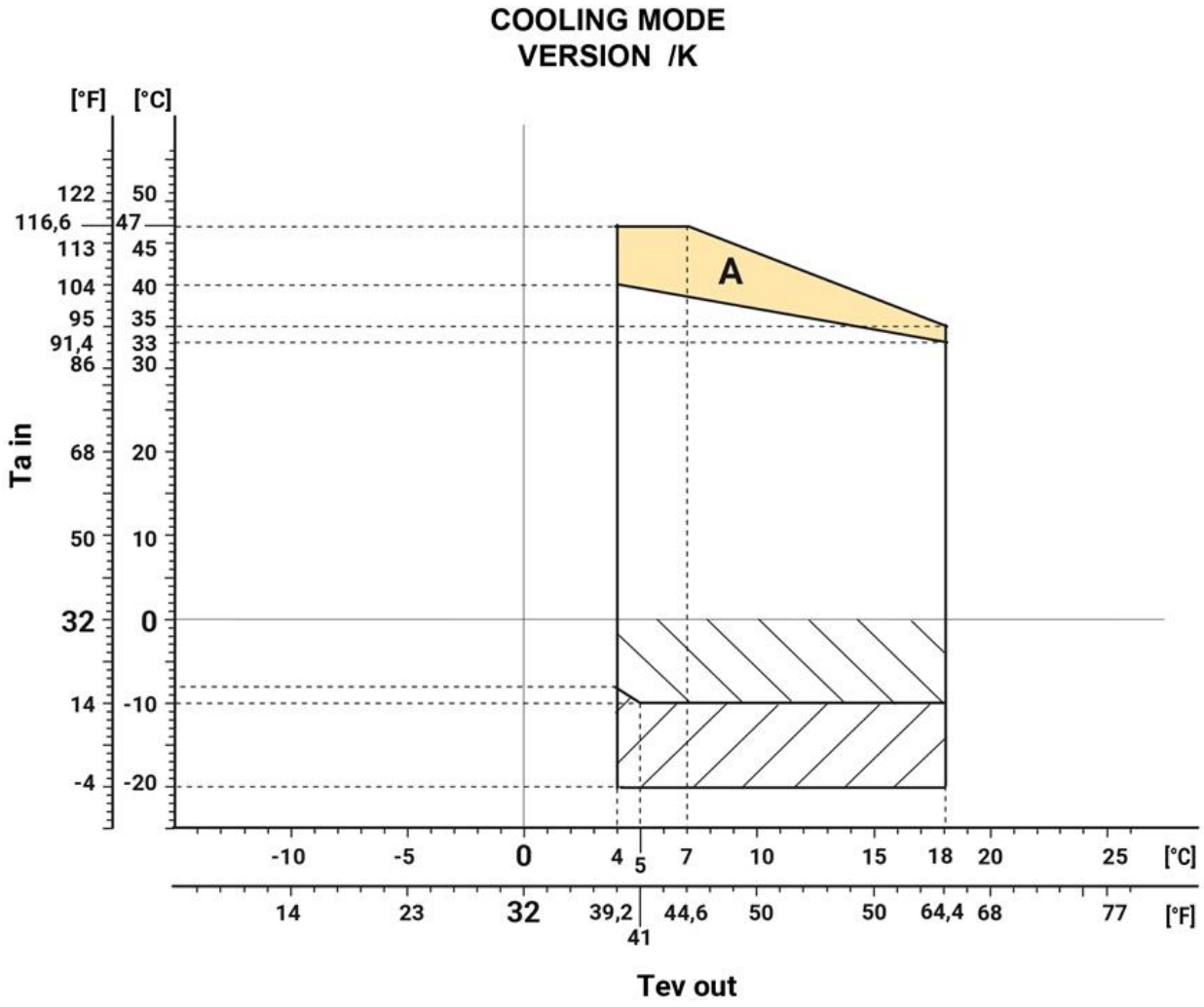
i-FX2-G01-SL-K			0532	0602	0622	0672	0732	0802	0892	0972	1032	1082
Prated,c	(1)	kW	517,1	560,2	604,4	627,0	718,6	771,4	839,5	916,8	978,7	1056,0
SEER	(1) (2)	-	5,35	5,43	5,28	5,12	5,32	5,16	5,18	5,17	5,10	5,35
Performance ηs	(1) (3)	%	211,0	214,0	208,0	202,0	210,0	203,0	204,0	204,0	201,0	211,0
i-FX2-G01-SL-K			**1122**	**1192**	**1242**	**1382**	**1452**	**1552**	**1633**	**1703**	**1863**	
Prated,c	(1)	kW	1118,0	1163,0	1221,0	1302,0	1402,0	1476,0	1602,0	1676,0	1773,0	
SEER	(1) (2)	-	5,38	5,45	5,45	5,40	5,43	5,48	5,29	5,37	5,29	
Performance ηs	(1) (3)	%	212,0	215,0	215,0	213,0	214,0	216,0	209,0	212,0	208,0	

i-FX2-G01-E			0522	0572	0612	0642	0702	0792	0862	0922	0982	1062
Prated,c	(1)	kW	522,9	565,7	604,6	642,2	700,9	786,2	860,7	921,8	983,2	1054,0
SEER	(1) (2)	-	5,64	5,63	5,58	5,50	5,53	5,54	5,53	5,45	5,43	5,49
Performance ηs	(1) (3)	%	223,0	222,0	220,0	217,0	218,0	219,0	218,0	215,0	214,0	217,0
i-FX2-G01-E			**1132**	**1202**	**1252**	**1402**	**1482**					
Prated,c	(1)	kW	1129,0	1197,0	1247,0	1394,0	1482,0					
SEER	(1) (2)	-	5,65	5,62	5,66	5,72	5,73					
Performance ηs	(1) (3)	%	223,0	222,0	224,0	226,0	226,0					

i-FX2-G01-SL-E			0522	0572	0612	0642	0702	0792	0862	0922	0982	1062
Prated,c	(1)	kW	506,4	573,4	596,2	622,9	699,4	770,2	832,2	913,6	966,1	1042,0
SEER	(1) (2)	-	5,64	5,48	5,56	5,44	5,53	5,51	5,45	5,52	5,39	5,56
Performance ηs	(1) (3)	%	222,0	216,0	220,0	215,0	218,0	218,0	215,0	218,0	213,0	219,0
i-FX2-G01-SL-E			**1132**	**1202**	**1252**	**1402**	**1482**					
Prated,c	(1)	kW	1115,0	1183,0	1229,0	1351,0	1436,0					
SEER	(1) (2)	-	5,65	5,61	5,66	5,66	5,64					
Performance ηs	(1) (3)	%	223,0	221,0	223,0	223,0	223,0					

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 R134a [GWP_{100} 1300] fluorinated greenhouse gases.
Data certified in EUROVENT

8.1 Operating limits - Graphs



Ta in Outdoor air temperature

Tev out Evaporator leaving water temperature

Unit at full load.
Unit at full load not super low noise (-SL version)

Required: Antifreeze heaters on pipes, pumps* (opt. 2432) *if present.

Required: Antifreeze heaters on pipes, pumps* (opt. 2432) *if present.
Extra insulation on heat exchangers / pipes + pumps* (opt. 2631 / 2633) *if present.
EC fans (opt. 808)

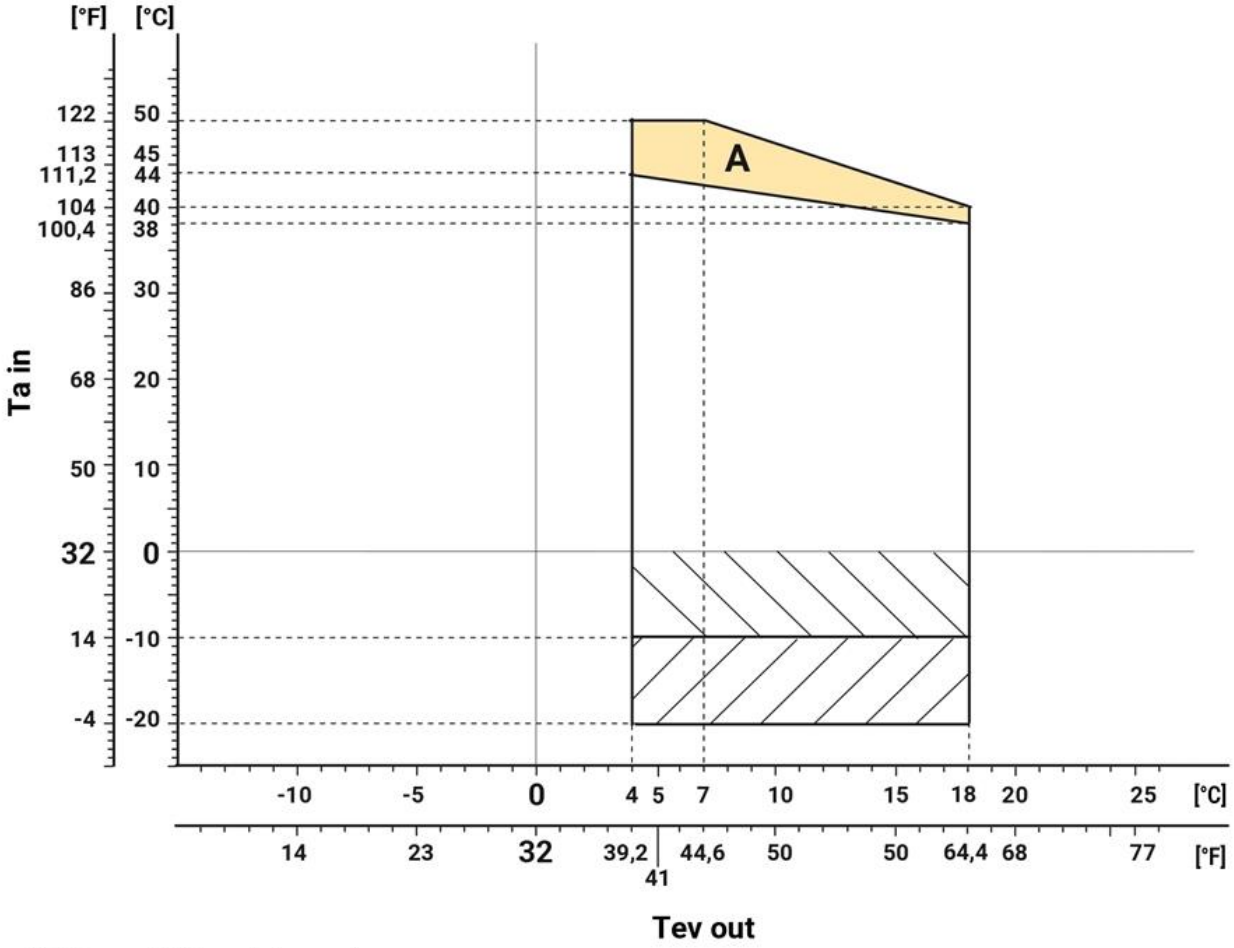
A

Unit at full load.
Unit at full load not super low noise (SL version)

In particular operating conditions the unit can work with forced ventilation, at partial loads or with derating compressors. For any specific information please refer to the ElcaWorld software selection.

For the specific temperature limits of each model please refer to the selection software ElcaWorld.

COOLING MODE
VERSION /E



Ta in Outdoor air temperature

Tev out Evaporator leaving water temperature

Unit at full load.
Unit at full load not super low noise (-SL version)

Required: Antifreeze heaters on pipes, pumps* (opt. 2432) *if present.

Required: Antifreeze heaters on pipes, pumps* (opt. 2432) *if present.
Extra insulation on heat exchangers / pipes + pumps* (opt. 2631 / 2633) *if present.

A

Unit at full load.
Unit at full load not super low noise (-SL version)

In particular operating conditions the unit can work with forced ventilation, at partial loads or with derating compressors. For any specific information please refer to the ElcaWorld software selection.

For the specific temperature limits of each model please refer to the selection software ElcaWorld.

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 (m² °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	$1{,}80 \times 10^{-5}$	1,000	1,000	0,0	1,000	1,000	0,0	1,000
VARIOUS	$4{,}40 \times 10^{-5}$	1,000	1,000	0,0	0,990	1,030	1,0	0,990
VARIOUS	$8{,}80 \times 10^{-5}$	0,960	0,990	0,7	0,980	1,040	1,5	0,980
VARIOUS	$13{,}20 \times 10^{-5}$	0,944	0,985	1,0	0,964	1,050	2,3	0,964
VARIOUS	$17{,}20 \times 10^{-5}$	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

[SI System]

Water flow and pressure drop

Water flow in the plant (side) exchanger is given by:
Q=P/(4,186 x 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 x (3,6 x 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
i-FX2-G01-K 0532	400/3/50	5,14	13,06	36,67	143	1900	-	-	-	-
i-FX2-G01-K 0602	400/3/50	5,14	13,06	36,67	143	2100	-	-	-	-
i-FX2-G01-K 0622	400/3/50	3,97	14,44	46,94	124	2200	-	-	-	-
i-FX2-G01-K 0672	400/3/50	3,97	14,44	46,94	124	2400	-	-	-	-
i-FX2-G01-K 0732	400/3/50	3,61	16,67	47,78	238	2500	-	-	-	-
i-FX2-G01-K 0802	400/3/50	2,44	20,00	57,22	226	2800	-	-	-	-
i-FX2-G01-K 0892	400/3/50	2,44	20,00	57,22	226	3100	-	-	-	-
i-FX2-G01-K 0972	400/3/50	1,53	24,72	68,06	210	3400	-	-	-	-
i-FX2-G01-K 1032	400/3/50	1,53	24,72	68,06	210	3600	-	-	-	-
i-FX2-G01-K 1082	400/3/50	1,87	22,50	63,89	275	3800	-	-	-	-
i-FX2-G01-K 1122	400/3/50	1,87	22,50	63,89	275	3900	-	-	-	-
i-FX2-G01-K 1192	400/3/50	1,62	23,61	66,94	275	4100	-	-	-	-
i-FX2-G01-K 1242	400/3/50	1,53	24,17	68,89	261	4400	-	-	-	-
i-FX2-G01-K 1382	400/3/50	1,08	28,33	100,8	310	4800	-	-	-	-
i-FX2-G01-K 1452	400/3/50	1,08	28,33	100,8	310	5100	-	-	-	-
i-FX2-G01-K 1552	400/3/50	0,82	37,22	102,8	575	5400	-	-	-	-
i-FX2-G01-K 1633	400/3/50	0,88	38,89	97,22	550	5700	-	-	-	-
i-FX2-G01-K 1703	400/3/50	0,88	38,89	97,22	550	6000	-	-	-	-
i-FX2-G01-K 1863	400/3/50	0,51	41,67	116,1	500	6500	-	-	-	-
i-FX2-G01-D-K 0532	400/3/50	5,14	13,06	36,67	143	1900	73,0	0,003	8,778	4,40
i-FX2-G01-D-K 0602	400/3/50	5,14	13,06	36,67	143	2100	50,0	0,003	9,722	5,10
i-FX2-G01-D-K 0622	400/3/50	3,97	14,44	46,94	124	2200	50,0	0,003	10,03	5,10
i-FX2-G01-D-K 0672	400/3/50	3,97	14,44	46,94	124	2400	36,0	0,003	10,72	5,80
i-FX2-G01-D-K 0732	400/3/50	3,61	16,67	47,78	238	2500	36,0	0,003	11,89	5,80
i-FX2-G01-D-K 0802	400/3/50	2,44	20,00	57,22	226	2800	27,0	0,003	13,56	7,40
i-FX2-G01-D-K 0892	400/3/50	2,44	20,00	57,22	226	3100	21,0	0,003	14,81	9,00
i-FX2-G01-D-K 0972	400/3/50	1,53	24,72	68,06	210	3400	21,0	0,003	15,64	9,00
i-FX2-G01-D-K 1032	400/3/50	1,53	24,72	68,06	210	3600	21,0	0,003	16,53	9,00
i-FX2-G01-D-K 1082	400/3/50	1,87	22,50	63,89	275	3800	14,8	0,003	17,22	10,5
i-FX2-G01-D-K 1122	400/3/50	1,87	22,50	63,89	275	3900	11,0	0,003	18,53	12,0
i-FX2-G01-D-K 1192	400/3/50	1,62	23,61	66,94	275	4100	11,0	0,003	18,58	12,0
i-FX2-G01-D-K 1242	400/3/50	1,53	24,17	68,89	261	4400	11,0	0,003	19,83	12,0
i-FX2-G01-D-K 1382	400/3/50	1,08	28,33	100,8	310	4800	8,50	0,003	21,72	30,0
i-FX2-G01-D-K 1452	400/3/50	1,08	28,33	100,8	310	5100	8,50	0,003	23,83	30,0
i-FX2-G01-D-K 1552	400/3/50	0,82	37,22	102,8	575	5400	8,50	0,003	23,94	30,0
i-FX2-G01-D-K 1633	400/3/50	0,88	38,89	97,22	550	5700	5,90	0,003	26,47	16,5
i-FX2-G01-D-K 1703	400/3/50	0,88	38,89	97,22	550	6000	4,90	0,003	27,94	18,0

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

[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
i-FX2-G01-D-K 1863	400/3/50	0,51	41,67	116,1	500	6500	4,90	0,003	29,92	18,0
i-FX2-G01-R-K 0532	400/3/50	5,14	13,06	36,67	146	1900	2,50	20,00	45,56	65,8
i-FX2-G01-R-K 0602	400/3/50	5,14	13,06	36,67	146	2100	2,20	22,22	50,83	72,7
i-FX2-G01-R-K 0622	400/3/50	3,97	14,44	46,94	124	2200	2,20	22,22	50,83	72,7
i-FX2-G01-R-K 0672	400/3/50	3,97	14,44	46,94	124	2400	1,90	24,44	56,11	79,6
i-FX2-G01-R-K 0732	400/3/50	3,61	16,67	47,78	238	2500	1,70	27,22	62,78	90,0
i-FX2-G01-R-K 0802	400/3/50	2,44	20,00	57,22	226	2800	0,90	37,78	86,67	109
i-FX2-G01-R-K 0892	400/3/50	2,44	20,00	57,22	226	3100	0,90	37,78	86,67	109
i-FX2-G01-R-K 0972	400/3/50	1,53	24,72	68,06	210	3400	0,90	37,78	86,67	109
i-FX2-G01-R-K 1032	400/3/50	1,53	24,72	68,06	210	3600	0,60	42,78	97,22	128
i-FX2-G01-R-K 1082	400/3/50	1,87	22,50	63,89	275	3800	0,50	45,28	103,1	136
i-FX2-G01-R-K 1122	400/3/50	1,87	22,50	63,89	275	3900	0,40	47,78	108,9	143
i-FX2-G01-R-K 1192	400/3/50	1,62	23,61	66,94	275	4100	0,40	47,78	108,9	143
i-FX2-G01-R-K 1242	400/3/50	1,53	24,17	68,89	261	4400	0,40	53,89	122,2	159
i-FX2-G01-R-K 1382	400/3/50	1,08	28,33	100,8	310	4800	0,30	61,67	141,1	178
i-FX2-G01-R-K 1452	400/3/50	1,08	28,33	100,8	310	5100	0,30	61,67	141,1	178
i-FX2-G01-R-K 1552	400/3/50	0,82	37,22	102,8	575	5400	0,30	61,67	141,1	178
i-FX2-G01-R-K 1633	400/3/50	0,88	38,89	97,22	550	5700	0,20	69,17	157,5	207
i-FX2-G01-R-K 1703	400/3/50	0,88	38,89	97,22	550	6000	0,20	71,67	163,3	215
i-FX2-G01-R-K 1863	400/3/50	0,51	41,67	116,1	500	6500	0,20	80,83	183,3	238
i-FX2-G01-SL-K 0532	400/3/50	5,14	13,06	36,67	143	1800	-	-	-	-
i-FX2-G01-SL-K 0602	400/3/50	5,14	13,06	36,67	143	2000	-	-	-	-
i-FX2-G01-SL-K 0622	400/3/50	3,97	14,44	46,94	124	2100	-	-	-	-
i-FX2-G01-SL-K 0672	400/3/50	3,97	14,44	46,94	124	2200	-	-	-	-
i-FX2-G01-SL-K 0732	400/3/50	3,61	16,67	47,78	238	2500	-	-	-	-
i-FX2-G01-SL-K 0802	400/3/50	2,44	20,00	57,22	226	2700	-	-	-	-
i-FX2-G01-SL-K 0892	400/3/50	2,44	20,00	57,22	226	2900	-	-	-	-
i-FX2-G01-SL-K 0972	400/3/50	1,53	24,72	68,06	210	3200	-	-	-	-
i-FX2-G01-SL-K 1032	400/3/50	1,53	24,72	68,06	210	3400	-	-	-	-
i-FX2-G01-SL-K 1082	400/3/50	1,87	22,50	63,89	275	3700	-	-	-	-
i-FX2-G01-SL-K 1122	400/3/50	1,87	22,50	63,89	275	3900	-	-	-	-
i-FX2-G01-SL-K 1192	400/3/50	1,62	23,61	66,94	275	4100	-	-	-	-
i-FX2-G01-SL-K 1242	400/3/50	1,53	24,17	68,89	261	4300	-	-	-	-
i-FX2-G01-SL-K 1382	400/3/50	1,08	28,33	100,8	310	4600	-	-	-	-
i-FX2-G01-SL-K 1452	400/3/50	1,08	28,33	100,8	310	4900	-	-	-	-
i-FX2-G01-SL-K 1552	400/3/50	0,82	37,22	102,8	575	5200	-	-	-	-
i-FX2-G01-SL-K 1633	400/3/50	0,88	38,89	97,22	550	5600	-	-	-	-
i-FX2-G01-SL-K 1703	400/3/50	0,88	38,89	97,22	550	5900	-	-	-	-
i-FX2-G01-SL-K 1863	400/3/50	0,51	41,67	116,1	500	6200	-	-	-	-
i-FX2-G01-D-SL-K 0532	400/3/50	5,14	13,06	36,67	143	1800	73,0	0,003	8,778	4,40
i-FX2-G01-D-SL-K 0602	400/3/50	5,14	13,06	36,67	143	2000	73,0	0,003	9,722	4,40
i-FX2-G01-D-SL-K 0622	400/3/50	3,97	14,44	46,94	124	2100	50,0	0,003	10,03	5,10
i-FX2-G01-D-SL-K 0672	400/3/50	3,97	14,44	46,94	124	2200	36,0	0,003	10,72	5,80
i-FX2-G01-D-SL-K 0732	400/3/50	3,61	16,67	47,78	238	2500	36,0	0,003	11,89	5,80
i-FX2-G01-D-SL-K 0802	400/3/50	2,44	20,00	57,22	226	2700	27,0	0,003	13,56	7,40

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

[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
i-FX2-G01-D-SL-K 0892	400/3/50	2,44	20,00	57,22	226	2900	21,0	0,003	14,81	9,00
i-FX2-G01-D-SL-K 0972	400/3/50	1,53	24,72	68,06	210	3200	21,0	0,003	15,64	9,00
i-FX2-G01-D-SL-K 1032	400/3/50	1,53	24,72	68,06	210	3400	21,0	0,003	16,53	9,00
i-FX2-G01-D-SL-K 1082	400/3/50	1,87	22,50	63,89	275	3700	14,8	0,003	17,22	10,5
i-FX2-G01-D-SL-K 1122	400/3/50	1,87	22,50	63,89	275	3900	11,0	0,003	18,53	12,0
i-FX2-G01-D-SL-K 1192	400/3/50	1,62	23,61	66,94	275	4100	11,0	0,003	18,58	12,0
i-FX2-G01-D-SL-K 1242	400/3/50	1,53	24,17	68,89	261	4300	11,0	0,003	19,83	12,0
i-FX2-G01-D-SL-K 1382	400/3/50	1,08	28,33	100,8	310	4600	8,50	0,003	21,72	30,0
i-FX2-G01-D-SL-K 1452	400/3/50	1,08	28,33	100,8	310	4900	8,50	0,003	23,83	30,0
i-FX2-G01-D-SL-K 1552	400/3/50	0,82	37,22	102,8	575	5200	8,50	0,003	23,94	30,0
i-FX2-G01-D-SL-K 1633	400/3/50	0,88	38,89	97,22	550	5600	5,90	0,003	26,47	16,5
i-FX2-G01-D-SL-K 1703	400/3/50	0,88	38,89	97,22	550	5900	4,90	0,003	27,94	18,0
i-FX2-G01-D-SL-K 1863	400/3/50	0,51	41,67	116,1	500	6200	4,90	0,003	29,92	18,0
i-FX2-G01-R-SL-K 0532	400/3/50	5,14	13,06	36,67	143	1800	2,80	18,89	42,78	62,3
i-FX2-G01-R-SL-K 0602	400/3/50	5,14	13,06	36,67	143	2000	2,50	20,00	45,56	65,8
i-FX2-G01-R-SL-K 0622	400/3/50	3,97	14,44	46,94	124	2100	2,20	22,22	50,83	72,7
i-FX2-G01-R-SL-K 0672	400/3/50	3,97	14,44	46,94	124	2200	1,90	24,44	56,11	79,6
i-FX2-G01-R-SL-K 0732	400/3/50	3,61	16,67	47,78	238	2500	1,70	27,22	62,78	90,0
i-FX2-G01-R-SL-K 0802	400/3/50	2,44	20,00	57,22	226	2700	0,90	37,78	86,67	109
i-FX2-G01-R-SL-K 0892	400/3/50	2,44	20,00	57,22	226	2900	0,90	37,78	86,67	109
i-FX2-G01-R-SL-K 0972	400/3/50	1,53	24,72	68,06	210	3200	0,90	37,78	86,67	109
i-FX2-G01-R-SL-K 1032	400/3/50	1,53	24,72	68,06	210	3400	0,60	42,78	97,22	128
i-FX2-G01-R-SL-K 1082	400/3/50	1,87	22,50	63,89	275	3700	0,50	45,28	103,1	136
i-FX2-G01-R-SL-K 1122	400/3/50	1,87	22,50	63,89	275	3900	0,40	47,78	108,9	143
i-FX2-G01-R-SL-K 1192	400/3/50	1,62	23,61	66,94	275	4100	0,40	47,78	108,9	143
i-FX2-G01-R-SL-K 1242	400/3/50	1,53	24,17	68,89	261	4300	0,40	53,89	122,2	159
i-FX2-G01-R-SL-K 1382	400/3/50	1,08	28,33	100,8	310	4600	0,30	61,67	141,1	178
i-FX2-G01-R-SL-K 1452	400/3/50	1,08	28,33	100,8	310	4900	0,30	61,67	141,1	178
i-FX2-G01-R-SL-K 1552	400/3/50	0,82	37,22	102,8	575	5200	0,30	61,67	141,1	178
i-FX2-G01-R-SL-K 1633	400/3/50	0,88	38,89	97,22	550	5600	0,20	69,17	157,5	207
i-FX2-G01-R-SL-K 1703	400/3/50	0,88	38,89	97,22	550	5900	0,20	71,67	163,3	215
i-FX2-G01-R-SL-K 1863	400/3/50	0,51	41,67	116,1	500	6200	0,20	80,83	183,3	238
i-FX2-G01-K-EC 0532	400/3/50	5,14	13,06	36,67	143	1900	-	-	-	-
i-FX2-G01-K-EC 0602	400/3/50	5,14	13,06	36,67	143	2100	-	-	-	-
i-FX2-G01-K-EC 0622	400/3/50	3,97	14,44	46,94	124	2200	-	-	-	-
i-FX2-G01-K-EC 0672	400/3/50	3,97	14,44	46,94	124	2400	-	-	-	-
i-FX2-G01-K-EC 0732	400/3/50	3,61	16,67	47,78	238	2500	-	-	-	-
i-FX2-G01-K-EC 0802	400/3/50	2,44	20,00	57,22	226	2800	-	-	-	-
i-FX2-G01-K-EC 0892	400/3/50	2,44	20,00	57,22	226	3100	-	-	-	-
i-FX2-G01-K-EC 0972	400/3/50	1,53	24,72	68,06	210	3400	-	-	-	-
i-FX2-G01-K-EC 1032	400/3/50	1,53	24,72	68,06	210	3600	-	-	-	-
i-FX2-G01-K-EC 1082	400/3/50	1,87	22,50	63,89	275	3800	-	-	-	-
i-FX2-G01-K-EC 1122	400/3/50	1,87	22,50	63,89	275	3900	-	-	-	-
i-FX2-G01-K-EC 1192	400/3/50	1,62	23,61	66,94	275	4100	-	-	-	-
i-FX2-G01-K-EC 1242	400/3/50	1,53	24,17	68,89	261	4400	-	-	-	-

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

[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
i-FX2-G01-K-EC 1382	400/3/50	1,08	28,33	100,8	310	4800	-	-	-	-
i-FX2-G01-K-EC 1452	400/3/50	1,08	28,33	100,8	310	5100	-	-	-	-
i-FX2-G01-K-EC 1552	400/3/50	0,82	37,22	102,8	575	5400	-	-	-	-
i-FX2-G01-K-EC 1633	400/3/50	0,88	38,89	97,22	550	5700	-	-	-	-
i-FX2-G01-K-EC 1703	400/3/50	0,88	38,89	97,22	550	6000	-	-	-	-
i-FX2-G01-K-EC 1863	400/3/50	0,51	41,67	116,1	500	6500	-	-	-	-
i-FX2-G01-D-K-EC 0532	400/3/50	5,14	13,06	36,67	143	1900	73,0	0,003	8,778	4,40
i-FX2-G01-D-K-EC 0602	400/3/50	5,14	13,06	36,67	143	2100	50,0	0,003	9,722	5,10
i-FX2-G01-D-K-EC 0622	400/3/50	3,97	14,44	46,94	124	2200	50,0	0,003	10,03	5,10
i-FX2-G01-D-K-EC 0672	400/3/50	3,97	14,44	46,94	124	2400	36,0	0,003	10,72	5,80
i-FX2-G01-D-K-EC 0732	400/3/50	3,61	16,67	47,78	238	2500	36,0	0,003	11,89	5,80
i-FX2-G01-D-K-EC 0802	400/3/50	2,44	20,00	57,22	226	2800	27,0	0,003	13,56	7,40
i-FX2-G01-D-K-EC 0892	400/3/50	2,44	20,00	57,22	226	3100	21,0	0,003	14,81	9,00
i-FX2-G01-D-K-EC 0972	400/3/50	1,53	24,72	68,06	210	3400	21,0	0,003	15,64	9,00
i-FX2-G01-D-K-EC 1032	400/3/50	1,53	24,72	68,06	210	3600	21,0	0,003	16,53	9,00
i-FX2-G01-D-K-EC 1082	400/3/50	1,87	22,50	63,89	275	3800	14,8	0,003	17,22	10,5
i-FX2-G01-D-K-EC 1122	400/3/50	1,87	22,50	63,89	275	3900	11,0	0,003	18,53	12,0
i-FX2-G01-D-K-EC 1192	400/3/50	1,62	23,61	66,94	275	4100	11,0	0,003	18,58	12,0
i-FX2-G01-D-K-EC 1242	400/3/50	1,53	24,17	68,89	261	4400	11,0	0,003	19,83	12,0
i-FX2-G01-D-K-EC 1382	400/3/50	1,08	28,33	100,8	310	4800	8,50	0,003	21,72	30,0
i-FX2-G01-D-K-EC 1452	400/3/50	1,08	28,33	100,8	310	5100	8,50	0,003	23,83	30,0
i-FX2-G01-D-K-EC 1552	400/3/50	0,82	37,22	102,8	575	5400	8,50	0,003	23,94	30,0
i-FX2-G01-D-K-EC 1633	400/3/50	0,88	38,89	97,22	550	5700	5,90	0,003	26,47	16,5
i-FX2-G01-D-K-EC 1703	400/3/50	0,88	38,89	97,22	550	6000	4,90	0,003	27,94	18,0
i-FX2-G01-D-K-EC 1863	400/3/50	0,51	41,67	116,1	500	6500	4,90	0,003	29,92	18,0
i-FX2-G01-R-K-EC 0532	400/3/50	5,14	13,06	36,67	143	1900	2,50	20,00	45,56	65,8
i-FX2-G01-R-K-EC 0602	400/3/50	5,14	13,06	36,67	143	2100	2,20	22,22	50,83	72,7
i-FX2-G01-R-K-EC 0622	400/3/50	3,97	14,44	46,94	124	2200	2,20	22,22	50,83	72,7
i-FX2-G01-R-K-EC 0672	400/3/50	3,97	14,44	46,94	124	2400	1,90	24,44	56,11	79,6
i-FX2-G01-R-K-EC 0732	400/3/50	3,61	16,67	47,78	238	2500	1,70	27,22	62,78	90,0
i-FX2-G01-R-K-EC 0802	400/3/50	2,44	20,00	57,22	226	2800	0,90	37,78	86,67	109
i-FX2-G01-R-K-EC 0892	400/3/50	2,44	20,00	57,22	226	3100	0,90	37,78	86,67	109
i-FX2-G01-R-K-EC 0972	400/3/50	1,53	24,72	68,06	210	3400	0,90	37,78	86,67	109
i-FX2-G01-R-K-EC 1032	400/3/50	1,53	24,72	68,06	210	3600	0,60	42,78	97,22	128
i-FX2-G01-R-K-EC 1082	400/3/50	1,87	22,50	63,89	275	3800	0,50	45,28	103,1	136
i-FX2-G01-R-K-EC 1122	400/3/50	1,87	22,50	63,89	275	3900	0,40	47,78	108,9	143
i-FX2-G01-R-K-EC 1192	400/3/50	1,62	23,61	66,94	275	4100	0,40	47,78	108,9	143
i-FX2-G01-R-K-EC 1242	400/3/50	1,53	24,17	68,89	261	4400	0,40	53,89	122,2	159
i-FX2-G01-R-K-EC 1382	400/3/50	1,08	28,33	100,8	310	4800	0,30	61,67	141,1	178
i-FX2-G01-R-K-EC 1452	400/3/50	1,08	28,33	100,8	310	5100	0,30	61,67	141,1	178
i-FX2-G01-R-K-EC 1552	400/3/50	0,82	37,22	102,8	575	5400	0,30	61,67	141,1	178
i-FX2-G01-R-K-EC 1633	400/3/50	0,88	38,89	97,22	550	5700	0,20	69,17	157,5	207
i-FX2-G01-R-K-EC 1703	400/3/50	0,88	38,89	97,22	550	6000	0,20	71,67	163,3	215
i-FX2-G01-R-K-EC 1863	400/3/50	0,51	41,67	116,1	500	6500	0,20	80,83	183,3	238
i-FX2-G01-SL-K-EC 0532	400/3/50	5,14	13,06	36,67	143	1800	-	-	-	-

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

[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
i-FX2-G01-SL-K-EC 0602	400/3/50	5,14	13,06	36,67	143	2000	-	-	-	-
i-FX2-G01-SL-K-EC 0622	400/3/50	3,97	14,44	46,94	124	2100	-	-	-	-
i-FX2-G01-SL-K-EC 0672	400/3/50	3,97	14,44	46,94	124	2200	-	-	-	-
i-FX2-G01-SL-K-EC 0732	400/3/50	3,61	16,67	47,78	238	2500	-	-	-	-
i-FX2-G01-SL-K-EC 0802	400/3/50	2,44	20,00	57,22	226	2700	-	-	-	-
i-FX2-G01-SL-K-EC 0892	400/3/50	2,44	20,00	57,22	226	2900	-	-	-	-
i-FX2-G01-SL-K-EC 0972	400/3/50	1,53	24,72	68,06	210	3200	-	-	-	-
i-FX2-G01-SL-K-EC 1032	400/3/50	1,53	24,72	68,06	210	3400	-	-	-	-
i-FX2-G01-SL-K-EC 1082	400/3/50	1,87	22,50	63,89	275	3700	-	-	-	-
i-FX2-G01-SL-K-EC 1122	400/3/50	1,87	22,50	63,89	275	3900	-	-	-	-
i-FX2-G01-SL-K-EC 1192	400/3/50	1,62	23,61	66,94	275	4100	-	-	-	-
i-FX2-G01-SL-K-EC 1242	400/3/50	1,53	24,17	68,89	261	4300	-	-	-	-
i-FX2-G01-SL-K-EC 1382	400/3/50	1,08	28,33	100,8	310	4600	-	-	-	-
i-FX2-G01-SL-K-EC 1452	400/3/50	1,08	28,33	100,8	310	4900	-	-	-	-
i-FX2-G01-SL-K-EC 1552	400/3/50	0,82	37,22	102,8	575	5200	-	-	-	-
i-FX2-G01-SL-K-EC 1633	400/3/50	0,88	38,89	97,22	550	5600	-	-	-	-
i-FX2-G01-SL-K-EC 1703	400/3/50	0,88	38,89	97,22	550	5900	-	-	-	-
i-FX2-G01-SL-K-EC 1863	400/3/50	0,51	41,67	116,1	500	6200	-	-	-	-
i-FX2-G01-D-SL-K-EC 0532	400/3/50	5,14	13,06	36,67	143	1800	73,0	0,003	8,778	4,40
i-FX2-G01-D-SL-K-EC 0602	400/3/50	5,14	13,06	36,67	143	2000	73,0	0,003	9,722	4,40
i-FX2-G01-D-SL-K-EC 0622	400/3/50	3,97	14,44	46,94	124	2100	50,0	0,003	10,03	5,10
i-FX2-G01-D-SL-K-EC 0672	400/3/50	3,97	14,44	46,94	124	2200	36,0	0,003	10,72	5,80
i-FX2-G01-D-SL-K-EC 0732	400/3/50	3,61	16,67	47,78	238	2500	36,0	0,003	11,89	5,80
i-FX2-G01-D-SL-K-EC 0802	400/3/50	2,44	20,00	57,22	226	2700	27,0	0,003	13,56	7,40
i-FX2-G01-D-SL-K-EC 0892	400/3/50	2,44	20,00	57,22	226	2900	21,0	0,003	14,81	9,00
i-FX2-G01-D-SL-K-EC 0972	400/3/50	1,53	24,72	68,06	210	3200	21,0	0,003	15,64	9,00
i-FX2-G01-D-SL-K-EC 1032	400/3/50	1,53	24,72	68,06	210	3400	21,0	0,003	16,53	9,00
i-FX2-G01-D-SL-K-EC 1082	400/3/50	1,87	22,50	63,89	275	3700	14,8	0,003	17,22	10,5
i-FX2-G01-D-SL-K-EC 1122	400/3/50	1,87	22,50	63,89	275	3900	11,0	0,003	18,53	12,0
i-FX2-G01-D-SL-K-EC 1192	400/3/50	1,62	23,61	66,94	275	4100	11,0	0,003	18,58	12,0
i-FX2-G01-D-SL-K-EC 1242	400/3/50	1,53	24,17	68,89	261	4300	11,0	0,003	19,83	12,0
i-FX2-G01-D-SL-K-EC 1382	400/3/50	1,08	28,33	100,8	310	4600	8,50	0,003	21,72	30,0
i-FX2-G01-D-SL-K-EC 1452	400/3/50	1,08	28,33	100,8	310	4900	8,50	0,003	23,83	30,0
i-FX2-G01-D-SL-K-EC 1552	400/3/50	0,82	37,22	102,8	575	5200	8,50	0,003	23,94	30,0
i-FX2-G01-D-SL-K-EC 1633	400/3/50	0,88	38,89	97,22	550	5600	5,90	0,003	26,47	16,5
i-FX2-G01-D-SL-K-EC 1703	400/3/50	0,88	38,89	97,22	550	5900	4,90	0,003	27,94	18,0
i-FX2-G01-D-SL-K-EC 1863	400/3/50	0,51	41,67	116,1	500	6200	4,90	0,003	29,92	18,0
i-FX2-G01-R-SL-K-EC 0532	400/3/50	5,14	13,06	36,67	143	1800	2,80	18,89	42,78	62,3
i-FX2-G01-R-SL-K-EC 0602	400/3/50	5,14	13,06	36,67	143	2000	2,50	20,00	45,56	65,8
i-FX2-G01-R-SL-K-EC 0622	400/3/50	3,97	14,44	46,94	124	2100	2,20	22,22	50,83	72,7
i-FX2-G01-R-SL-K-EC 0672	400/3/50	3,97	14,44	46,94	124	2200	1,90	24,44	56,11	79,6
i-FX2-G01-R-SL-K-EC 0732	400/3/50	3,61	16,67	47,78	238	2500	1,70	27,22	62,78	90,0
i-FX2-G01-R-SL-K-EC 0802	400/3/50	2,44	20,00	57,22	226	2700	0,90	37,78	86,67	109
i-FX2-G01-R-SL-K-EC 0892	400/3/50	2,44	20,00	57,22	226	2900	0,90	37,78	86,67	109
i-FX2-G01-R-SL-K-EC 0972	400/3/50	1,53	24,72	68,06	210	3200	0,90	37,78	86,67	109

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

[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
i-FX2-G01-R-SL-K-EC 1032	400/3/50	1,53	24,72	68,06	210	3400	0,60	42,78	97,22	128
i-FX2-G01-R-SL-K-EC 1082	400/3/50	1,87	22,50	63,89	275	3700	0,50	45,28	103,1	136
i-FX2-G01-R-SL-K-EC 1122	400/3/50	1,87	22,50	63,89	275	3900	0,40	47,78	108,9	143
i-FX2-G01-R-SL-K-EC 1192	400/3/50	1,62	23,61	66,94	275	4100	0,40	47,78	108,9	143
i-FX2-G01-R-SL-K-EC 1242	400/3/50	1,53	24,17	68,89	261	4300	0,40	53,89	122,2	159
i-FX2-G01-R-SL-K-EC 1382	400/3/50	1,08	28,33	100,8	310	4600	0,30	61,67	141,1	178
i-FX2-G01-R-SL-K-EC 1452	400/3/50	1,08	28,33	100,8	310	4900	0,30	61,67	141,1	178
i-FX2-G01-R-SL-K-EC 1552	400/3/50	0,82	37,22	102,8	575	5200	0,30	61,67	141,1	178
i-FX2-G01-R-SL-K-EC 1633	400/3/50	0,88	38,89	97,22	550	5600	0,20	69,17	157,5	207
i-FX2-G01-R-SL-K-EC 1703	400/3/50	0,88	38,89	97,22	550	5900	0,20	71,67	163,3	215
i-FX2-G01-R-SL-K-EC 1863	400/3/50	0,51	41,67	116,1	500	6200	0,20	80,83	183,3	238
i-FX2-G01-E 0522	400/3/50	5,14	13,06	36,67	143	1800	-	-	-	-
i-FX2-G01-E 0572	400/3/50	3,97	14,44	46,94	124	2000	-	-	-	-
i-FX2-G01-E 0612	400/3/50	3,97	14,44	46,94	124	2100	-	-	-	-
i-FX2-G01-E 0642	400/3/50	3,97	14,44	46,94	124	2200	-	-	-	-
i-FX2-G01-E 0702	400/3/50	3,61	16,67	47,78	238	2500	-	-	-	-
i-FX2-G01-E 0792	400/3/50	2,44	20,00	57,22	226	2800	-	-	-	-
i-FX2-G01-E 0862	400/3/50	2,44	20,00	57,22	226	3000	-	-	-	-
i-FX2-G01-E 0922	400/3/50	1,53	24,72	68,06	210	3200	-	-	-	-
i-FX2-G01-E 0982	400/3/50	1,53	24,72	68,06	210	3400	-	-	-	-
i-FX2-G01-E 1062	400/3/50	1,87	22,50	63,89	275	3700	-	-	-	-
i-FX2-G01-E 1132	400/3/50	1,62	23,61	66,94	275	4000	-	-	-	-
i-FX2-G01-E 1202	400/3/50	1,08	28,33	100,8	310	4200	-	-	-	-
i-FX2-G01-E 1252	400/3/50	1,08	28,33	100,8	310	4400	-	-	-	-
i-FX2-G01-E 1402	400/3/50	0,82	37,22	102,8	575	4900	-	-	-	-
i-FX2-G01-E 1482	400/3/50	0,88	38,89	97,22	550	5200	-	-	-	-
i-FX2-G01-D-E 0522	400/3/50	5,14	13,06	36,67	143	1800	73,0	0,003	7,528	4,40
i-FX2-G01-D-E 0572	400/3/50	3,97	14,44	46,94	124	2000	73,0	0,003	8,250	4,40
i-FX2-G01-D-E 0612	400/3/50	3,97	14,44	46,94	124	2100	50,0	0,003	8,750	5,10
i-FX2-G01-D-E 0642	400/3/50	3,97	14,44	46,94	124	2200	36,0	0,003	9,333	5,80
i-FX2-G01-D-E 0702	400/3/50	3,61	16,67	47,78	238	2500	36,0	0,003	10,33	5,80
i-FX2-G01-D-E 0792	400/3/50	2,44	20,00	57,22	226	2800	27,0	0,003	11,94	7,40
i-FX2-G01-D-E 0862	400/3/50	2,44	20,00	57,22	226	3000	21,0	0,003	13,31	9,00
i-FX2-G01-D-E 0922	400/3/50	1,53	24,72	68,06	210	3200	21,0	0,003	14,08	9,00
i-FX2-G01-D-E 0982	400/3/50	1,53	24,72	68,06	210	3400	21,0	0,003	14,89	9,00
i-FX2-G01-D-E 1062	400/3/50	1,87	22,50	63,89	275	3700	14,8	0,003	15,69	10,5
i-FX2-G01-D-E 1132	400/3/50	1,62	23,61	66,94	275	4000	11,0	0,003	16,47	12,0
i-FX2-G01-D-E 1202	400/3/50	1,08	28,33	100,8	310	4200	11,0	0,003	18,03	12,0
i-FX2-G01-D-E 1252	400/3/50	1,08	28,33	100,8	310	4400	11,0	0,003	18,14	12,0
i-FX2-G01-D-E 1402	400/3/50	0,82	37,22	102,8	575	4900	8,50	0,003	20,33	30,0
i-FX2-G01-D-E 1482	400/3/50	0,88	38,89	97,22	550	5200	8,50	0,003	22,03	30,0
i-FX2-G01-R-E 0522	400/3/50	5,14	13,06	36,67	143	1800	2,50	20,00	45,56	65,8
i-FX2-G01-R-E 0572	400/3/50	3,97	14,44	46,94	124	2000	2,50	20,00	45,56	65,8
i-FX2-G01-R-E 0612	400/3/50	3,97	14,44	46,94	124	2100	2,20	22,22	50,83	72,7
i-FX2-G01-R-E 0642	400/3/50	3,97	14,44	46,94	124	2200	1,90	24,44	56,11	79,6

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

[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
i-FX2-G01-R-E 0702	400/3/50	3,61	16,67	47,78	238	2500	1,70	27,22	62,78	90,0
i-FX2-G01-R-E 0792	400/3/50	2,44	20,00	57,22	226	2800	0,90	37,78	86,67	109
i-FX2-G01-R-E 0862	400/3/50	2,44	20,00	57,22	226	3000	0,90	37,78	86,67	109
i-FX2-G01-R-E 0922	400/3/50	1,53	24,72	68,06	210	3200	0,60	42,78	97,22	128
i-FX2-G01-R-E 0982	400/3/50	1,53	24,72	68,06	210	3400	0,60	42,78	97,22	128
i-FX2-G01-R-E 1062	400/3/50	1,87	22,50	63,89	275	3700	0,50	45,28	103,1	136
i-FX2-G01-R-E 1132	400/3/50	1,62	23,61	66,94	275	4000	0,40	47,78	108,9	143
i-FX2-G01-R-E 1202	400/3/50	1,08	28,33	100,8	310	4200	0,40	53,89	122,2	159
i-FX2-G01-R-E 1252	400/3/50	1,08	28,33	100,8	310	4400	0,40	53,89	122,2	159
i-FX2-G01-R-E 1402	400/3/50	0,82	37,22	102,8	575	4900	0,30	61,67	141,1	178
i-FX2-G01-R-E 1482	400/3/50	0,88	38,89	97,22	550	5200	0,30	61,67	141,1	178
i-FX2-G01-SL-E 0522	400/3/50	5,14	13,06	36,67	143	1800	-	-	-	-
i-FX2-G01-SL-E 0572	400/3/50	3,97	14,44	46,94	124	2000	-	-	-	-
i-FX2-G01-SL-E 0612	400/3/50	3,97	14,44	46,94	124	2100	-	-	-	-
i-FX2-G01-SL-E 0642	400/3/50	3,97	14,44	46,94	124	2200	-	-	-	-
i-FX2-G01-SL-E 0702	400/3/50	3,61	16,67	47,78	238	2500	-	-	-	-
i-FX2-G01-SL-E 0792	400/3/50	2,44	20,00	57,22	226	2700	-	-	-	-
i-FX2-G01-SL-E 0862	400/3/50	2,44	20,00	57,22	226	2900	-	-	-	-
i-FX2-G01-SL-E 0922	400/3/50	1,53	24,72	68,06	210	3200	-	-	-	-
i-FX2-G01-SL-E 0982	400/3/50	1,53	24,72	68,06	210	3400	-	-	-	-
i-FX2-G01-SL-E 1062	400/3/50	1,87	22,50	63,89	275	3700	-	-	-	-
i-FX2-G01-SL-E 1132	400/3/50	1,62	23,61	66,94	275	3900	-	-	-	-
i-FX2-G01-SL-E 1202	400/3/50	1,08	28,33	100,8	310	4100	-	-	-	-
i-FX2-G01-SL-E 1252	400/3/50	1,08	28,33	100,8	310	4300	-	-	-	-
i-FX2-G01-SL-E 1402	400/3/50	0,82	37,22	102,8	575	4700	-	-	-	-
i-FX2-G01-SL-E 1482	400/3/50	0,88	38,89	97,22	550	5000	-	-	-	-
i-FX2-G01-D-SL-E 0522	400/3/50	5,14	13,06	36,67	143	1800	73,0	0,003	7,528	4,40
i-FX2-G01-D-SL-E 0572	400/3/50	3,97	14,44	46,94	124	2000	50,0	0,003	8,250	5,10
i-FX2-G01-D-SL-E 0612	400/3/50	3,97	14,44	46,94	124	2100	50,0	0,003	8,750	5,10
i-FX2-G01-D-SL-E 0642	400/3/50	3,97	14,44	46,94	124	2200	36,0	0,003	9,333	5,80
i-FX2-G01-D-SL-E 0702	400/3/50	3,61	16,67	47,78	238	2500	36,0	0,003	10,33	5,80
i-FX2-G01-D-SL-E 0792	400/3/50	2,44	20,00	57,22	226	2700	27,0	0,003	11,94	7,40
i-FX2-G01-D-SL-E 0862	400/3/50	2,44	20,00	57,22	226	2900	21,0	0,003	13,31	9,00
i-FX2-G01-D-SL-E 0922	400/3/50	1,53	24,72	68,06	210	3200	21,0	0,003	14,08	9,00
i-FX2-G01-D-SL-E 0982	400/3/50	1,53	24,72	68,06	210	3400	21,0	0,003	14,89	9,00
i-FX2-G01-D-SL-E 1062	400/3/50	1,87	22,50	63,89	275	3700	14,8	0,003	15,69	10,5
i-FX2-G01-D-SL-E 1132	400/3/50	1,62	23,61	66,94	275	3900	11,0	0,003	16,47	12,0
i-FX2-G01-D-SL-E 1202	400/3/50	1,08	28,33	100,8	310	4100	11,0	0,003	18,03	12,0
i-FX2-G01-D-SL-E 1252	400/3/50	1,08	28,33	100,8	310	4300	11,0	0,003	18,14	12,0
i-FX2-G01-D-SL-E 1402	400/3/50	0,82	37,22	102,8	575	4700	8,50	0,003	20,33	30,0
i-FX2-G01-D-SL-E 1482	400/3/50	0,88	38,89	97,22	550	5000	8,50	0,003	22,03	30,0
i-FX2-G01-R-SL-E 0522	400/3/50	5,14	13,06	36,67	143	1800	2,50	20,00	45,56	65,8
i-FX2-G01-R-SL-E 0572	400/3/50	3,97	14,44	46,94	124	2000	2,20	22,22	50,83	72,7
i-FX2-G01-R-SL-E 0612	400/3/50	3,97	14,44	46,94	124	2100	2,20	22,22	50,83	72,7
i-FX2-G01-R-SL-E 0642	400/3/50	3,97	14,44	46,94	124	2200	1,90	24,44	56,11	79,6

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

[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
i-FX2-G01-R-SL-E 0702	400/3/50	3,61	16,67	47,78	238	2500	1,70	27,22	62,78	90,0
i-FX2-G01-R-SL-E 0792	400/3/50	2,44	20,00	57,22	226	2700	0,90	37,78	86,67	109
i-FX2-G01-R-SL-E 0862	400/3/50	2,44	20,00	57,22	226	2900	0,90	37,78	86,67	109
i-FX2-G01-R-SL-E 0922	400/3/50	1,53	24,72	68,06	210	3200	0,60	42,78	97,22	128
i-FX2-G01-R-SL-E 0982	400/3/50	1,53	24,72	68,06	210	3400	0,60	42,78	97,22	128
i-FX2-G01-R-SL-E 1062	400/3/50	1,87	22,50	63,89	275	3700	0,50	45,28	103,1	136
i-FX2-G01-R-SL-E 1132	400/3/50	1,62	23,61	66,94	275	3900	0,40	47,78	108,9	143
i-FX2-G01-R-SL-E 1202	400/3/50	1,08	28,33	100,8	310	4100	0,40	53,89	122,2	159
i-FX2-G01-R-SL-E 1252	400/3/50	1,08	28,33	100,8	310	4300	0,40	53,89	122,2	159
i-FX2-G01-R-SL-E 1402	400/3/50	0,82	37,22	102,8	575	4700	0,30	61,67	141,1	178
i-FX2-G01-R-SL-E 1482	400/3/50	0,88	38,89	97,22	550	5000	0,30	61,67	141,1	178

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 ELECTRIC DATA

[SI System]

i-FX2-G01-K

SIZE	Power supply V/ph/Hz	Maximum values								
		Compressor				Fans (1)		Total (1)(2)		
		n	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]
0532	400/3/50	2	2x102.4	2x167.5	2x20	6x2.2	6x4.1	218,0	360	-
0602	400/3/50	2	1x101.8+1x125.5	1x166.6+1x202.4	1x20+1x20	7x2.2	7x4.1	242,7	398	-
0622	400/3/50	2	1x103.3+1x129.8	1x168.8+1x209.5	1x20+1x20	7x2.2	7x4.1	248,5	407	-
0672	400/3/50	2	2x125.1	2x201.8	2x20	8x2.2	8x4.1	267,8	436	-
0732	400/3/50	2	2x139.6	2x224.2	2x20	8x2.2	8x4.1	296,7	481	-
0802	400/3/50	2	1x184.4+1x142.8	1x292.8+1x229.4	1x20+1x20	9x2.2	9x4.1	347,0	559	-
0892	400/3/50	2	2x183.5	2x291.2	2x20	10x2.2	10x4.1	388,9	624	-
0972	400/3/50	2	1x175.7+1x190.1	1x279.5+1x300.9	1x20+1x20	11x2.2	11x4.1	390,1	626	-
1032	400/3/50	2	2x186.4	2x295	2x20	12x2.2	12x4.1	399,2	639	-
1082	400/3/50	2	1x229+1x178.9	1x368+1x284	1x20+1x20	12x2.2	12x4.1	434,3	701	-
1122	400/3/50	2	2x229	2x368	2x20	12x2.2	12x4.1	484,4	785	-
1192	400/3/50	2	2x239	2x384	2x20	14x2.2	14x4.1	508,8	825	-
1242	400/3/50	2	2x250	2x400	2x20	14x2.2	14x4.1	530,8	857	-
1382	400/3/50	2	2x268	2x433	2x20	16x2.2	16x4.1	571,2	932	-
1452	400/3/50	2	2x285	2x459	2x20	16x2.2	16x4.1	605,2	984	-
1552	400/3/50	2	2x290	2x467	2x20	18x2.2	18x4.1	619,6	1008	-
1633	400/3/50	2	1x229+1x178.9	1x368+1x284	1x20+1x20	18x2.2	18x4.1	676,5	1094	-
1703	400/3/50	3	3x229	3x368	3x20	18x2.2	18x4.1	726,6	1178	-
1863	400/3/50	3	3x247	3x396	3x20	20x2.2	20x4.1	785,0	1270	-

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.

Voltage tolerance: 10%
Maximum voltage unbalance: 2%

Give the typical operating conditions of units designed for outdoor installation, which can be associated (according to reference document IEC 60721) to the following classes:
- climatic conditions class 4K4H: air temperature range from -20 up to 55°C (*), relative humidity range from 4 up to 100%, with possible precipitations, at air pressure from 70 and 106 kPa and a maximum solar radiation of 1120 W/m2
- special climatic conditions negligible
- biological conditions class 4B1 and 4C2: locations in a generic urban area
- mechanically active substances class 4S2: locations in areas with sand or dust representative of urban areas
- mechanical conditions class 4M1: locations protected from significant vibrations or shocks

The required protection level for safe operation, according to reference document IEC 60529, is IP43XW (protection against access, to the most critical unit's parts, of external devices with diameter larger than 1 mm and rain).
The unit can be considered IP44XW protected, i.e. protected against access of external devices (with diameter larger than 1 mm) and water in general.

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

[SI System]

i-FX2-G01-SL-K

SIZE	Power supply V/ph/Hz	Maximum values								
		Compressor				Fans (1)		Total (1)(2)		
		n	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]
0532	400/3/50	2	1x90.9+1x104.7	1x149.7+1x170.8	1x20+1x20	7x2.2	7x4.1	211,0	349	-
0602	400/3/50	2	2x103.6	2x169.1	2x20	8x2.2	8x4.1	224,8	371	-
0622	400/3/50	2	1x120.4+1x103.6	1x194.6+1x169.1	1x20+1x20	8x2.2	8x4.1	241,6	397	-
0672	400/3/50	2	2x119.3	2x192.9	2x20	8x2.2	8x4.1	256,2	419	-
0732	400/3/50	2	2x131.3	2x211	2x20	10x2.2	10x4.1	284,6	463	-
0802	400/3/50	2	1x168.1+1x131.3	1x267+1x211	1x20+1x20	10x2.2	10x4.1	321,4	519	-
0892	400/3/50	2	2x171.5	2x272.3	2x20	10x2.2	10x4.1	364,9	586	-
0972	400/3/50	2	1x168.8+1x179.6	1x268.1+1x285.1	1x20+1x20	11x2.2	11x4.1	372,6	598	-
1032	400/3/50	2	2x178.9	2x284	2x20	12x2.2	12x4.1	384,2	617	-
1082	400/3/50	2	1x229+1x178.9	1x368+1x284	1x20+1x20	13x2.2	13x4.1	436,5	705	-
1122	400/3/50	2	2x229	2x368	2x20	14x2.2	14x4.1	488,8	793	-
1192	400/3/50	2	2x237	2x380	2x20	16x2.2	16x4.1	509,2	826	-
1242	400/3/50	2	2x247	2x396	2x20	16x2.2	16x4.1	529,2	858	-
1382	400/3/50	2	2x260	2x420	2x20	16x2.2	16x4.1	555,2	906	-
1452	400/3/50	2	2x278	2x448	2x20	18x2.2	18x4.1	595,6	970	-
1552	400/3/50	2	2x285	2x459	2x20	18x2.2	18x4.1	609,6	992	-
1633	400/3/50	3	2x229+1x178.9	2x368+1x284	2x20+1x20	20x2.2	20x4.1	680,9	1102	-
1703	400/3/50	3	3x229	3x368	3x20	20x2.2	20x4.1	731,0	1186	-
1863	400/3/50	3	3x247	3x396	3x20	20x2.2	20x4.1	785,0	1270	-

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.

Voltage tolerance: 10%
Maximum voltage unbalance: 2%

Give the typical operating conditions of units designed for outdoor installation, which can be associated (according to reference document IEC 60721) to the following classes:
- climatic conditions class 4K4H: air temperature range from -20 up to 55°C (*), relative humidity range from 4 up to 100%, with possible precipitations, at air pressure from 70 and 106 kPa and a maximum solar radiation of 1120 W/m2
- special climatic conditions negligible
- biological conditions class 4B1 and 4C2: locations in a generic urban area
- mechanically active substances class 4S2: locations in areas with sand or dust representative of urban areas
- mechanical conditions class 4M1: locations protected from significant vibrations or shocks

The required protection level for safe operation, according to reference document IEC 60529, is IP43XW (protection against access, to the most critical unit's parts, of external devices with diameter larger than 1 mm and rain).
The unit can be considered IP44XW protected, i.e. protected against access of external devices (with diameter larger than 1 mm) and water in general.

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

[SI System]

i-FX2-G01-K+EC

SIZE	Power supply V/ph/Hz	Maximum values								
		Compressor				Fans (1)		Total (1)(2)		
		n	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]
0532	400/3/50	2	2x102.4	2x167.5	2x20	6x2.2	6x4.1	216,5	355	-
0602	400/3/50	2	1x101.8+1x125.5	1x166.6+1x202.4	1x20+1x20	7x2.2	7x4.1	240,9	392	-
0622	400/3/50	2	1x103.3+1x129.8	1x168.8+1x209.5	1x20+1x20	7x2.2	7x4.1	246,7	401	-
0672	400/3/50	2	2x125.1	2x201.8	2x20	8x2.2	8x4.1	265,8	430	-
0732	400/3/50	2	2x139.6	2x224.2	2x20	8x2.2	8x4.1	294,7	475	-
0802	400/3/50	2	1x184.4+1x142.8	1x292.8+1x229.4	1x20+1x20	9x2.2	9x4.1	344,8	552	-
0892	400/3/50	2	2x183.5	2x291.2	2x20	10x2.2	10x4.1	386,4	616	-
0972	400/3/50	2	1x175.7+1x190.1	1x279.5+1x300.9	1x20+1x20	11x2.2	11x4.1	387,3	617	-
1032	400/3/50	2	2x186.4	2x295	2x20	12x2.2	12x4.1	396,2	630	-
1082	400/3/50	2	1x229+1x178.9	1x368+1x284	1x20+1x20	12x2.2	12x4.1	431,3	692	-
1122	400/3/50	2	2x229	2x368	2x20	12x2.2	12x4.1	481,4	776	-
1192	400/3/50	2	2x239	2x384	2x20	14x2.2	14x4.1	505,3	814	-
1242	400/3/50	2	2x250	2x400	2x20	14x2.2	14x4.1	527,3	846	-
1382	400/3/50	2	2x268	2x433	2x20	16x2.2	16x4.1	567,2	919	-
1452	400/3/50	2	2x285	2x459	2x20	16x2.2	16x4.1	601,2	971	-
1552	400/3/50	2	2x290	2x467	2x20	18x2.2	18x4.1	615,1	993	-
1633	400/3/50	2	1x229+1x178.9	1x368+1x284	1x20+1x20	18x2.2	18x4.1	672,0	1079	-
1703	400/3/50	3	3x229	3x368	3x20	18x2.2	18x4.1	722,1	1163	-
1863	400/3/50	3	3x247	3x396	3x20	20x2.2	20x4.1	780,0	1254	-

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.

Voltage tolerance: 10%
Maximum voltage unbalance: 2%

Give the typical operating conditions of units designed for outdoor installation, which can be associated (according to reference document IEC 60721) to the following classes:
- climatic conditions class 4K4H: air temperature range from -20 up to 55°C (*), relative humidity range from 4 up to 100%, with possible precipitations, at air pressure from 70 and 106 kPa and a maximum solar radiation of 1120 W/m2
- special climatic conditions negligible
- biological conditions class 4B1 and 4C2: locations in a generic urban area
- mechanically active substances class 4S2: locations in areas with sand or dust representative of urban areas
- mechanical conditions class 4M1: locations protected from significant vibrations or shocks

The required protection level for safe operation, according to reference document IEC 60529, is IP43XW (protection against access, to the most critical unit's parts, of external devices with diameter larger than 1 mm and rain).
The unit can be considered IP44XW protected, i.e. protected against access of external devices (with diameter larger than 1 mm) and water in general.

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

[SI System]

i-FX2-G01-SL-K

SIZE	Power supply V/ph/Hz	Maximum values								
		Compressor				Fans (1)		Total (1)(2)		
		n	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]
0532	400/3/50	2	1x90.9+1x104.7	1x149.7+1x170.8	1x20+1x20	7x1.95	7x3.3	209,3	344	-
0602	400/3/50	2	2x103.6	2x169.1	2x20	8x1.95	8x3.3	222,8	365	-
0622	400/3/50	2	1x120.4+1x103.6	1x194.6+1x169.1	1x20+1x20	8x1.95	8x3.3	239,6	390	-
0672	400/3/50	2	2x119.3	2x192.9	2x20	8x1.95	8x3.3	254,2	412	-
0732	400/3/50	2	2x131.3	2x211	2x20	10x1.95	10x3.3	282,1	455	-
0802	400/3/50	2	1x168.1+1x131.3	1x267+1x211	1x20+1x20	10x1.95	10x3.3	318,9	511	-
0892	400/3/50	2	2x171.5	2x272.3	2x20	10x1.95	10x3.3	362,4	578	-
0972	400/3/50	2	1x168.8+1x179.6	1x268.1+1x285.1	1x20+1x20	11x1.95	11x3.3	369,8	590	-
1032	400/3/50	2	2x178.9	2x284	2x20	12x1.95	12x3.3	381,2	608	-
1082	400/3/50	2	1x229+1x178.9	1x368+1x284	1x20+1x20	13x1.95	13x3.3	433,3	695	-
1122	400/3/50	2	2x229	2x368	2x20	14x1.95	14x3.3	485,3	782	-
1192	400/3/50	2	2x237	2x380	2x20	16x1.95	16x3.3	505,2	813	-
1242	400/3/50	2	2x247	2x396	2x20	16x1.95	16x3.3	525,2	845	-
1382	400/3/50	2	2x260	2x420	2x20	16x1.95	16x3.3	551,2	893	-
1452	400/3/50	2	2x278	2x448	2x20	18x1.95	18x3.3	591,1	955	-
1552	400/3/50	2	2x285	2x459	2x20	18x1.95	18x3.3	605,1	977	-
1633	400/3/50	3	2x229+1x178.9	2x368+1x284	2x20+1x20	20x1.95	20x3.3	675,9	1086	-
1703	400/3/50	3	3x229	3x368	3x20	20x1.95	20x3.3	726,0	1170	-
1863	400/3/50	3	3x247	3x396	3x20	20x1.95	20x3.3	780,0	1254	-

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.

Voltage tolerance: 10%
Maximum voltage unbalance: 2%

Give the typical operating conditions of units designed for outdoor installation, which can be associated (according to reference document IEC 60721) to the following classes:
- climatic conditions class 4K4H: air temperature range from -20 up to 55°C (*), relative humidity range from 4 up to 100%, with possible precipitations, at air pressure from 70 and 106 kPa and a maximum solar radiation of 1120 W/m2
- special climatic conditions negligible
- biological conditions class 4B1 and 4C2: locations in a generic urban area
- mechanically active substances class 4S2: locations in areas with sand or dust representative of urban areas
- mechanical conditions class 4M1: locations protected from significant vibrations or shocks

The required protection level for safe operation, according to reference document IEC 60529, is IP43XW (protection against access, to the most critical unit's parts, of external devices with diameter larger than 1 mm and rain).
The unit can be considered IP44XW protected, i.e. protected against access of external devices (with diameter larger than 1 mm) and water in general.

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

[SI System]

i-FX2-G01-E

SIZE	Power supply V/ph/Hz	Maximum values								
		Compressor				Fans (1)		Total (1)(2)		
		n	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]
0522	400/3/50	2	2x97.9	2x160.4	2x20	8x1.95	8x3.3	211,4	347	-
0572	400/3/50	2	2x104.7	2x170.8	2x20	8x1.95	8x3.3	225,0	368	-
0612	400/3/50	2	1x120.4+1x104.7	1x194.6+1x170.8	1x20+1x20	9x1.95	9x3.3	242,7	395	-
0642	400/3/50	2	2x120.4	2x194.6	2x20	10x1.95	10x3.3	260,3	422	-
0702	400/3/50	2	2x131.3	2x211	2x20	10x1.95	10x3.3	282,1	455	-
0792	400/3/50	2	1x172.3+1x131.3	1x274+1x211	1x20+1x20	11x1.95	11x3.3	325,1	521	-
0862	400/3/50	2	2x172.3	2x274	2x20	12x1.95	12x3.3	368,0	588	-
0922	400/3/50	2	1x184.6+1x172.3	1x292+1x274	1x20+1x20	13x1.95	13x3.3	382,3	609	-
0982	400/3/50	2	2x184.6	2x292	2x20	14x1.95	14x3.3	396,5	630	-
1062	400/3/50	2	1x184.6+1x232	1x292+1x372	1x20+1x20	15x1.95	15x3.3	445,9	714	-
1132	400/3/50	2	2x232	2x372	2x20	16x1.95	16x3.3	495,2	797	-
1202	400/3/50	2	2x247	2x396	2x20	16x1.95	16x3.3	525,2	845	-
1252	400/3/50	2	2x250	2x400	2x20	18x1.95	18x3.3	535,1	859	-
1402	400/3/50	2	2x271	2x437	2x20	20x1.95	20x3.3	581,0	940	-
1482	400/3/50	2	2x285	2x459	2x20	20x1.95	20x3.3	609,0	984	-

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.

Voltage tolerance: 10%
Maximum voltage unbalance: 2%

Give the typical operating conditions of units designed for outdoor installation, which can be associated (according to reference document IEC 60721) to the following classes:
- climatic conditions class 4K4H: air temperature range from -20 up to 55°C (*), relative humidity range from 4 up to 100%, with possible precipitations, at air pressure from 70 and 106 kPa and a maximum solar radiation of 1120 W/m2
- special climatic conditions negligible
- biological conditions class 4B1 and 4C2: locations in a generic urban area
- mechanically active substances class 4S2: locations in areas with sand or dust representative of urban areas
- mechanical conditions class 4M1: locations protected from significant vibrations or shocks

The required protection level for safe operation, according to reference document IEC 60529, is IP43XW (protection against access, to the most critical unit's parts, of external devices with diameter larger than 1 mm and rain).
The unit can be considered IP44XW protected, i.e. protected against access of external devices (with diameter larger than 1 mm) and water in general.

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

[SI System]

i-FX2-G01-SL-E

SIZE	Power supply V/ph/Hz	Maximum values								
		Compressor				Fans (1)		Total (1)(2)		
		n	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]
0522	400/3/50	2	2x97.9	2x160.4	2x20	8x1.95	8x3.3	211,4	347	-
0572	400/3/50	2	1x120.4+1x97.9	1x194.6+1x160.4	1x20+1x20	9x1.95	9x3.3	235,9	385	-
0612	400/3/50	2	1x120.4+1x104.7	1x194.6+1x170.8	1x20+1x20	10x1.95	10x3.3	244,6	398	-
0642	400/3/50	2	2x120.4	2x194.6	2x20	10x1.95	10x3.3	260,3	422	-
0702	400/3/50	2	2x131.3	2x211	2x20	12x1.95	12x3.3	286,0	462	-
0792	400/3/50	2	1x172.3+1x131.3	1x274+1x211	1x20+1x20	12x1.95	12x3.3	327,0	525	-
0862	400/3/50	2	2x172.3	2x274	2x20	14x1.95	14x3.3	371,9	594	-
0922	400/3/50	2	1x172.3+1x184.6	1x274+1x292	1x20+1x20	15x1.95	15x3.3	386,2	616	-
0982	400/3/50	2	2x184.6	2x292	2x20	16x1.95	16x3.3	400,4	637	-
1062	400/3/50	2	1x232+1x184.6	1x372+1x292	1x20+1x20	17x1.95	17x3.3	449,8	720	-
1132	400/3/50	2	2x232	2x372	2x20	18x1.95	18x3.3	499,1	803	-
1202	400/3/50	2	2x247	2x396	2x20	18x1.95	18x3.3	529,1	851	-
1252	400/3/50	2	2x250	2x400	2x20	20x1.95	20x3.3	539,0	866	-
1402	400/3/50	2	2x271	2x437	2x20	20x1.95	20x3.3	581,0	940	-
1482	400/3/50	2	2x285	2x459	2x20	20x1.95	20x3.3	609,0	984	-

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.

Voltage tolerance: 10%
Maximum voltage unbalance: 2%

Give the typical operating conditions of units designed for outdoor installation, which can be associated (according to reference document IEC 60721) to the following classes:
- climatic conditions class 4K4H: air temperature range from -20 up to 55°C (*), relative humidity range from 4 up to 100%, with possible precipitations, at air pressure from 70 and 106 kPa and a maximum solar radiation of 1120 W/m2
- special climatic conditions negligible
- biological conditions class 4B1 and 4C2: locations in a generic urban area
- mechanically active substances class 4S2: locations in areas with sand or dust representative of urban areas
- mechanical conditions class 4M1: locations protected from significant vibrations or shocks

The required protection level for safe operation, according to reference document IEC 60529, is IP43XW (protection against access, to the most critical unit's parts, of external devices with diameter larger than 1 mm and rain).
The unit can be considered IP44XW protected, i.e. protected against access of external devices (with diameter larger than 1 mm) and water in general.

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

10.2 Dimensions of the electrical connections to the main switch

Maximum cables/bars section connected to main switch and short time current

RANGE		FLA	LOAD BREAK SWITCH		ATS ABB		Load break switch technical data. Minimum and maximum cable section.	ATS technical data. Minimum and maximum cable section.	ICW (0,3s) Short time current [kA]	ICW (0,3s) Short time current [kA]. Option 3412
			Model	Rated current In	Model	Rated current In				
Versions	Sizes	[A]		[A]		[A]			[kA]	[kA]
K	0532	373,2	SIRCO B5 AC 26003064	630	OXB630E3X2QB	630	https://www.socomec.com/files/live/sites/systemsite/files/SCP/pdf_catalogue/GB/cat_sircosircoac_en.pdf	TruONE ATS - Main catalog (abb.com)	22	20
SL-K		372,0								
K	0602	416,1								
SL-K		394,2								
K	0622	383,5								
SL-K		419,7								
K	0672	462,0								
SL-K		447,8								
K	0732	492,0								
SL-K		493,0								
K	0802	560,5	SIRCO B6 26CL3081	800	OXB800E3X2QB	800				
SL-K		549,0								
K	0892	625,0								
SL-K		605,0								
K	0972	651,9								
SL-K		633,9								
K	1032	677,4								
SL-K		655,4								
K	1082	739,4	SIRCO B6 26CL3099	1000	OXB1000E3X2QB	1000			35	
SL-K		743,9								
K	1122	831,7								
SL-K		840,7								
K	1192	872,7	SIRCO B6 26CL3119	1250	OXB1250E3X2QB	1250				
SL-K		873,7								
K	1242	904,7								
SL-K		905,7								
K	1382	979,7								
SL-K		953,7								
K	1452	1044,0								
SL-K		1031,0								
K	1552	1069,0								
SL-K		1053,0								
K	1633	1155,0	SIRCO B7 26003161	1600	OXB1600E3X2QB	1600			44	
SL-K		1164,0								
K	1703	1262,5								
SL-K		1271,5								
K	1863	1355,5								
SL-K		1355,5								

RANGE		FLA	LOAD BREAK SWITCH		ATS ABB		Load break switch technical data. Minimum and maximum cable section.	ATS technical data. Minimum and maximum cable section.	ICW (0,3s) Short time current [kA]	ICW (0,3s) Short time current [kA]. Option 3412
			Model	Rated current In	Model	Rated current In				
Versions	Sizes	[A]		[A]		[A]			[kA]	[kA]
E	0522	376,8	SIRCO B5 AC 26003064	630	OXB630E3X2QB	630	https://www.socomec.com/files/live/sites/systemsite/files/SCP/pdf_catalogue/GB/cat_sircosircoac_en.pdf	TruONE ATS - Main catalog (abb.com)	22	20
SL-E		376,8								
E	0572	397,6								
SL-E		415,5								
E	0612	425,9								
SL-E		430,4								
E	0642	454,2								
SL-E		454,2								
E	0702	487,0								
SL-E		496,0								
E	0792	560,7	SIRCO B6 26CL3081	800	OXB800E3X2QB	800				
SL-E		565,2								
E	0862	628,2								
SL-E		637,2								
E	0922	650,7								
SL-E		659,7								
E	0982	680,4	SIRCO B6 26CL3099	1000	OXB1000E3X2QB	1000			35	
SL-E		689,4								
E	1062	764,9								
SL-E		773,9								
E	1132	857,7	SIRCO B6 26CL3119	1250	OXB1250E3X2QB	1250				
SL-E		866,7								
E	1202	905,7								
SL-E		914,7								
E	1252	922,7								
SL-E		931,7								
E	1402	1005,7								
SL-E		1005,7								
E	1482	1062,0	SIRCO B7 26003161	1600	OXB1600E3X2QB	1600			44	
SL-E		1062,0								

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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								
0532	101	101	98	97	96	92	84	74	**100**
0602	102	102	99	98	97	93	85	75	**101**
0622	102	102	99	98	97	93	85	75	**101**
0672	102	102	99	98	97	93	85	75	**101**
0732	103	103	100	99	98	94	86	76	**102**
0802	103	103	100	99	98	94	86	76	**102**
0892	104	104	101	100	99	95	87	77	**103**
0972	105	105	102	101	100	96	88	78	**104**
1032	105	105	102	101	100	96	88	78	**104**
1082	105	105	102	101	100	96	88	78	**104**
1122	106	106	103	102	101	97	89	79	**105**
1192	106	106	103	102	101	97	89	79	**105**
1242	107	107	104	103	102	98	90	80	**106**
1382	107	107	104	103	102	98	90	80	**106**
1452	107	107	104	103	102	98	90	80	**106**
1552	107	107	104	103	102	98	90	80	**106**
1633	107	107	104	103	102	98	90	80	**106**
1703	107	107	104	103	102	98	90	80	**106**
1863	108	108	105	104	103	99	91	81	**107**

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 taken in compliance with ISO 9614.
Such certification refers specifically to the sound Power Level in dB(A). This is therefore the only acoustic data to be considered as binding.
Sound power level in cooling, outdoors.

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SOUND PRESSURE LEVEL									
SIZE	Octave band [Hz]								Total sound level dB(A)
	63	125	250	500	1000	2000	4000	8000	
	Sound pressure level dB								
0532	69	69	66	65	64	60	52	42	**68**
0602	70	70	67	66	65	61	53	43	**69**
0622	70	70	67	66	65	61	53	43	**69**
0672	70	70	67	66	65	61	53	43	**69**
0732	71	71	68	67	66	62	54	44	**70**
0802	70	70	67	66	65	61	53	43	**69**
0892	71	71	68	67	66	62	54	44	**70**
0972	72	72	69	68	67	63	55	45	**71**
1032	72	72	69	68	67	63	55	45	**71**
1082	72	72	69	68	67	63	55	45	**71**
1122	73	73	70	69	68	64	56	46	**72**
1192	73	73	70	69	68	64	56	46	**72**

Working conditions
Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°C; Source (side) heat exchanger air (in) 35,0°C.
Average sound pressure level at 10m distance, unit in a free field on a reflective surface; non-binding value calculated from the sound power level.

i-FX2-G01-K

SOUND PRESSURE LEVEL									
SIZE	Octave band [Hz]								Total sound level dB(A)
	63	125	250	500	1000	2000	4000	8000	
	Sound pressure level dB								
1242	74	74	71	70	69	65	57	47	**73**
1382	74	74	71	70	69	65	57	47	**73**
1452	74	74	71	70	69	65	57	47	**73**
1552	74	74	71	70	69	65	57	47	**73**
1633	74	74	71	70	69	65	57	47	**73**
1703	74	74	71	70	69	65	57	47	**73**
1863	75	75	72	71	70	66	58	48	**74**

Working conditions
Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°C; Source (side) heat exchanger air (in) 35,0°C.
Average sound pressure level at 10m distance, unit in a free field on a reflective surface; non-binding value calculated from the sound power level.

i-FX2-G01-SL-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								
0532	92	92	89	88	87	83	75	65	**91**
0602	93	93	90	89	88	84	76	66	**92**
0622	93	93	90	89	88	84	76	66	**92**
0672	93	93	90	89	88	84	76	66	**92**
0732	94	94	91	90	89	85	77	67	**93**
0802	94	94	91	90	89	85	77	67	**93**
0892	94	94	91	90	89	85	77	67	**93**
0972	95	95	92	91	90	86	78	68	**94**
1032	96	96	93	92	91	87	79	69	**95**
1082	97	97	94	93	92	88	80	70	**96**
1122	97	97	94	93	92	88	80	70	**96**
1192	97	97	94	93	92	88	80	70	**96**
1242	97	97	94	93	92	88	80	70	**96**
1382	97	97	94	93	92	88	80	70	**96**
1452	97	97	94	93	92	88	80	70	**96**
1552	97	97	94	93	92	88	80	70	**96**
1633	97	97	94	93	92	88	80	70	**96**
1703	97	97	94	93	92	88	80	70	**96**
1863	98	98	95	94	93	89	81	71	**97**

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 taken in compliance with ISO 9614.
Such certification refers specifically to the sound Power Level in dB(A). This is therefore the only acoustic data to be considered as binding.
Sound power level in cooling, outdoors.

i-FX2-G01-SL-K

SOUND PRESSURE LEVEL									
SIZE	Octave band [Hz]								Total sound level dB(A)
	63	125	250	500	1000	2000	4000	8000	
	Sound pressure level dB								
0532	60	60	57	56	55	51	43	33	**59**
0602	61	61	58	57	56	52	44	34	**60**
0622	61	61	58	57	56	52	44	34	**60**
0672	61	61	58	57	56	52	44	34	**60**
0732	61	61	58	57	56	52	44	34	**60**
0802	61	61	58	57	56	52	44	34	**60**
0892	61	61	58	57	56	52	44	34	**60**
0972	62	62	59	58	57	53	45	35	**61**
1032	63	63	60	59	58	54	46	36	**62**
1082	64	64	61	60	59	55	47	37	**63**
1122	64	64	61	60	59	55	47	37	**63**
1192	64	64	61	60	59	55	47	37	**63**

Working conditions
Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°C; Source (side) heat exchanger air (in) 35,0°C.
Average sound pressure level at 10m distance, unit in a free field on a reflective surface; non-binding value calculated from the sound power level.

i-FX2-G01-SL-K

SOUND PRESSURE LEVEL									
SIZE	Octave band [Hz]								Total sound level dB(A)
	63	125	250	500	1000	2000	4000	8000	
	Sound pressure level dB								
1242	64	64	61	60	59	55	47	37	**63**
1382	64	64	61	60	59	55	47	37	**63**
1452	64	64	61	60	59	55	47	37	**63**
1552	64	64	61	60	59	55	47	37	**63**
1633	64	64	61	60	59	55	47	37	**63**
1703	64	64	61	60	59	55	47	37	**63**
1863	65	65	62	61	60	56	48	38	**64**

Working conditions
Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°C; Source (side) heat exchanger air (in) 35,0°C.
Average sound pressure level at 10m distance, unit in a free field on a reflective surface; non-binding value calculated from the sound power level.

i-FX2-G01-K+EC

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								
0532	101	101	98	97	96	92	84	74	**100**
0602	102	102	99	98	97	93	85	75	**101**
0622	102	102	99	98	97	93	85	75	**101**
0672	102	102	99	98	97	93	85	75	**101**
0732	103	103	100	99	98	94	86	76	**102**
0802	103	103	100	99	98	94	86	76	**102**
0892	104	104	101	100	99	95	87	77	**103**
0972	105	105	102	101	100	96	88	78	**104**
1032	105	105	102	101	100	96	88	78	**104**
1082	105	105	102	101	100	96	88	78	**104**
1122	106	106	103	102	101	97	89	79	**105**
1192	106	106	103	102	101	97	89	79	**105**
1242	107	107	104	103	102	98	90	80	**106**
1382	107	107	104	103	102	98	90	80	**106**
1452	107	107	104	103	102	98	90	80	**106**
1552	107	107	104	103	102	98	90	80	**106**
1633	107	107	104	103	102	98	90	80	**106**
1703	107	107	104	103	102	98	90	80	**106**
1863	108	108	105	104	103	99	91	81	**107**

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 taken in compliance with ISO 9614.
Such certification refers specifically to the sound Power Level in dB(A). This is therefore the only acoustic data to be considered as binding.
Sound power level in cooling, outdoors.

i-FX2-G01-K+EC

SOUND PRESSURE LEVEL									
SIZE	Octave band [Hz]								Total sound level dB(A)
	63	125	250	500	1000	2000	4000	8000	
	Sound pressure level dB								
0532	69	69	66	65	64	60	52	42	**68**
0602	70	70	67	66	65	61	53	43	**69**
0622	70	70	67	66	65	61	53	43	**69**
0672	70	70	67	66	65	61	53	43	**69**
0732	71	71	68	67	66	62	54	44	**70**
0802	70	70	67	66	65	61	53	43	**69**
0892	71	71	68	67	66	62	54	44	**70**
0972	72	72	69	68	67	63	55	45	**71**
1032	72	72	69	68	67	63	55	45	**71**
1082	72	72	69	68	67	63	55	45	**71**
1122	73	73	70	69	68	64	56	46	**72**
1192	73	73	70	69	68	64	56	46	**72**

Working conditions
Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°C; Source (side) heat exchanger air (in) 35,0°C.
Average sound pressure level at 10m distance, unit in a free field on a reflective surface; non-binding value calculated from the sound power level.

i-FX2-G01-K+EC

SOUND PRESSURE LEVEL									
SIZE	Octave band [Hz]								Total sound level dB(A)
	63	125	250	500	1000	2000	4000	8000	
	Sound pressure level dB								
1242	74	74	71	70	69	65	57	47	**73**
1382	74	74	71	70	69	65	57	47	**73**
1452	74	74	71	70	69	65	57	47	**73**
1552	74	74	71	70	69	65	57	47	**73**
1633	74	74	71	70	69	65	57	47	**73**
1703	74	74	71	70	69	65	57	47	**73**
1863	75	75	72	71	70	66	58	48	**74**

Working conditions
Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°C; Source (side) heat exchanger air (in) 35,0°C.
Average sound pressure level at 10m distance, unit in a free field on a reflective surface; non-binding value calculated from the sound power level.

i-FX2-G01-SL-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								
0532	92	92	89	88	87	83	75	65	**91**
0602	93	93	90	89	88	84	76	66	**92**
0622	93	93	90	89	88	84	76	66	**92**
0672	93	93	90	89	88	84	76	66	**92**
0732	94	94	91	90	89	85	77	67	**93**
0802	94	94	91	90	89	85	77	67	**93**
0892	94	94	91	90	89	85	77	67	**93**
0972	95	95	92	91	90	86	78	68	**94**
1032	96	96	93	92	91	87	79	69	**95**
1082	97	97	94	93	92	88	80	70	**96**
1122	97	97	94	93	92	88	80	70	**96**
1192	97	97	94	93	92	88	80	70	**96**
1242	97	97	94	93	92	88	80	70	**96**
1382	97	97	94	93	92	88	80	70	**96**
1452	97	97	94	93	92	88	80	70	**96**
1552	97	97	94	93	92	88	80	70	**96**
1633	97	97	94	93	92	88	80	70	**96**
1703	97	97	94	93	92	88	80	70	**96**
1863	98	98	95	94	93	89	81	71	**97**

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 taken in compliance with ISO 9614.
Such certification refers specifically to the sound Power Level in dB(A). This is therefore the only acoustic data to be considered as binding.
Sound power level in cooling, outdoors.

i-FX2-G01-SL-K

SOUND PRESSURE LEVEL									
SIZE	Octave band [Hz]								Total sound level dB(A)
	63	125	250	500	1000	2000	4000	8000	
	Sound pressure level dB								
0532	60	60	57	56	55	51	43	33	**59**
0602	61	61	58	57	56	52	44	34	**60**
0622	61	61	58	57	56	52	44	34	**60**
0672	61	61	58	57	56	52	44	34	**60**
0732	61	61	58	57	56	52	44	34	**60**
0802	61	61	58	57	56	52	44	34	**60**
0892	61	61	58	57	56	52	44	34	**60**
0972	62	62	59	58	57	53	45	35	**61**
1032	63	63	60	59	58	54	46	36	**62**
1082	64	64	61	60	59	55	47	37	**63**
1122	64	64	61	60	59	55	47	37	**63**
1192	64	64	61	60	59	55	47	37	**63**

Working conditions
Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°C; Source (side) heat exchanger air (in) 35,0°C.
Average sound pressure level at 10m distance, unit in a free field on a reflective surface; non-binding value calculated from the sound power level.

i-FX2-G01-SL-K

SOUND PRESSURE LEVEL									
SIZE	Octave band [Hz]								Total sound level dB(A)
	63	125	250	500	1000	2000	4000	8000	
	Sound pressure level dB								
1242	64	64	61	60	59	55	47	37	**63**
1382	64	64	61	60	59	55	47	37	**63**
1452	64	64	61	60	59	55	47	37	**63**
1552	64	64	61	60	59	55	47	37	**63**
1633	64	64	61	60	59	55	47	37	**63**
1703	64	64	61	60	59	55	47	37	**63**
1863	65	65	62	61	60	56	48	38	**64**

Working conditions
Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°C; Source (side) heat exchanger air (in) 35,0°C.
Average sound pressure level at 10m distance, unit in a free field on a reflective surface; non-binding value calculated from the sound power level.

i-FX2-G01-E

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								
0522	101	101	98	97	96	92	84	74	**100**
0572	102	102	99	98	97	93	85	75	**101**
0612	102	102	99	98	97	93	85	75	**101**
0642	102	102	99	98	97	93	85	75	**101**
0702	103	103	100	99	98	94	86	76	**102**
0792	103	103	100	99	98	94	86	76	**102**
0862	104	104	101	100	99	95	87	77	**103**
0922	105	105	102	101	100	96	88	78	**104**
0982	105	105	102	101	100	96	88	78	**104**
1062	105	105	102	101	100	96	88	78	**104**
1132	106	106	103	102	101	97	89	79	**105**
1202	107	107	104	103	102	98	90	80	**106**
1252	107	107	104	103	102	98	90	80	**106**
1402	107	107	104	103	102	98	90	80	**106**
1482	107	107	104	103	102	98	90	80	**106**

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 taken in compliance with ISO 9614.
Such certification refers specifically to the sound Power Level in dB(A). This is therefore the only acoustic data to be considered as binding.
Sound power level in cooling, outdoors.

i-FX2-G01-E

SOUND PRESSURE LEVEL									
SIZE	Octave band [Hz]								Total sound level dB(A)
	63	125	250	500	1000	2000	4000	8000	
	Sound pressure level dB								
0522	69	69	66	65	64	60	52	42	**68**
0572	70	70	67	66	65	61	53	43	**69**
0612	69	69	66	65	64	60	52	42	**68**
0642	69	69	66	65	64	60	52	42	**68**
0702	70	70	67	66	65	61	53	43	**69**
0792	70	70	67	66	65	61	53	43	**69**
0862	71	71	68	67	66	62	54	44	**70**
0922	72	72	69	68	67	63	55	45	**71**
0982	72	72	69	68	67	63	55	45	**71**
1062	72	72	69	68	67	63	55	45	**71**
1132	73	73	70	69	68	64	56	46	**72**
1202	74	74	71	70	69	65	57	47	**73**
1252	74	74	71	70	69	65	57	47	**73**
1402	74	74	71	70	69	65	57	47	**73**
1482	74	74	71	70	69	65	57	47	**73**

Working conditions
Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°C; Source (side) heat exchanger air (in) 35,0°C.
Average sound pressure level at 10m distance, unit in a free field on a reflective surface; non-binding value calculated from the sound power level.

i-FX2-G01-SL-E

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								
0522	92	92	89	88	87	83	75	65	**91**
0572	93	93	90	89	88	84	76	66	**92**
0612	93	93	90	89	88	84	76	66	**92**
0642	93	93	90	89	88	84	76	66	**92**
0702	94	94	91	90	89	85	77	67	**93**
0792	94	94	91	90	89	85	77	67	**93**
0862	94	94	91	90	89	85	77	67	**93**
0922	95	95	92	91	90	86	78	68	**94**
0982	96	96	93	92	91	87	79	69	**95**
1062	97	97	94	93	92	88	80	70	**96**
1132	97	97	94	93	92	88	80	70	**96**
1202	97	97	94	93	92	88	80	70	**96**
1252	97	97	94	93	92	88	80	70	**96**
1402	97	97	94	93	92	88	80	70	**96**
1482	97	97	94	93	92	88	80	70	**96**

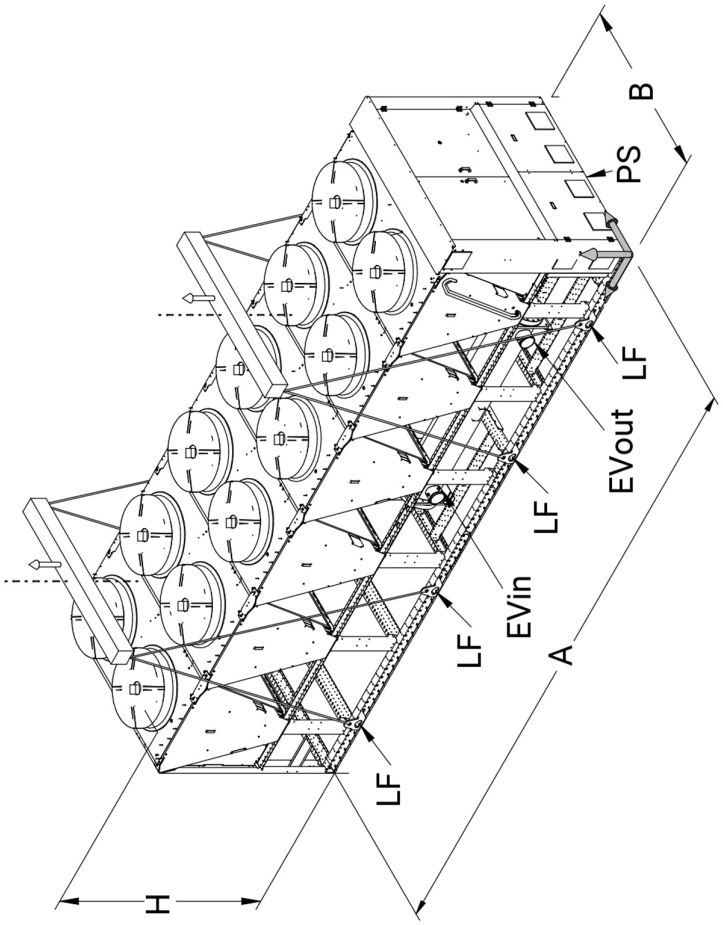
Working conditions
Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°C; Source (side) heat exchanger air (in) 35,0°C.
Sound power on the basis of measurements taken in compliance with ISO 9614.
Such certification refers specifically to the sound Power Level in dB(A). This is therefore the only acoustic data to be considered as binding.
Sound power level in cooling, outdoors.

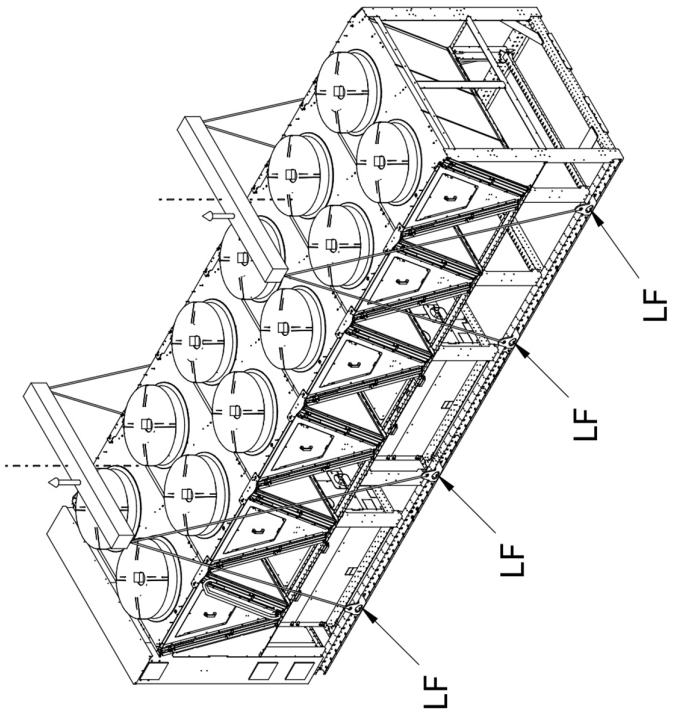
i-FX2-G01-SL-E

SOUND PRESSURE LEVEL									
SIZE	Octave band [Hz]								Total sound level dB(A)
	63	125	250	500	1000	2000	4000	8000	
	Sound pressure level dB								
0522	60	60	57	56	55	51	43	33	**59**
0572	60	60	57	56	55	51	43	33	**59**
0612	60	60	57	56	55	51	43	33	**59**
0642	60	60	57	56	55	51	43	33	**59**
0702	61	61	58	57	56	52	44	34	**60**
0792	61	61	58	57	56	52	44	34	**60**
0862	61	61	58	57	56	52	44	34	**60**
0922	62	62	59	58	57	53	45	35	**61**
0982	63	63	60	59	58	54	46	36	**62**
1062	64	64	61	60	59	55	47	37	**63**
1132	64	64	61	60	59	55	47	37	**63**
1202	64	64	61	60	59	55	47	37	**63**
1252	64	64	61	60	59	55	47	37	**63**
1402	64	64	61	60	59	55	47	37	**63**
1482	64	64	61	60	59	55	47	37	**63**

Working conditions
Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°C; Source (side) heat exchanger air (in) 35,0°C.
Average sound pressure level at 10m distance, unit in a free field on a reflective surface; non-binding value calculated from the sound power level.

ATTN: UTILIZZARE N° 8 FUNI DI SOLLEVAMENTO DI PARI LUNGHEZZA
ATTN: USE N° 8 LIFTING ROPES WITH EQUAL LENGHT ONLY



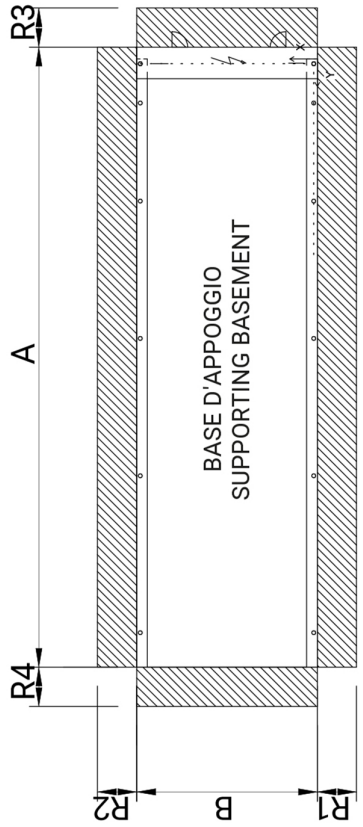


EVin Entrata acqua evaporatore
Evaporator water inlet

EVout Uscita acqua evaporatore
Evaporator water outlet

LF Punti di sollevamento
Lifting points

PS Ingresso linea elettrica
Power inlet



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

[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
i-FX2-G01-K 0532	4150	2260	2640	4500	2300	2000	1500	1500	H	6"	-	-
i-FX2-G01-K 0602	5400	2260	2640	5000	2300	2000	1500	1500	H	6"	-	-
i-FX2-G01-K 0622	5400	2260	2640	5007	2300	2000	1500	1500	H	6"	-	-
i-FX2-G01-K 0672	5400	2260	2640	5106	2300	2000	1500	1500	H	6"	-	-
i-FX2-G01-K 0732	5400	2260	2640	5388	2300	2000	1500	1500	H	6"	-	-
i-FX2-G01-K 0802	6650	2260	2640	5863	2300	2000	1500	1500	H	6"	-	-
i-FX2-G01-K 0892	6650	2260	2640	5974	2300	2000	1500	1500	H	6"	-	-
i-FX2-G01-K 0972	7900	2260	2640	6464	2300	2000	1500	1500	H	6"	-	-
i-FX2-G01-K 1032	7900	2260	2640	6584	2300	2000	1500	1500	H	6"	-	-
i-FX2-G01-K 1082	7900	2260	2640	7031	2300	2000	1500	1500	H	8"	-	-
i-FX2-G01-K 1122	7900	2260	2640	7409	2300	2000	1500	1500	H	8"	-	-
i-FX2-G01-K 1192	9150	2260	2640	8243	2300	2000	1500	1500	H	8"	-	-
i-FX2-G01-K 1242	9150	2260	2640	8249	2300	2000	1500	1500	H	8"	-	-
i-FX2-G01-K 1382	10400	2260	2640	9008	2300	2000	1500	1500	H	8"	-	-
i-FX2-G01-K 1452	10400	2260	2640	9008	2300	2000	1500	1500	H	8"	-	-
i-FX2-G01-K 1552	11650	2260	2640	10165	2300	2000	1500	1500	H	8"	-	-
i-FX2-G01-K 1633	11650	2260	2640	11301	2300	2000	1500	1500	H	8"	-	-
i-FX2-G01-K 1703	11650	2260	2640	11679	2300	2000	1500	1500	H	8"	-	-
i-FX2-G01-K 1863	12900	2260	2640	12284	2300	2000	1500	1500	H	8"	-	-
i-FX2-G01-SL-K 0532	5400	2260	2640	5570	2300	2000	1500	1500	H	6"	-	-
i-FX2-G01-SL-K 0602	5400	2260	2640	5661	2300	2000	1500	1500	H	6"	-	-
i-FX2-G01-SL-K 0622	5400	2260	2640	5676	2300	2000	1500	1500	H	6"	-	-
i-FX2-G01-SL-K 0672	5400	2260	2640	5686	2300	2000	1500	1500	H	6"	-	-
i-FX2-G01-SL-K 0732	6650	2260	2640	6520	2300	2000	1500	1500	H	6"	-	-
i-FX2-G01-SL-K 0802	6650	2260	2640	6543	2300	2000	1500	1500	H	6"	-	-
i-FX2-G01-SL-K 0892	6650	2260	2640	6563	2300	2000	1500	1500	H	6"	-	-
i-FX2-G01-SL-K 0972	7900	2260	2640	7053	2300	2000	1500	1500	H	6"	-	-
i-FX2-G01-SL-K 1032	7900	2260	2640	7173	2300	2000	1500	1500	H	6"	-	-
i-FX2-G01-SL-K 1082	9150	2260	2640	8205	2300	2000	1500	1500	H	8"	-	-
i-FX2-G01-SL-K 1122	9150	2260	2640	8674	2300	2000	1500	1500	H	8"	-	-
i-FX2-G01-SL-K 1192	10400	2260	2640	9378	2300	2000	1500	1500	H	8"	-	-
i-FX2-G01-SL-K 1242	10400	2260	2640	9383	2300	2000	1500	1500	H	8"	-	-
i-FX2-G01-SL-K 1382	10400	2260	2640	9607	2300	2000	1500	1500	H	8"	-	-
i-FX2-G01-SL-K 1452	11650	2260	2640	10217	2300	2000	1500	1500	H	8"	-	-
i-FX2-G01-SL-K 1552	11650	2260	2640	10773	2300	2000	1500	1500	H	8"	-	-
i-FX2-G01-SL-K 1633	12900	2260	2640	12753	2300	2000	1500	1500	H	8"	-	-
i-FX2-G01-SL-K 1703	12900	2260	2640	13131	2300	2000	1500	1500	H	8"	-	-
i-FX2-G01-SL-K 1863	12900	2260	2640	13177	2300	2000	1500	1500	H	8"	-	-
i-FX2-G01-K-EC 0532	4150	2260	2640	4500	2300	2000	1500	1500	H	6"	-	-
i-FX2-G01-K-EC 0602	5400	2260	2640	5000	2300	2000	1500	1500	H	6"	-	-
i-FX2-G01-K-EC 0622	5400	2260	2640	5007	2300	2000	1500	1500	H	6"	-	-
i-FX2-G01-K-EC 0672	5400	2260	2640	5106	2300	2000	1500	1500	H	6"	-	-
i-FX2-G01-K-EC 0732	5400	2260	2640	5388	2300	2000	1500	1500	H	6"	-	-
i-FX2-G01-K-EC 0802	6650	2260	2640	5863	2300	2000	1500	1500	H	6"	-	-
i-FX2-G01-K-EC 0892	6650	2260	2640	5974	2300	2000	1500	1500	H	6"	-	-
i-FX2-G01-K-EC 0972	7900	2260	2640	6464	2300	2000	1500	1500	H	6"	-	-
i-FX2-G01-K-EC 1032	7900	2260	2640	6584	2300	2000	1500	1500	H	6"	-	-

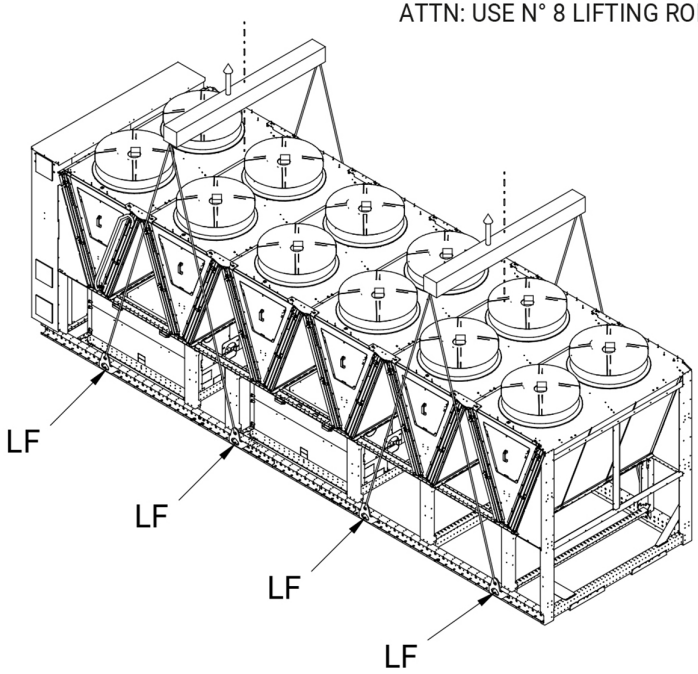
[SI System]

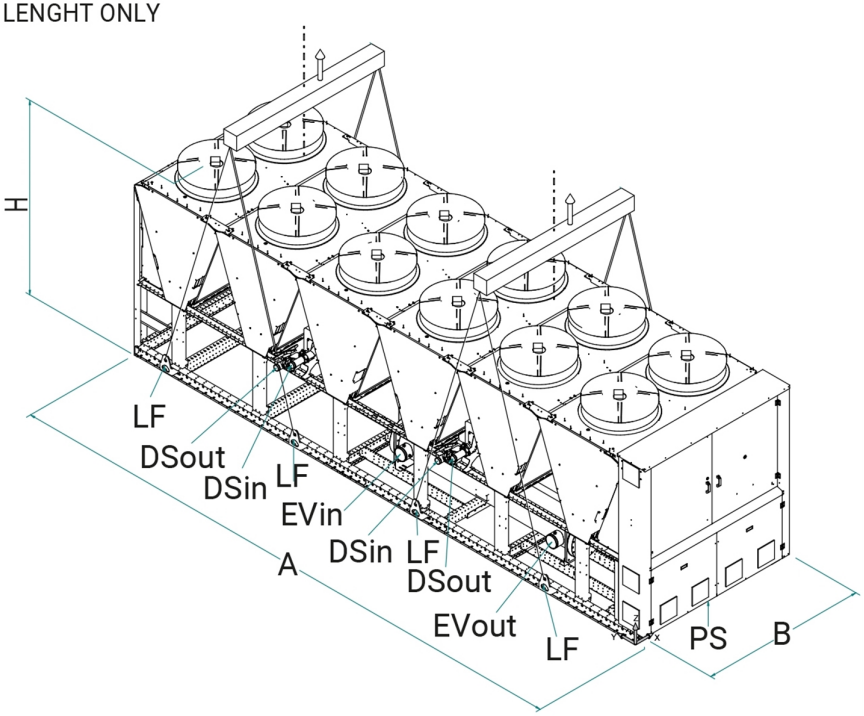
SIZE	DIMENSIONS AND WEIGHTS				CLEARANCE				HEAT EXCHANGER USER SIDE		HEAT RECOVERY EX. USER SIDE	
	A	B	H	WEIGHT	R1	R2	R3	R4	IN/OUT		IN/OUT	
	[mm]	[mm]	[mm]	[kg]	[mm]	[mm]	[mm]	[mm]	TYPE	Ø	TYPE	Ø
i-FX2-G01-K-EC 1082	7900	2260	2640	7031	2300	2000	1500	1500	H	8"	-	-
i-FX2-G01-K-EC 1122	7900	2260	2640	7409	2300	2000	1500	1500	H	8"	-	-
i-FX2-G01-K-EC 1192	9150	2260	2640	8243	2300	2000	1500	1500	H	8"	-	-
i-FX2-G01-K-EC 1242	9150	2260	2640	8249	2300	2000	1500	1500	H	8"	-	-
i-FX2-G01-K-EC 1382	10400	2260	2640	9008	2300	2000	1500	1500	H	8"	-	-
i-FX2-G01-K-EC 1452	10400	2260	2640	9008	2300	2000	1500	1500	H	8"	-	-
i-FX2-G01-K-EC 1552	11650	2260	2640	10165	2300	2000	1500	1500	H	8"	-	-
i-FX2-G01-K-EC 1633	11650	2260	2640	11301	2300	2000	1500	1500	H	8"	-	-
i-FX2-G01-K-EC 1703	11650	2260	2640	11679	2300	2000	1500	1500	H	8"	-	-
i-FX2-G01-K-EC 1863	12900	2260	2640	12284	2300	2000	1500	1500	H	8"	-	-
i-FX2-G01-SL-K-EC 0532	5400	2260	2640	5570	2300	2000	1500	1500	H	6"	-	-
i-FX2-G01-SL-K-EC 0602	5400	2260	2640	5661	2300	2000	1500	1500	H	6"	-	-
i-FX2-G01-SL-K-EC 0622	5400	2260	2640	5676	2300	2000	1500	1500	H	6"	-	-
i-FX2-G01-SL-K-EC 0672	5400	2260	2640	5686	2300	2000	1500	1500	H	6"	-	-
i-FX2-G01-SL-K-EC 0732	6650	2260	2640	6520	2300	2000	1500	1500	H	6"	-	-
i-FX2-G01-SL-K-EC 0802	6650	2260	2640	6543	2300	2000	1500	1500	H	6"	-	-
i-FX2-G01-SL-K-EC 0892	6650	2260	2640	6563	2300	2000	1500	1500	H	6"	-	-
i-FX2-G01-SL-K-EC 0972	7900	2260	2640	7053	2300	2000	1500	1500	H	6"	-	-
i-FX2-G01-SL-K-EC 1032	7900	2260	2640	7173	2300	2000	1500	1500	H	6"	-	-
i-FX2-G01-SL-K-EC 1082	9150	2260	2640	8205	2300	2000	1500	1500	H	8"	-	-
i-FX2-G01-SL-K-EC 1122	9150	2260	2640	8674	2300	2000	1500	1500	H	8"	-	-
i-FX2-G01-SL-K-EC 1192	10400	2260	2640	9378	2300	2000	1500	1500	H	8"	-	-
i-FX2-G01-SL-K-EC 1242	10400	2260	2640	9383	2300	2000	1500	1500	H	8"	-	-
i-FX2-G01-SL-K-EC 1382	10400	2260	2640	9607	2300	2000	1500	1500	H	8"	-	-
i-FX2-G01-SL-K-EC 1452	11650	2260	2640	10217	2300	2000	1500	1500	H	8"	-	-
i-FX2-G01-SL-K-EC 1552	11650	2260	2640	10773	2300	2000	1500	1500	H	8"	-	-
i-FX2-G01-SL-K-EC 1633	12900	2260	2640	12753	2300	2000	1500	1500	H	8"	-	-
i-FX2-G01-SL-K-EC 1703	12900	2260	2640	13131	2300	2000	1500	1500	H	8"	-	-
i-FX2-G01-SL-K-EC 1863	12900	2260	2640	13177	2300	2000	1500	1500	H	8"	-	-
i-FX2-G01-E 0522	5400	2260	2640	5078	2300	2000	1500	1500	H	6"	-	-
i-FX2-G01-E 0572	5400	2260	2640	5085	2300	2000	1500	1500	H	6"	-	-
i-FX2-G01-E 0612	6650	2260	2640	5548	2300	2000	1500	1500	H	6"	-	-
i-FX2-G01-E 0642	6650	2260	2640	5649	2300	2000	1500	1500	H	6"	-	-
i-FX2-G01-E 0702	6650	2260	2640	5931	2300	2000	1500	1500	H	6"	-	-
i-FX2-G01-E 0792	7900	2260	2640	6384	2300	2000	1500	1500	H	6"	-	-
i-FX2-G01-E 0862	7900	2260	2640	6500	2300	2000	1500	1500	H	6"	-	-
i-FX2-G01-E 0922	9150	2260	2640	7169	2300	2000	1500	1500	H	6"	-	-
i-FX2-G01-E 0982	9150	2260	2640	7291	2300	2000	1500	1500	H	6"	-	-
i-FX2-G01-E 1062	10400	2260	2640	8141	2300	2000	1500	1500	H	8"	-	-
i-FX2-G01-E 1132	10400	2260	2640	8779	2300	2000	1500	1500	H	8"	-	-
i-FX2-G01-E 1202	10400	2260	2640	8983	2300	2000	1500	1500	H	8"	-	-
i-FX2-G01-E 1252	11650	2260	2640	9583	2300	2000	1500	1500	H	8"	-	-
i-FX2-G01-E 1402	12900	2260	2640	10708	2300	2000	1500	1500	H	8"	-	-
i-FX2-G01-E 1482	12900	2260	2640	10744	2300	2000	1500	1500	H	8"	-	-
i-FX2-G01-SL-E 0522	5400	2260	2640	5658	2300	2000	1500	1500	H	6"	-	-
i-FX2-G01-SL-E 0572	6650	2260	2640	6135	2300	2000	1500	1500	H	6"	-	-
i-FX2-G01-SL-E 0612	6650	2260	2640	6229	2300	2000	1500	1500	H	6"	-	-

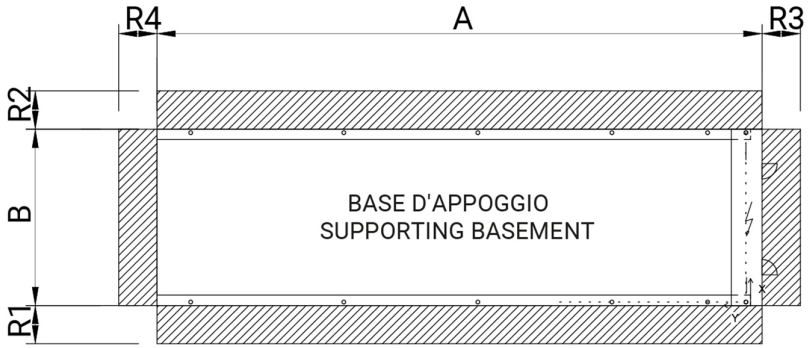
[SI System]

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
i-FX2-G01-SL-E 0642	6650	2260	2640	6239	2300	2000	1500	1500	H	6"	-	-
i-FX2-G01-SL-E 0702	7900	2260	2640	7045	2300	2000	1500	1500	H	6"	-	-
i-FX2-G01-SL-E 0792	7900	2260	2640	7063	2300	2000	1500	1500	H	6"	-	-
i-FX2-G01-SL-E 0862	9150	2260	2640	7806	2300	2000	1500	1500	H	6"	-	-
i-FX2-G01-SL-E 0922	10400	2260	2640	8287	2300	2000	1500	1500	H	6"	-	-
i-FX2-G01-SL-E 0982	10400	2260	2640	8409	2300	2000	1500	1500	H	6"	-	-
i-FX2-G01-SL-E 1062	11650	2260	2640	9347	2300	2000	1500	1500	H	8"	-	-
i-FX2-G01-SL-E 1132	11650	2260	2640	9985	2300	2000	1500	1500	H	8"	-	-
i-FX2-G01-SL-E 1202	11650	2260	2640	10191	2300	2000	1500	1500	H	8"	-	-
i-FX2-G01-SL-E 1252	12900	2260	2640	10738	2300	2000	1500	1500	H	8"	-	-
i-FX2-G01-SL-E 1402	12900	2260	2640	11316	2300	2000	1500	1500	H	8"	-	-
i-FX2-G01-SL-E 1482	12900	2260	2640	11352	2300	2000	1500	1500	H	8"	-	-

ATTN: UTILIZZARE N° 8 FUNI DI SOLLEVAMENTO DI PARI LUNGHEZZA
ATTN: USE N° 8 LIFTING ROPES WITH EQUAL LENGHT ONLY







EVin Entrata acqua evaporatore
Evaporator water inlet

EVout Uscita acqua evaporatore
Evaporator water outlet

CDin Entrata acqua desurriscaldatore (solo per versione /D)
Desuperheater water inlet (only for "/D" version)

CDout Uscita acqua desurriscaldatore (solo per versione /D)
Desuperheater water outlet (only for "/D" version)

LF Punti di sollevamento
Lifting points

PS Ingresso linea elettrica
Power inlet

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

[SI System]

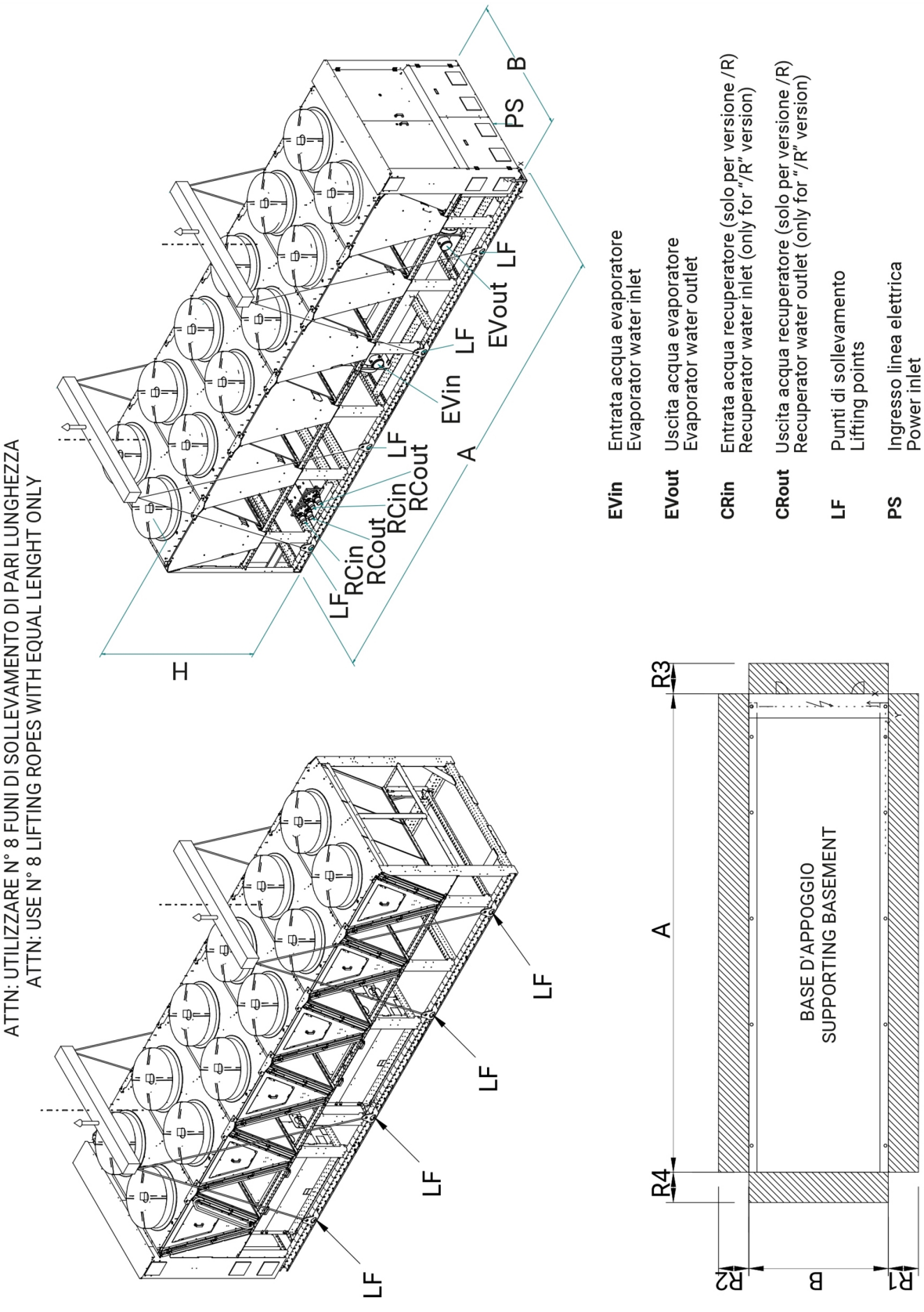
SIZE	DIMENSIONS AND WEIGHTS				CLEARANCE				HEAT EXCHANGER USER SIDE		HEAT RECOVERY EX. USER SIDE	
	A	B	H	WEIGHT	R1	R2	R3	R4	IN/OUT		IN/OUT	
	[mm]	[mm]	[mm]	[kg]	[mm]	[mm]	[mm]	[mm]	TYPE	Ø	TYPE	Ø
i-FX2-G01-D-K 0532	4150	2260	2640	4586	2300	2000	1500	1500	H	6"	F1	2"
i-FX2-G01-D-K 0602	5400	2260	2640	5088	2300	2000	1500	1500	H	6"	F1	2"
i-FX2-G01-D-K 0622	5400	2260	2640	5095	2300	2000	1500	1500	H	6"	F1	2"
i-FX2-G01-D-K 0672	5400	2260	2640	5196	2300	2000	1500	1500	H	6"	F1	2"
i-FX2-G01-D-K 0732	5400	2260	2640	5478	2300	2000	1500	1500	H	6"	F1	2"
i-FX2-G01-D-K 0802	6650	2260	2640	5964	2300	2000	1500	1500	H	6"	F1	2"1/2
i-FX2-G01-D-K 0892	6650	2260	2640	6086	2300	2000	1500	1500	H	6"	F1	2"1/2
i-FX2-G01-D-K 0972	7900	2260	2640	6576	2300	2000	1500	1500	H	6"	F1	2"1/2
i-FX2-G01-D-K 1032	7900	2260	2640	6696	2300	2000	1500	1500	H	6"	F1	2"1/2
i-FX2-G01-D-K 1082	7900	2260	2640	7150	2300	2000	1500	1500	H	8"	F1	2"1/2
i-FX2-G01-D-K 1122	7900	2260	2640	7535	2300	2000	1500	1500	H	8"	F1	2"1/2
i-FX2-G01-D-K 1192	9150	2260	2640	8369	2300	2000	1500	1500	H	8"	F1	2"1/2
i-FX2-G01-D-K 1242	9150	2260	2640	8375	2300	2000	1500	1500	H	8"	F1	2"1/2
i-FX2-G01-D-K 1382	10400	2260	2640	9192	2300	2000	1500	1500	H	8"	J1	2"1/2
i-FX2-G01-D-K 1452	10400	2260	2640	9192	2300	2000	1500	1500	H	8"	J1	2"1/2
i-FX2-G01-D-K 1552	11650	2260	2640	10349	2300	2000	1500	1500	H	8"	J1	2"1/2
i-FX2-G01-D-K 1633	11650	2260	2640	11484	2300	2000	1500	1500	H	8"	F1	2"1/2
i-FX2-G01-D-K 1703	11650	2260	2640	11869	2300	2000	1500	1500	H	8"	F1	2"1/2
i-FX2-G01-D-K 1863	12900	2260	2640	12474	2300	2000	1500	1500	H	8"	F1	2"1/2
i-FX2-G01-D-SL-K 0532	5400	2260	2640	5656	2300	2000	1500	1500	H	6"	F1	2"
i-FX2-G01-D-SL-K 0602	5400	2260	2640	5747	2300	2000	1500	1500	H	6"	F1	2"
i-FX2-G01-D-SL-K 0622	5400	2260	2640	5764	2300	2000	1500	1500	H	6"	F1	2"
i-FX2-G01-D-SL-K 0672	5400	2260	2640	5776	2300	2000	1500	1500	H	6"	F1	2"
i-FX2-G01-D-SL-K 0732	6650	2260	2640	6610	2300	2000	1500	1500	H	6"	F1	2"
i-FX2-G01-D-SL-K 0802	6650	2260	2640	6644	2300	2000	1500	1500	H	6"	F1	2"1/2
i-FX2-G01-D-SL-K 0892	6650	2260	2640	6675	2300	2000	1500	1500	H	6"	F1	2"1/2
i-FX2-G01-D-SL-K 0972	7900	2260	2640	7165	2300	2000	1500	1500	H	6"	F1	2"1/2
i-FX2-G01-D-SL-K 1032	7900	2260	2640	7285	2300	2000	1500	1500	H	6"	F1	2"1/2
i-FX2-G01-D-SL-K 1082	9150	2260	2640	8324	2300	2000	1500	1500	H	8"	F1	2"1/2
i-FX2-G01-D-SL-K 1122	9150	2260	2640	8800	2300	2000	1500	1500	H	8"	F1	2"1/2
i-FX2-G01-D-SL-K 1192	10400	2260	2640	9504	2300	2000	1500	1500	H	8"	F1	2"1/2
i-FX2-G01-D-SL-K 1242	10400	2260	2640	9509	2300	2000	1500	1500	H	8"	F1	2"1/2
i-FX2-G01-D-SL-K 1382	10400	2260	2640	9791	2300	2000	1500	1500	H	8"	J1	2"1/2
i-FX2-G01-D-SL-K 1452	11650	2260	2640	10401	2300	2000	1500	1500	H	8"	J1	2"1/2
i-FX2-G01-D-SL-K 1552	11650	2260	2640	10957	2300	2000	1500	1500	H	8"	J1	2"1/2
i-FX2-G01-D-SL-K 1633	12900	2260	2640	12936	2300	2000	1500	1500	H	8"	F1	2"1/2
i-FX2-G01-D-SL-K 1703	12900	2260	2640	13321	2300	2000	1500	1500	H	8"	F1	2"1/2
i-FX2-G01-D-SL-K 1863	12900	2260	2640	13367	2300	2000	1500	1500	H	8"	F1	2"1/2
i-FX2-G01-D-K-EC 0532	4150	2260	2640	4586	2300	2000	1500	1500	H	6"	F1	2"
i-FX2-G01-D-K-EC 0602	5400	2260	2640	5088	2300	2000	1500	1500	H	6"	F1	2"
i-FX2-G01-D-K-EC 0622	5400	2260	2640	5095	2300	2000	1500	1500	H	6"	F1	2"
i-FX2-G01-D-K-EC 0672	5400	2260	2640	5196	2300	2000	1500	1500	H	6"	F1	2"
i-FX2-G01-D-K-EC 0732	5400	2260	2640	5478	2300	2000	1500	1500	H	6"	F1	2"
i-FX2-G01-D-K-EC 0802	6650	2260	2640	5964	2300	2000	1500	1500	H	6"	F1	2"1/2
i-FX2-G01-D-K-EC 0892	6650	2260	2640	6086	2300	2000	1500	1500	H	6"	F1	2"1/2
i-FX2-G01-D-K-EC 0972	7900	2260	2640	6576	2300	2000	1500	1500	H	6"	F1	2"1/2
i-FX2-G01-D-K-EC 1032	7900	2260	2640	6696	2300	2000	1500	1500	H	6"	F1	2"1/2

[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
i-FX2-G01-D-K-EC 1082	7900	2260	2640	7150	2300	2000	1500	1500	H	8"	F1	2"1/2
i-FX2-G01-D-K-EC 1122	7900	2260	2640	7535	2300	2000	1500	1500	H	8"	F1	2"1/2
i-FX2-G01-D-K-EC 1192	9150	2260	2640	8369	2300	2000	1500	1500	H	8"	F1	2"1/2
i-FX2-G01-D-K-EC 1242	9150	2260	2640	8375	2300	2000	1500	1500	H	8"	F1	2"1/2
i-FX2-G01-D-K-EC 1382	10400	2260	2640	9192	2300	2000	1500	1500	H	8"	J1	2"1/2
i-FX2-G01-D-K-EC 1452	10400	2260	2640	9192	2300	2000	1500	1500	H	8"	J1	2"1/2
i-FX2-G01-D-K-EC 1552	11650	2260	2640	10349	2300	2000	1500	1500	H	8"	J1	2"1/2
i-FX2-G01-D-K-EC 1633	11650	2260	2640	11484	2300	2000	1500	1500	H	8"	F1	2"1/2
i-FX2-G01-D-K-EC 1703	11650	2260	2640	11869	2300	2000	1500	1500	H	8"	F1	2"1/2
i-FX2-G01-D-K-EC 1863	12900	2260	2640	12474	2300	2000	1500	1500	H	8"	F1	2"1/2
i-FX2-G01-D-SL-K-EC 0532	5400	2260	2640	5656	2300	2000	1500	1500	H	6"	F1	2"
i-FX2-G01-D-SL-K-EC 0602	5400	2260	2640	5747	2300	2000	1500	1500	H	6"	F1	2"
i-FX2-G01-D-SL-K-EC 0622	5400	2260	2640	5764	2300	2000	1500	1500	H	6"	F1	2"
i-FX2-G01-D-SL-K-EC 0672	5400	2260	2640	5776	2300	2000	1500	1500	H	6"	F1	2"
i-FX2-G01-D-SL-K-EC 0732	6650	2260	2640	6610	2300	2000	1500	1500	H	6"	F1	2"
i-FX2-G01-D-SL-K-EC 0802	6650	2260	2640	6644	2300	2000	1500	1500	H	6"	F1	2"1/2
i-FX2-G01-D-SL-K-EC 0892	6650	2260	2640	6675	2300	2000	1500	1500	H	6"	F1	2"1/2
i-FX2-G01-D-SL-K-EC 0972	7900	2260	2640	7165	2300	2000	1500	1500	H	6"	F1	2"1/2
i-FX2-G01-D-SL-K-EC 1032	7900	2260	2640	7285	2300	2000	1500	1500	H	6"	F1	2"1/2
i-FX2-G01-D-SL-K-EC 1082	9150	2260	2640	8324	2300	2000	1500	1500	H	8"	F1	2"1/2
i-FX2-G01-D-SL-K-EC 1122	9150	2260	2640	8800	2300	2000	1500	1500	H	8"	F1	2"1/2
i-FX2-G01-D-SL-K-EC 1192	10400	2260	2640	9504	2300	2000	1500	1500	H	8"	F1	2"1/2
i-FX2-G01-D-SL-K-EC 1242	10400	2260	2640	9509	2300	2000	1500	1500	H	8"	F1	2"1/2
i-FX2-G01-D-SL-K-EC 1382	10400	2260	2640	9791	2300	2000	1500	1500	H	8"	J1	2"1/2
i-FX2-G01-D-SL-K-EC 1452	11650	2260	2640	10401	2300	2000	1500	1500	H	8"	J1	2"1/2
i-FX2-G01-D-SL-K-EC 1552	11650	2260	2640	10957	2300	2000	1500	1500	H	8"	J1	2"1/2
i-FX2-G01-D-SL-K-EC 1633	12900	2260	2640	12936	2300	2000	1500	1500	H	8"	F1	2"1/2
i-FX2-G01-D-SL-K-EC 1703	12900	2260	2640	13321	2300	2000	1500	1500	H	8"	F1	2"1/2
i-FX2-G01-D-SL-K-EC 1863	12900	2260	2640	13367	2300	2000	1500	1500	H	8"	F1	2"1/2
i-FX2-G01-D-E 0522	5400	2260	2640	5164	2300	2000	1500	1500	H	6"	F1	2"
i-FX2-G01-D-E 0572	5400	2260	2640	5171	2300	2000	1500	1500	H	6"	F1	2"
i-FX2-G01-D-E 0612	6650	2260	2640	5636	2300	2000	1500	1500	H	6"	F1	2"
i-FX2-G01-D-E 0642	6650	2260	2640	5739	2300	2000	1500	1500	H	6"	F1	2"
i-FX2-G01-D-E 0702	6650	2260	2640	6021	2300	2000	1500	1500	H	6"	F1	2"
i-FX2-G01-D-E 0792	7900	2260	2640	6485	2300	2000	1500	1500	H	6"	F1	2"1/2
i-FX2-G01-D-E 0862	7900	2260	2640	6612	2300	2000	1500	1500	H	6"	F1	2"1/2
i-FX2-G01-D-E 0922	9150	2260	2640	7281	2300	2000	1500	1500	H	6"	F1	2"1/2
i-FX2-G01-D-E 0982	9150	2260	2640	7403	2300	2000	1500	1500	H	6"	F1	2"1/2
i-FX2-G01-D-E 1062	10400	2260	2640	8260	2300	2000	1500	1500	H	8"	F1	2"1/2
i-FX2-G01-D-E 1132	10400	2260	2640	8905	2300	2000	1500	1500	H	8"	F1	2"1/2
i-FX2-G01-D-E 1202	10400	2260	2640	9109	2300	2000	1500	1500	H	8"	F1	2"1/2
i-FX2-G01-D-E 1252	11650	2260	2640	9709	2300	2000	1500	1500	H	8"	F1	2"1/2
i-FX2-G01-D-E 1402	12900	2260	2640	10892	2300	2000	1500	1500	H	8"	J1	2"1/2
i-FX2-G01-D-E 1482	12900	2260	2640	10928	2300	2000	1500	1500	H	8"	J1	2"1/2
i-FX2-G01-D-SL-E 0522	5400	2260	2640	5744	2300	2000	1500	1500	H	6"	F1	2"
i-FX2-G01-D-SL-E 0572	6650	2260	2640	6223	2300	2000	1500	1500	H	6"	F1	2"
i-FX2-G01-D-SL-E 0612	6650	2260	2640	6317	2300	2000	1500	1500	H	6"	F1	2"

[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
i-FX2-G01-D-SL-E 0642	6650	2260	2640	6329	2300	2000	1500	1500	H	6"	F1	2"
i-FX2-G01-D-SL-E 0702	7900	2260	2640	7135	2300	2000	1500	1500	H	6"	F1	2"
i-FX2-G01-D-SL-E 0792	7900	2260	2640	7164	2300	2000	1500	1500	H	6"	F1	2"1/2
i-FX2-G01-D-SL-E 0862	9150	2260	2640	7918	2300	2000	1500	1500	H	6"	F1	2"1/2
i-FX2-G01-D-SL-E 0922	10400	2260	2640	8399	2300	2000	1500	1500	H	6"	F1	2"1/2
i-FX2-G01-D-SL-E 0982	10400	2260	2640	8521	2300	2000	1500	1500	H	6"	F1	2"1/2
i-FX2-G01-D-SL-E 1062	11650	2260	2640	9466	2300	2000	1500	1500	H	8"	F1	2"1/2
i-FX2-G01-D-SL-E 1132	11650	2260	2640	10111	2300	2000	1500	1500	H	8"	F1	2"1/2
i-FX2-G01-D-SL-E 1202	11650	2260	2640	10317	2300	2000	1500	1500	H	8"	F1	2"1/2
i-FX2-G01-D-SL-E 1252	12900	2260	2640	10864	2300	2000	1500	1500	H	8"	F1	2"1/2
i-FX2-G01-D-SL-E 1402	12900	2260	2640	11500	2300	2000	1500	1500	H	8"	J1	2"1/2
i-FX2-G01-D-SL-E 1482	12900	2260	2640	11536	2300	2000	1500	1500	H	8"	J1	2"1/2



EVin Entrata acqua evaporatore
Evaporator water inlet

EVout Uscita acqua evaporatore
Evaporator water outlet

CRin Entrata acqua recuperatore (solo per versione /R)
Recuperator water inlet (only for "/R" version)

CRout Uscita acqua recuperatore (solo per versione /R)
Recuperator water outlet (only for "/R" version)

LF Punti di sollevamento
Lifting points

PS Ingresso linea elettrica
Power inlet

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

[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
i-FX2-G01-R-K 0532	0	2260	2640	5620	2300	2000	1500	1500	H	6"	J1	3"
i-FX2-G01-R-K 0602	0	2260	2640	6300	2300	2000	1500	1500	H	6"	J1	3"
i-FX2-G01-R-K 0622	0	2260	2640	6300	2300	2000	1500	1500	H	6"	J1	3"
i-FX2-G01-R-K 0672	0	2260	2640	6570	2300	2000	1500	1500	H	6"	J1	3"
i-FX2-G01-R-K 0732	0	2260	2640	6870	2300	2000	1500	1500	H	6"	J1	3"
i-FX2-G01-R-K 0802	0	2260	2640	7410	2300	2000	1500	1500	H	6"	F1	4"
i-FX2-G01-R-K 0892	0	2260	2640	7580	2300	2000	1500	1500	H	6"	F1	4"
i-FX2-G01-R-K 0972	0	2260	2640	8140	2300	2000	1500	1500	H	6"	F1	4"
i-FX2-G01-R-K 1032	0	2260	2640	8570	2300	2000	1500	1500	H	6"	F1	5"
i-FX2-G01-R-K 1082	0	2260	2640	9040	2300	2000	1500	1500	H	8"	F1	5"
i-FX2-G01-R-K 1122	0	2260	2640	9450	2300	2000	1500	1500	H	8"	F1	5"
i-FX2-G01-R-K 1192	0	2260	2640	10410	2300	2000	1500	1500	H	8"	F1	5"
i-FX2-G01-R-K 1242	0	2260	2640	10590	2300	2000	1500	1500	H	8"	F1	5"
i-FX2-G01-R-K 1382	0	2260	2640	11520	2300	2000	1500	1500	H	8"	F1	5"
i-FX2-G01-R-K 1452	0	2260	2640	11520	2300	2000	1500	1500	H	8"	F1	5"
i-FX2-G01-R-K 1552	0	2260	2640	12810	2300	2000	1500	1500	H	8"	F1	5"
i-FX2-G01-R-K 1633	0	2260	2640	14320	2300	2000	1500	1500	H	8"	F1	5"
i-FX2-G01-R-K 1703	0	2260	2640	14740	2300	2000	1500	1500	H	8"	F1	5"
i-FX2-G01-R-K 1863	0	2260	2640	15720	2300	2000	1500	1500	H	8"	F1	5"
i-FX2-G01-R-SL-K 0532	0	2260	2640	6620	2300	2000	1500	1500	H	6"	J1	3"
i-FX2-G01-R-SL-K 0602	0	2260	2640	6910	2300	2000	1500	1500	H	6"	J1	3"
i-FX2-G01-R-SL-K 0622	0	2260	2640	7040	2300	2000	1500	1500	H	6"	J1	3"
i-FX2-G01-R-SL-K 0672	0	2260	2640	7150	2300	2000	1500	1500	H	6"	J1	3"
i-FX2-G01-R-SL-K 0732	0	2260	2640	8050	2300	2000	1500	1500	H	6"	J1	3"
i-FX2-G01-R-SL-K 0802	0	2260	2640	8150	2300	2000	1500	1500	H	6"	F1	4"
i-FX2-G01-R-SL-K 0892	0	2260	2640	8170	2300	2000	1500	1500	H	6"	F1	4"
i-FX2-G01-R-SL-K 0972	0	2260	2640	8730	2300	2000	1500	1500	H	6"	F1	4"
i-FX2-G01-R-SL-K 1032	0	2260	2640	9160	2300	2000	1500	1500	H	6"	F1	5"
i-FX2-G01-R-SL-K 1082	0	2260	2640	10220	2300	2000	1500	1500	H	8"	F1	5"
i-FX2-G01-R-SL-K 1122	0	2260	2640	10840	2300	2000	1500	1500	H	8"	F1	5"
i-FX2-G01-R-SL-K 1192	0	2260	2640	11680	2300	2000	1500	1500	H	8"	F1	5"
i-FX2-G01-R-SL-K 1242	0	2260	2640	11850	2300	2000	1500	1500	H	8"	F1	5"
i-FX2-G01-R-SL-K 1382	0	2260	2640	12120	2300	2000	1500	1500	H	8"	F1	5"
i-FX2-G01-R-SL-K 1452	0	2260	2640	12860	2300	2000	1500	1500	H	8"	F1	5"
i-FX2-G01-R-SL-K 1552	0	2260	2640	13420	2300	2000	1500	1500	H	8"	F1	5"
i-FX2-G01-R-SL-K 1633	0	2260	2640	15900	2300	2000	1500	1500	H	8"	F1	5"
i-FX2-G01-R-SL-K 1703	0	2260	2640	16320	2300	2000	1500	1500	H	8"	F1	5"
i-FX2-G01-R-SL-K 1863	0	2260	2640	16610	2300	2000	1500	1500	H	8"	F1	5"
i-FX2-G01-R-K-EC 0532	0	2260	2640	5620	2300	2000	1500	1500	H	6"	J1	3"
i-FX2-G01-R-K-EC 0602	0	2260	2640	6300	2300	2000	1500	1500	H	6"	J1	3"
i-FX2-G01-R-K-EC 0622	0	2260	2640	6300	2300	2000	1500	1500	H	6"	J1	3"
i-FX2-G01-R-K-EC 0672	0	2260	2640	6570	2300	2000	1500	1500	H	6"	J1	3"
i-FX2-G01-R-K-EC 0732	0	2260	2640	6870	2300	2000	1500	1500	H	6"	J1	3"
i-FX2-G01-R-K-EC 0802	0	2260	2640	7410	2300	2000	1500	1500	H	6"	F1	4"
i-FX2-G01-R-K-EC 0892	0	2260	2640	7580	2300	2000	1500	1500	H	6"	F1	4"
i-FX2-G01-R-K-EC 0972	0	2260	2640	8140	2300	2000	1500	1500	H	6"	F1	4"
i-FX2-G01-R-K-EC 1032	0	2260	2640	8570	2300	2000	1500	1500	H	6"	F1	5"

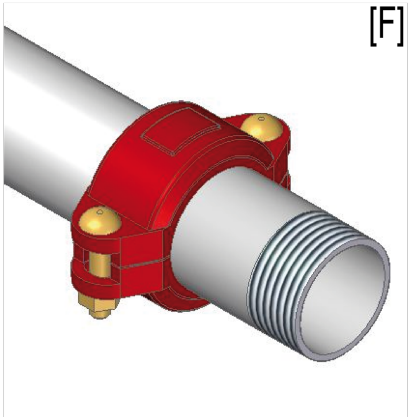
[SI System]

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
i-FX2-G01-R-K-EC 1082	0	2260	2640	9040	2300	2000	1500	1500	H	8"	F1	5"
i-FX2-G01-R-K-EC 1122	0	2260	2640	9450	2300	2000	1500	1500	H	8"	F1	5"
i-FX2-G01-R-K-EC 1192	0	2260	2640	10410	2300	2000	1500	1500	H	8"	F1	5"
i-FX2-G01-R-K-EC 1242	0	2260	2640	10590	2300	2000	1500	1500	H	8"	F1	5"
i-FX2-G01-R-K-EC 1382	0	2260	2640	11520	2300	2000	1500	1500	H	8"	F1	5"
i-FX2-G01-R-K-EC 1452	0	2260	2640	11520	2300	2000	1500	1500	H	8"	F1	5"
i-FX2-G01-R-K-EC 1552	0	2260	2640	12810	2300	2000	1500	1500	H	8"	F1	5"
i-FX2-G01-R-K-EC 1633	0	2260	2640	14320	2300	2000	1500	1500	H	8"	F1	5"
i-FX2-G01-R-K-EC 1703	0	2260	2640	14740	2300	2000	1500	1500	H	8"	F1	5"
i-FX2-G01-R-K-EC 1863	0	2260	2640	15720	2300	2000	1500	1500	H	8"	F1	5"
i-FX2-G01-R-SL-K-EC 0532	0	2260	2640	6620	2300	2000	1500	1500	H	6"	J1	3"
i-FX2-G01-R-SL-K-EC 0602	0	2260	2640	6910	2300	2000	1500	1500	H	6"	J1	3"
i-FX2-G01-R-SL-K-EC 0622	0	2260	2640	7040	2300	2000	1500	1500	H	6"	J1	3"
i-FX2-G01-R-SL-K-EC 0672	0	2260	2640	7150	2300	2000	1500	1500	H	6"	J1	3"
i-FX2-G01-R-SL-K-EC 0732	0	2260	2640	8050	2300	2000	1500	1500	H	6"	J1	3"
i-FX2-G01-R-SL-K-EC 0802	0	2260	2640	8150	2300	2000	1500	1500	H	6"	F1	4"
i-FX2-G01-R-SL-K-EC 0892	0	2260	2640	8170	2300	2000	1500	1500	H	6"	F1	4"
i-FX2-G01-R-SL-K-EC 0972	0	2260	2640	8730	2300	2000	1500	1500	H	6"	F1	4"
i-FX2-G01-R-SL-K-EC 1032	0	2260	2640	9160	2300	2000	1500	1500	H	6"	F1	5"
i-FX2-G01-R-SL-K-EC 1082	0	2260	2640	10220	2300	2000	1500	1500	H	8"	F1	5"
i-FX2-G01-R-SL-K-EC 1122	0	2260	2640	10840	2300	2000	1500	1500	H	8"	F1	5"
i-FX2-G01-R-SL-K-EC 1192	0	2260	2640	11680	2300	2000	1500	1500	H	8"	F1	5"
i-FX2-G01-R-SL-K-EC 1242	0	2260	2640	11850	2300	2000	1500	1500	H	8"	F1	5"
i-FX2-G01-R-SL-K-EC 1382	0	2260	2640	12120	2300	2000	1500	1500	H	8"	F1	5"
i-FX2-G01-R-SL-K-EC 1452	0	2260	2640	12860	2300	2000	1500	1500	H	8"	F1	5"
i-FX2-G01-R-SL-K-EC 1552	0	2260	2640	13420	2300	2000	1500	1500	H	8"	F1	5"
i-FX2-G01-R-SL-K-EC 1633	0	2260	2640	15900	2300	2000	1500	1500	H	8"	F1	5"
i-FX2-G01-R-SL-K-EC 1703	0	2260	2640	16320	2300	2000	1500	1500	H	8"	F1	5"
i-FX2-G01-R-SL-K-EC 1863	0	2260	2640	16610	2300	2000	1500	1500	H	8"	F1	5"
i-FX2-G01-R-E 0522	0	2260	2640	6330	2300	2000	1500	1500	H	6"	J1	3"
i-FX2-G01-R-E 0572	0	2260	2640	6340	2300	2000	1500	1500	H	6"	J1	3"
i-FX2-G01-R-E 0612	0	2260	2640	6900	2300	2000	1500	1500	H	6"	J1	3"
i-FX2-G01-R-E 0642	0	2260	2640	7170	2300	2000	1500	1500	H	6"	J1	3"
i-FX2-G01-R-E 0702	0	2260	2640	7460	2300	2000	1500	1500	H	6"	J1	3"
i-FX2-G01-R-E 0792	0	2260	2640	8060	2300	2000	1500	1500	H	6"	F1	4"
i-FX2-G01-R-E 0862	0	2260	2640	8240	2300	2000	1500	1500	H	6"	F1	4"
i-FX2-G01-R-E 0922	0	2260	2640	9220	2300	2000	1500	1500	H	6"	F1	5"
i-FX2-G01-R-E 0982	0	2260	2640	9410	2300	2000	1500	1500	H	6"	F1	5"
i-FX2-G01-R-E 1062	0	2260	2640	10350	2300	2000	1500	1500	H	8"	F1	5"
i-FX2-G01-R-E 1132	0	2260	2640	11080	2300	2000	1500	1500	H	8"	F1	5"
i-FX2-G01-R-E 1202	0	2260	2640	11450	2300	2000	1500	1500	H	8"	F1	5"
i-FX2-G01-R-E 1252	0	2260	2640	12180	2300	2000	1500	1500	H	8"	F1	5"
i-FX2-G01-R-E 1402	0	2260	2640	13480	2300	2000	1500	1500	H	8"	F1	5"
i-FX2-G01-R-E 1482	0	2260	2640	13520	2300	2000	1500	1500	H	8"	F1	5"
i-FX2-G01-R-SL-E 0522	0	2260	2640	6910	2300	2000	1500	1500	H	6"	J1	3"
i-FX2-G01-R-SL-E 0572	0	2260	2640	7480	2300	2000	1500	1500	H	6"	J1	3"
i-FX2-G01-R-SL-E 0612	0	2260	2640	7640	2300	2000	1500	1500	H	6"	J1	3"

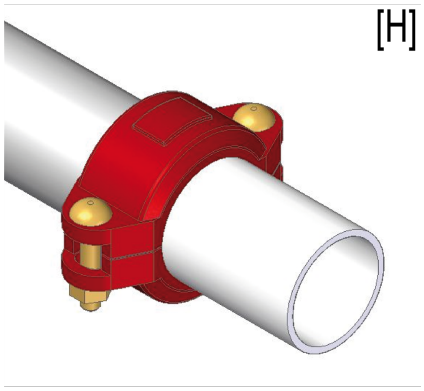
[SI System]

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
i-FX2-G01-R-SL-E 0642	0	2260	2640	7760	2300	2000	1500	1500	H	6"	J1	3"
i-FX2-G01-R-SL-E 0702	0	2260	2640	8710	2300	2000	1500	1500	H	6"	J1	3"
i-FX2-G01-R-SL-E 0792	0	2260	2640	8800	2300	2000	1500	1500	H	6"	F1	4"
i-FX2-G01-R-SL-E 0862	0	2260	2640	9680	2300	2000	1500	1500	H	6"	F1	4"
i-FX2-G01-R-SL-E 0922	0	2260	2640	10470	2300	2000	1500	1500	H	6"	F1	5"
i-FX2-G01-R-SL-E 0982	0	2260	2640	10660	2300	2000	1500	1500	H	6"	F1	5"
i-FX2-G01-R-SL-E 1062	0	2260	2640	11690	2300	2000	1500	1500	H	8"	F1	5"
i-FX2-G01-R-SL-E 1132	0	2260	2640	12420	2300	2000	1500	1500	H	8"	F1	5"
i-FX2-G01-R-SL-E 1202	0	2260	2640	12790	2300	2000	1500	1500	H	8"	F1	5"
i-FX2-G01-R-SL-E 1252	0	2260	2640	13470	2300	2000	1500	1500	H	8"	F1	5"
i-FX2-G01-R-SL-E 1402	0	2260	2640	14090	2300	2000	1500	1500	H	8"	F1	5"
i-FX2-G01-R-SL-E 1482	0	2260	2640	14130	2300	2000	1500	1500	H	8"	F1	5"

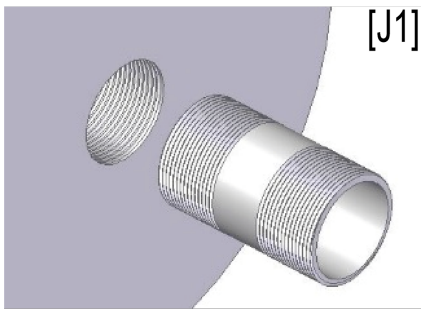
12.2 Legend of pipe connections



TYPE = F1
[F1] - Grooved coupling with male threaded counter-pipe user side (EN 10226 - R: external taper thread)



TYPE = H
[H] - Grooved coupling with weld end counter-pipe user side



TYPE = J1
[J1] - Female threaded connection (UNI ISO 228/1 - G) with male threaded counter-pipeuser side (UNI ISO 228/1 - G)

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

NOMINAL PIPE SIZE	PIPE OUTSIDE DIAMETER
ø inches	ø mm
4	114,3
4 1/2	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

NOTE:

Conventional diameter value [in inches] identifi es short thread designation, based upon the relative standard.
All relative values are defi ned by standards.

13.1 Hydronic groups

HYDRONIC MODULE

The units can be fitted with the following types hydronic module:

- Only terminals (modulating)
The hydronic module allows to control the external pumps with the unit controller logic.
- Pumps (fix or variable speed)
The hydronic module includes the pumps and the main water circuit components, thus optimizing hydraulic and electrical installation space, time and costs.

The complete list of the options available is present in the accessory section of the bulletin.

For the hydronic modules with only terminals, the factory-mounted components are:
- Terminals for external pumps control (relays + 0-10V modulating signal)
- Differential pressure switch (on heat exchanger)
- Drain valve (on heat exchanger)

For the hydronic modules with pumps, the factory-mounted components are:
- 2 in-line or close-coupled pumps (depending on size), 2 poles, low or high head, fix or variable speed (inverter)
- Pump suction and discharge valves
- One-way valve (Clapet type for in-line pumps)
- Purge valve
- Drain plug
- Differential pressure switch (on heat exchanger)
- Drain valve (on heat exchanger)

The pumps are controlled in duty/standby, with running hours equalization and changeover on device failure.
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 of 15 mm.
The hydronic group is protected by a self-ventilated enclosure. In silenced units (/SL versions and units with Noise Reducer (code 2315)), the enclosure is acoustically insulated by a 30 mm thick lining of polyester fibers (Fiberform).

SIZES K, SL-K	Minimum plant water content for ΔT≤5 K [m³]	Minimum plant water content for ΔT>5 K [m³]
532	1,9	3,8
602	2,1	4,3
622	2,2	4,5
672	2,4	4,8
732	2,5	5,2
802	2,8	5,7
892	3,1	6,4
972	3,4	7,0
1032	3,6	7,4
1082	3,8	7,8
1122	3,9	8,0
1192	4,1	8,5
1242	4,4	8,9
1382	4,8	9,9
1452	5,1	10,4
1552	5,4	11,1
1633	5,7	11,7
1703	6,0	12,2
1863	6,5	13,4

SIZES E, SL-E	Minimum plant water content for ΔT≤5 K [m³]	Minimum plant water content for ΔT>5 K [m³]
522	1,8	3,7
572	2,0	4,1
612	2,1	4,4
642	2,3	4,6
702	2,5	5,0
792	2,8	5,7
862	3,0	6,2
922	3,2	6,6
982	3,4	7,0
1062	3,7	7,6
1132	4,0	8,1
1202	4,2	8,6
1252	4,4	9,0
1402	4,9	10,0
1482	5,2	10,6

IN-LINE PUMPS
Low or high head pumps

Grundfos single-stage, close-coupled, volute twin-head pump with in-line suction and discharge ports. The pump housing and the impeller are made of cast iron, with optimized design to improve the efficiency. The twin-head pumps are designed with two parallel power heads. Each power head is fitted with a fan-cooled asynchronous motor of identical size. Motor and pump shafts are connected via a rigid two-part coupling. The pumps are of the top-pull-out design, i.e. you can remove the power head (motor, pump head and impeller) for maintenance or service while the pump housing remains in the pipework.
Pump housing and pump head are electrocoated to improve the corrosion resistance. The flanges have tappings for mounting of pressure gauges. The central part of the motor stool is provided with guards for protection against the shaft and coupling.
The shaft seal is in accordance with EN 12756. Pipework connection is via PN 16 DIN flanges (EN 1092-2 and ISO 7005-2).
The pump is fitted with an unbalanced rubber bellows seal with torque transmission across the spring and around the bellows. Due to the bellows, the seal does not wear the shaft, and the axial movement is not prevented by deposits on the shaft.
Primary seal:
- Rotating seal ring material: Silicon carbide (SiC)
- Stationary seat material: Silicon carbide (SiC)

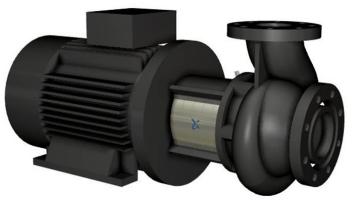
This material pairing is used where higher corrosion resistance is required. The high hardness of this material pairing offers good resistance against abrasive particles.
Secondary seal material: EPDM (ethylene-propylene rubber). EPDM has excellent resistance to hot water.
A circulation of liquid through the duct of the air vent screw ensures lubrication and cooling of the shaft seal.
The twin-head pumps are connected in parallel. A non-return flap valve in the common outlet port is opened by the flow of the pumped liquid and prevents backflow of liquid into the idle pump head. The pump housing is provided with a replaceable bronze neck ring to reduce the amount of liquid running from the discharge side of the impeller to the suction side.
The pumps are fitted with high efficiency motors classified as IE3 in accordance with IEC 60034-30. The fan-cooled motors are totally enclosed, with main dimensions to IEC and DIN standards. Electrical tolerances comply with IEC 60034. Insulation class F (IEC 85). These motors show high efficiency, thus minimizing the energy consumption. The motor can be drived via a variable frequency drive for variable speed operation.



END-SUCTION PUMPS
Low or high head pumps

Non-self-priming, single-stage, centrifugal volute end-suction pumps with axial inlet port, radial outlet port and horizontal shaft, designed according to ISO 5199 with dimensions and rated performance according to EN 733 (10 bar). Flanges are PN 16 with dimensions according to EN 1092-2.
The pump is close-coupled to a fan-cooled asynchronous motor. Pump housing and impeller are made of cast iron, while the wear ring is made of bronze. The back pull-out design enables removal of the motor, motor stool and impeller without disturbing the pump housing or pipework. Cast-iron parts have an epoxy-based coating made in a cathodic electro-deposition (CED) process.
The pump housing has both a priming and a drain hole closed by plugs.
The impeller is a closed impeller with double-curved blades with smooth surfaces. The impeller is statically balanced according to ISO 1940-1 class G6.3 and hydraulically balanced to compensate for axial thrust. Wear rings used in pump housing and for impeller are made of bronze.
Motor stool and pump cover are made of cast iron. Coupling guards are fitted to the motor stool. The pump cover is provided with a manual air vent screw for venting of the pump housing and the shaft seal chamber. An O-ring forms the seal between cover and pump housing.
The pump is fitted with an unbalanced rubber bellows seal with torque transmission across the spring and around the bellows. Due to the bellows, the seal does not wear the shaft, and the axial movement is not prevented by deposits on the shaft.
Primary seal:
- Rotating seal ring material: Silicon carbide (SiC)
- Stationary seat material: Silicon carbide (SiC)

This material pairing is used where higher corrosion resistance is required. The high hardness of this material pairing offers good resistance against abrasive particles.
Secondary seal material: EPDM (ethylene-propylene rubber). EPDM has excellent resistance to hot water.
The pumps are fitted with high efficiency motors classified as IE3 in accordance with IEC 60034-30. The fan-cooled motors are totally enclosed, with main dimensions to IEC and DIN standards. Electrical tolerances comply with IEC 60034. Insulation class F (IEC 85). These motors show high efficiency, thus minimizing the energy consumption. The motor can be drived via a variable frequency drive for variable speed operation.



VARIABLE FREQUENCY DRIVE
For pump speed control

Frequency converters, with IP55 protection rating for rough environment. The drives, one for each pump, are air cooled and installed with a dedicated enclosure.
The fast-response speed control combined with the advanced auto-tuning function ensures safe and accurate operation in any condition.
Optimum control of the excitation current maximizes motor efficiency for additional energy savings.
The drive features built-in EMC filter (EN 61800-3, 1st Environment, Category C2) and DC link choke to significantly reduce electromagnetic noise and current harmonic distortion THDi.

OTHER COMPONENTS

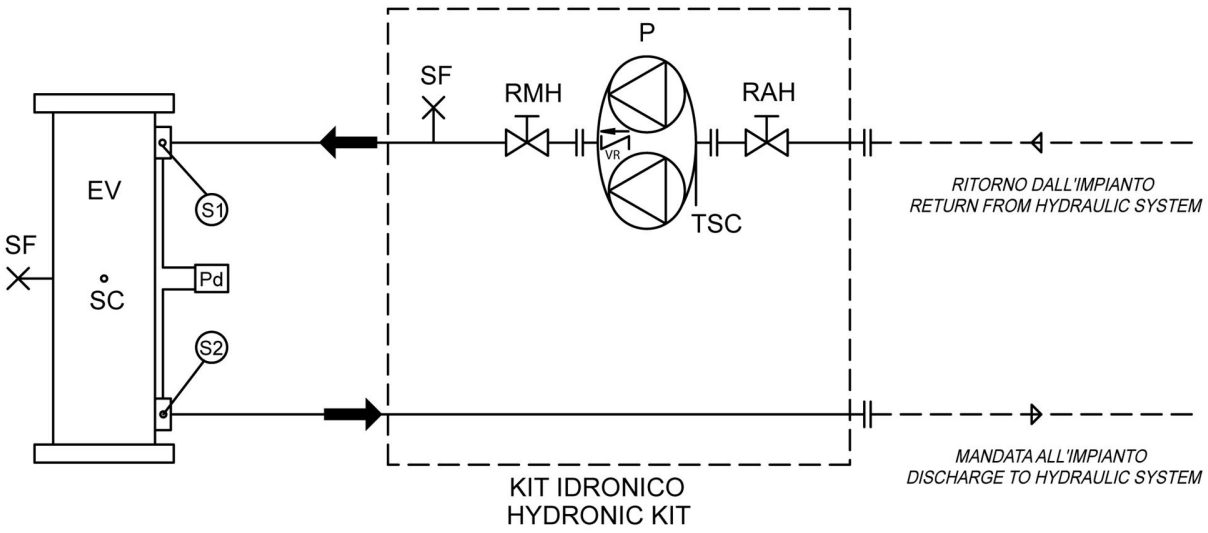
The following components are excluded from the hydronic kit supply, but their use is mandatory for the correct unit and system operation.
These components are available as accessories and supplied loose, it shall be the customer responsability to install them.
- Unit inlet water filter
- Unit outlet flow-switch

It is also recommended the use of the following components:
- Unit inlet and outlet pressure gauges
- Shut-off valves
- Flexible joints on piping

Possible configurations

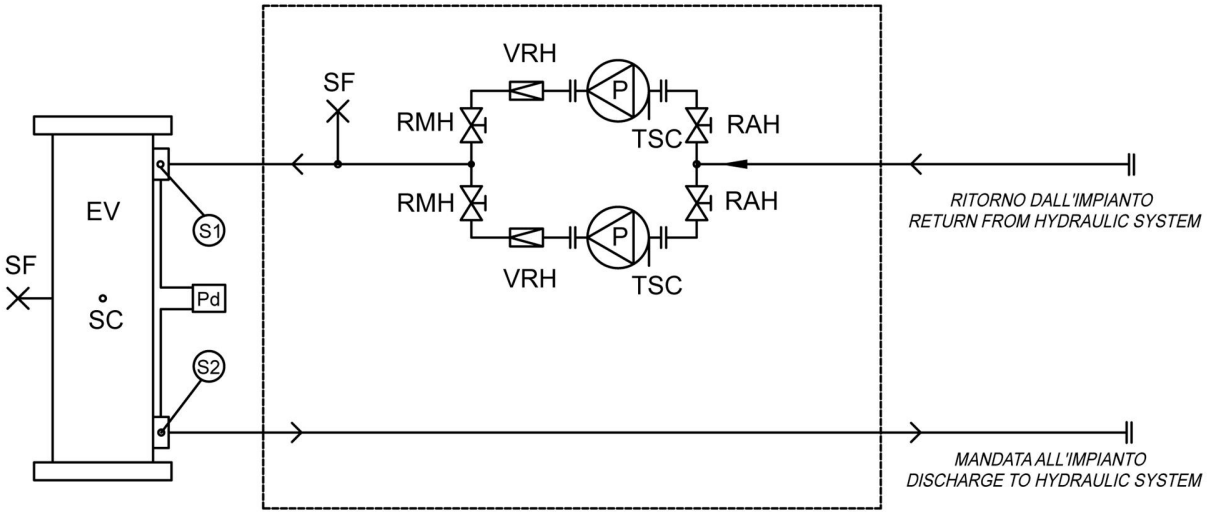
PUMP GROUP	Versions			
	E	K	SL-E	SL-K
EV - 2 PUMPS 2P LH (FIX SPEED)(4711)	X	X	X	X
EV - 2 PUMPS 2P HH (FIX SPEED)(4712)	X	X	X	X
EV - 2 PUMPS 2P LH (VAR SPEED)(4722)	X	X	X	X
EV - 2 PUMPS 2P HH (VAR SPEED)(4723)	X	X	X	X

Schema idraulico pompe IN-LINE - configurazione STD
Hydraulic diagram IN-LINE water PUMPS – STD configuration



LEGENDA - LEGEND	
COMPONENTI DEL KIT IDRONICO *COMPONENTS OF THE HYDRONIC KIT*	
EV	Evaporatore (scambiatore a fascio tubiero) Evaporator (tube exchanger)
P	Pompa gemellare Twin rotor pump
Pd	Pressostato differenziale lato acqua Water Differential pressure switch
RAH	Rubinetto aspirazione Pump suction valve
RMH	Rubinetto mandata Pump discharge valve
SC	Valvola di scarico Drain valve
TSC	Tappo di scarico Drain plug
SF	Valvola di sfiato Purge valve
S1	Sonda ingresso acqua scambiatore Exchanger water inlet probe
S2	Sonda uscita acqua scambiatore Exchanger water outlet probe
VR	Valvola di non ritorno (interna alla pompa) One way valve (pump inside)

Schema idraulico pompe ORTOGONALI - configurazione STD
Hydraulic diagram END-SUCTION water PUMPS – STD configuration



KIT IDRONICO
HYDRONIC KIT

LEGENDA - LEGEND	
COMPONENTI DEL KIT IDRONICO *COMPONENTS OF THE HYDRONIC KIT*	
EV	Evaporatore (scambiatore a fascio tubiero) Evaporator (tube exchanger)
P	Pompa Water pump
Pd	Pressostato differenziale lato acqua Water Differential pressure switch
RAH	Rubinetto aspirazione Pump suction valve
RMH	Rubinetto mandata Pump discharge valve
SC	Valvola di scarico Drain valve
TSC	Tappo di scarico Drain plug
SF	Valvola di sfiato Purge valve
S1	Sonda ingresso acqua scambiatore Exchanger water inlet probe
S2	Sonda uscita acqua scambiatore Exchanger water outlet probe
VRH	Valvola di non ritorno One way valve

Hydronic kit positioning

	Version	EV - 2 PUMPS 2P LH (FIX SPEED) (4711)				EV - 2 PUMPS 2P HH (FIX SPEED) (4712)				EV - 2 PUMPS 2P LH (VAR SPEED) (4722)				EV - 2 PUMPS 2P HH (VAR SPEED) (4723)			
		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]
0522	E	1250	/	/	649	1250	/	/	714	1250	/	/	724	1250	/	/	779
	SL-E	1250	/	/	649	1250	/	/	714	1250	/	/	724	1250	/	/	779
0532	K	1250	/	/	646	1250	/	/	713	1250	/	/	721	1250	/	/	778
	SL-K	1250	/	/	649	1250	/	/	714	1250	/	/	724	1250	/	/	779
0572	E	1250	/	/	772	1250	/	/	714	1250	/	/	855	1250	/	/	779
	SL-E	/	/	/	637	/	/	/	645	/	/	/	712	/	/	/	710
0602	K	1250	/	/	772	1250	/	/	714	1250	/	/	855	1250	/	/	779
	SL-K	1250	/	/	772	1250	/	/	714	1250	/	/	855	1250	/	/	779
0612	E	/	/	/	637	/	/	/	700	/	/	/	712	/	/	/	765
	SL-E	/	/	/	637	/	/	/	700	/	/	/	712	/	/	/	765
0622	K	1250	/	/	772	1250	/	/	765	1250	/	/	855	1250	/	/	830
	SL-K	1250	/	/	772	1250	/	/	765	1250	/	/	855	1250	/	/	830
0642	E	/	/	/	637	/	/	/	700	/	/	/	712	/	/	/	765
	SL-E	/	/	/	637	/	/	/	700	/	/	/	712	/	/	/	765
0672	K	1250	/	/	772	1250	/	/	792	1250	/	/	855	1250	/	/	857
	SL-K	1250	/	/	772	1250	/	/	792	1250	/	/	855	1250	/	/	857
0702	E	/	/	/	644	/	/	/	703	/	/	/	719	/	/	/	768
	SL-E	/	/	/	703	/	/	/	757	/	/	/	778	/	/	/	822
0732	K	1250	/	/	782	1250	/	/	809	1250	/	/	865	1250	/	/	874
	SL-K	/	/	/	644	/	/	/	730	/	/	/	719	/	/	/	795
0792	E	/	/	/	929	/	/	/	972	/	/	/	994	/	/	/	1037
	SL-E	/	/	/	929	/	/	/	972	/	/	/	994	/	/	/	1037
0802	K	/	/	/	761	/	/	/	730	/	/	/	826	/	/	/	795
	SL-K	/	/	/	761	/	/	/	730	/	/	/	826	/	/	/	795
0862	E	/	/	/	929	/	/	/	972	/	/	/	994	/	/	/	1037
	SL-E	/	/	/	924	/	/	/	990	/	/	/	989	/	/	/	1055
0892	K	/	/	/	804	/	/	/	895	/	/	/	869	/	/	/	960
	SL-K	/	/	/	804	/	/	/	895	/	/	/	869	/	/	/	960
0922	E	/	/	/	924	/	/	/	990	/	/	/	989	/	/	/	1055
	SL-E	/	/	/	924	/	/	/	990	/	/	/	989	/	/	/	1055
0972	K	/	/	/	929	/	/	/	1069	/	/	/	994	/	/	/	1175
	SL-K	/	/	/	929	/	/	/	1069	/	/	/	994	/	/	/	1175
0982	E	/	/	/	924	/	/	/	1022	/	/	/	989	500	/	/	1135
	SL-E	/	/	/	924	/	/	/	1022	/	/	/	989	500	/	/	1135
1032	K	/	/	/	994	/	/	/	1069	/	/	/	1059	/	/	/	1175
	SL-K	/	/	/	994	/	/	/	1069	/	/	/	1059	/	/	/	1175
1062	E	/	/	/	1016	/	/	/	1048	/	/	/	1081	500	/	/	1161

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)
EV - 2 PUMPS 2P LH (FIX SPEED)	EV - 2 PUMPS 2P LH (FIX SPEED)
EV - 2 PUMPS 2P HH (FIX SPEED)	EV - 2 PUMPS 2P HH (FIX SPEED)
EV - 2 PUMPS 2P LH (VAR SPEED)	EV - 2 PUMPS 2P LH (VAR SPEED)
EV - 2 PUMPS 2P HH (VAR SPEED)	EV - 2 PUMPS 2P HH (VAR SPEED)
-	Not available

Hydronic kit positioning

	Version	EV - 2 PUMPS 2P LH (FIX SPEED) (4711)				EV - 2 PUMPS 2P HH (FIX SPEED) (4712)				EV - 2 PUMPS 2P LH (VAR SPEED) (4722)				EV - 2 PUMPS 2P HH (VAR SPEED) (4723)			
		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]
1062	SL-E	/	/	/	1016	/	/	/	1059	/	/	/	1081	500	/	/	1172
1082	K	/	/	/	971	/	/	/	1041	/	/	/	1036	/	/	/	1147
	SL-K	/	/	/	1013	/	/	/	1048	/	/	/	1078	500	/	/	1161
1122	K	/	/	/	971	/	/	/	1088	/	/	/	1036	/	/	/	1208
	SL-K	/	/	/	1013	/	/	/	1094	/	/	/	1078	500	/	/	1222
1132	E	/	/	/	1016	/	/	/	1094	/	/	/	1081	500	/	/	1222
	SL-E	/	/	/	1016	/	/	/	1106	/	/	/	1081	500	/	/	1234
1192	K	/	/	/	1013	/	/	/	1094	/	/	/	1078	500	/	/	1222
	SL-K	/	/	/	1016	/	/	/	1094	/	/	/	1081	500	/	/	1222
1202	E	/	/	/	1152	/	/	/	1227	/	/	/	1217	500	/	/	1355
	SL-E	/	/	/	1152	/	/	/	1237	/	/	/	1217	500	/	/	1365
1242	K	/	/	/	1046	/	/	/	1173	500	/	/	1159	500	/	/	1301
	SL-K	/	/	/	1049	/	/	/	1173	500	/	/	1162	500	/	/	1301
1252	E	/	/	/	1273	/	/	/	1305	500	/	/	1386	500	/	/	1433
	SL-E	/	/	/	1297	/	/	/	1320	500	/	/	1410	500	/	/	1448
1382	K	/	/	/	1300	/	/	/	1299	500	/	/	1413	500	/	/	1427
	SL-K	/	/	/	1300	/	/	/	1299	500	/	/	1413	500	/	/	1427
1402	E	/	/	/	1405	/	/	/	1418	500	/	/	1518	500	/	/	1546
	SL-E	/	/	/	1405	/	/	/	1418	500	/	/	1518	500	/	/	1546
1452	K	/	/	/	1300	/	/	/	1495	500	/	/	1413	500	/	/	1642
	SL-K	/	/	/	1273	/	/	/	1501	500	/	/	1386	500	/	/	1648
1482	E	/	/	/	1405	/	/	/	1614	500	/	/	1518	500	/	/	1761
	SL-E	/	/	/	1405	/	/	/	1614	500	/	/	1518	500	/	/	1761
1552	K	/	/	/	1403	/	/	/	1624	500	/	/	1516	500	/	/	1771
	SL-K	/	/	/	1403	/	/	/	1624	500	/	/	1516	500	/	/	1771
1633	K	/	/	/	1910	/	/	/	1614	500	/	/	2023	500	/	/	1761
	SL-K	/	/	/	1910	/	/	/	1614	500	/	/	2023	500	/	/	1761
1703	K	/	/	/	1910	/	/	/	2512	500	/	/	2023	500	/	/	2659
	SL-K	/	/	/	1910	/	/	/	2512	500	/	/	2023	500	/	/	2659
1863	K	/	/	/	1910	/	/	/	2512	500	/	/	2023	500	/	/	2659
	SL-K	/	/	/	1910	/	/	/	2512	500	/	/	2023	500	/	/	2659

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)
EV - 2 PUMPS 2P LH (FIX SPEED)	EV - 2 PUMPS 2P LH (FIX SPEED)
EV - 2 PUMPS 2P HH (FIX SPEED)	EV - 2 PUMPS 2P HH (FIX SPEED)
EV - 2 PUMPS 2P LH (VAR SPEED)	EV - 2 PUMPS 2P LH (VAR SPEED)
EV - 2 PUMPS 2P HH (VAR SPEED)	EV - 2 PUMPS 2P HH (VAR SPEED)
-	Not available

HEAT EXCHANGER USER SIDE - EV - 2 PUMPS 2P HH (FIX SPEED) (4712)

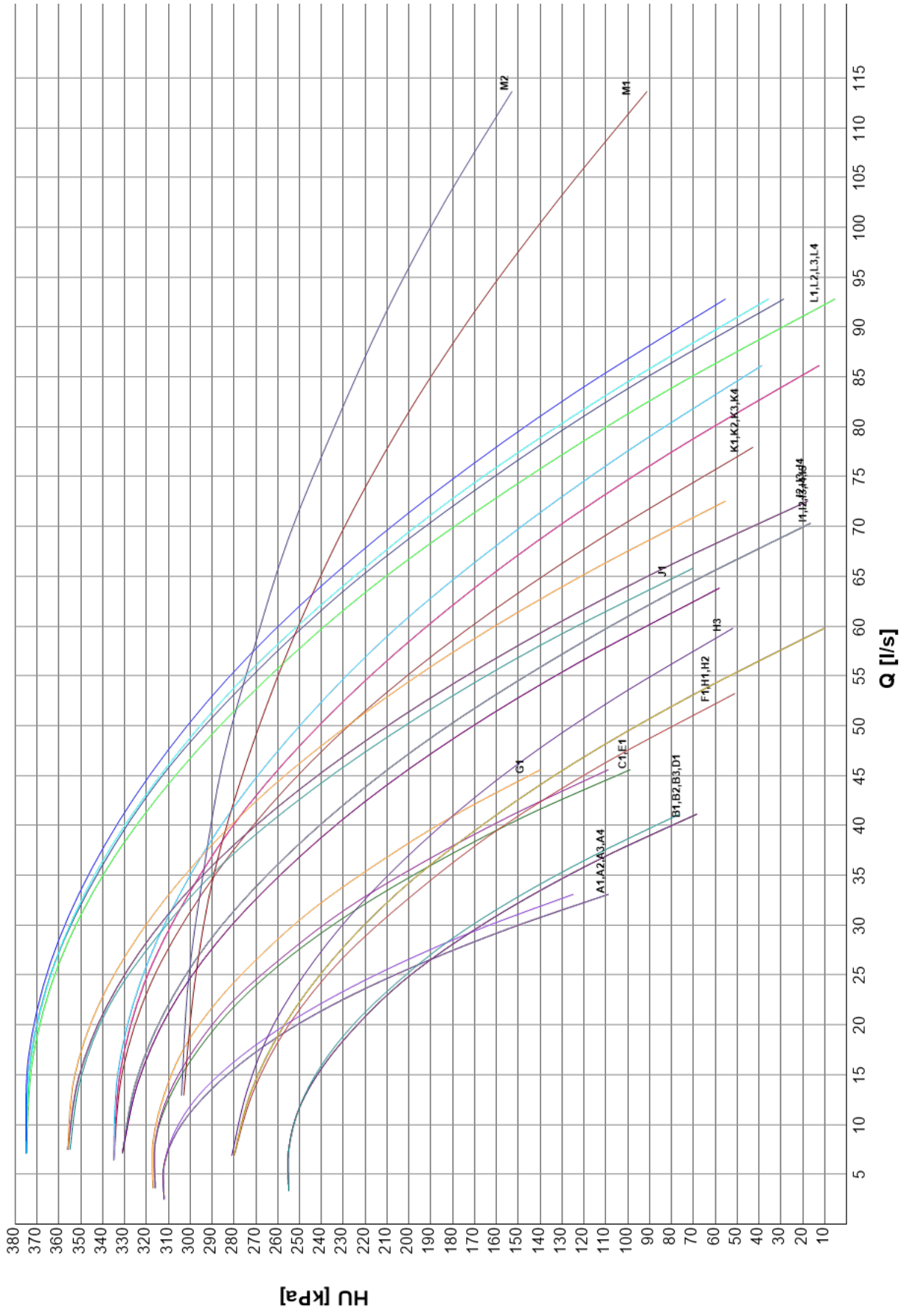
SIZE	Version	CH		PUMP					CH
		Pfgross	Qfgross	Curve	Model	N.	F.L.A.	F.L.I.	HU
		[kW] (1)	[l/s] (1)			Pole	[A]	[kW]	[kPa]
0522	E	523,4	25,03	A1	TPD 80-330/2 IE3	2	21	11,00	206
	SL-E	506,9	24,24						214
0532	K	533,6	25,52	A2					201
	SL-K	517,6	24,75						209
0572	E	566,2	27,08	A3					195
	SL-E	573,9	27,44						191
0602	K	597,5	28,57	A4					167
	SL-K	560,8	26,82						187
0612	E	605,1	28,94	B1	TPD 100-250/2 IE3	2	21	11,00	174
	SL-E	596,7	28,53						177
0622	K	623,9	29,84	B2					168
	SL-K	604,9	28,93						174
0642	E	642,8	30,74	B3					161
	SL-E	623,5	29,81						168
0672	K	674,5	32,25	C1	TPD 100-310/2 IE3	2	28	15,00	219
	SL-K	627,6	30,01						235
0702	E	701,5	33,55	D1	TPD 100-250/2 IE3	2	21	11,00	144
	SL-E	700,1	33,48						145
0732	K	726,0	34,72	E1	TPD 100-310/2 IE3	2	28	15,00	206
	SL-K	719,3	34,40						209
0792	E	786,8	37,62	F1	NB 80-160/151	2	26	15,00	172
	SL-E	770,8	36,86						176
0802	K	800,9	38,30	G1	TPD 100-310/2 IE3	2	28	15,00	200
	SL-K	772,0	36,92						210
0862	E	861,4	41,20	H1	NB 80-160/151	2	26	15,00	159
	SL-E	832,8	39,83						167
0892	K	889,8	42,55	H2					150
	SL-K	840,2	40,18						165
0922	E	922,4	44,11	H3					162
	SL-E	914,2	43,72						164
0972	K	967,2	46,25	I1	NB 80-160/161	2	35	18,50	206
	SL-K	917,4	43,87						220
0982	E	983,9	47,05	I2					201
	SL-E	966,7	46,23						206
1032	K	1034	49,45	I3					185
	SL-K	979,4	46,84						202
1062	E	1055	50,46	I4					167
	SL-E	1043	49,89						171
1082	K	1079	51,62	I5					159
	SL-K	1057	50,56						167
1122	K	1123	53,72	J1	NB 80-160/167 IE3	2	40	22,00	175
	SL-K	1119	53,51						176
1132	E	1130	54,02	J2					182
	SL-E	1115	53,34						187
1192	K	1186	56,69	J3					161
	SL-K	1164	55,64						169
1202	E	1198	57,29	J4					180
	SL-E	1184	56,60						185

HEAT EXCHANGER USER SIDE - EV - 2 PUMPS 2P HH (FIX SPEED) (4712)

SIZE	Version	CH		PUMP					CH
		Pfgross	Qfgross	Curve	Model	N.	F.L.A.	F.L.I.	HU
		[kW] (1)	[l/s] (1)			Pole	[A]	[kW]	[kPa]
1242	K	1243	59,46	K1	NB 100-160/167 IE3	2	37	22,00	175
	SL-K	1222	58,44						181
1252	E	1248	59,67	K2					193
	SL-E	1230	58,83						198
1382	K	1383	66,16	K3					156
	SL-K	1303	62,30						179
1402	E	1395	66,70	K4					168
	SL-E	1352	64,64						180
1452	K	1450	69,32	L1	NB 100-160/176 IE3	2	51	30,00	184
	SL-K	1403	67,09						197
1482	E	1483	70,92	L2					187
	SL-E	1436	68,69						200
1552	K	1551	74,19	L3					171
	SL-K	1476	70,61						193
1633	K	1628	77,86	L4					161
	SL-K	1603	76,66						168
1703	K	1702	81,42	M1	NB 125-200/176-154 IE3	2	75	45,00	200
	SL-K	1677	80,21						203
1863	K	1859	88,91	M2					216
	SL-K	1774	84,84						225

(1) Values refer to nominal conditions
CH Cooling 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 - EV - 2 PUMPS 2P HH (FIX SPEED) (4712)



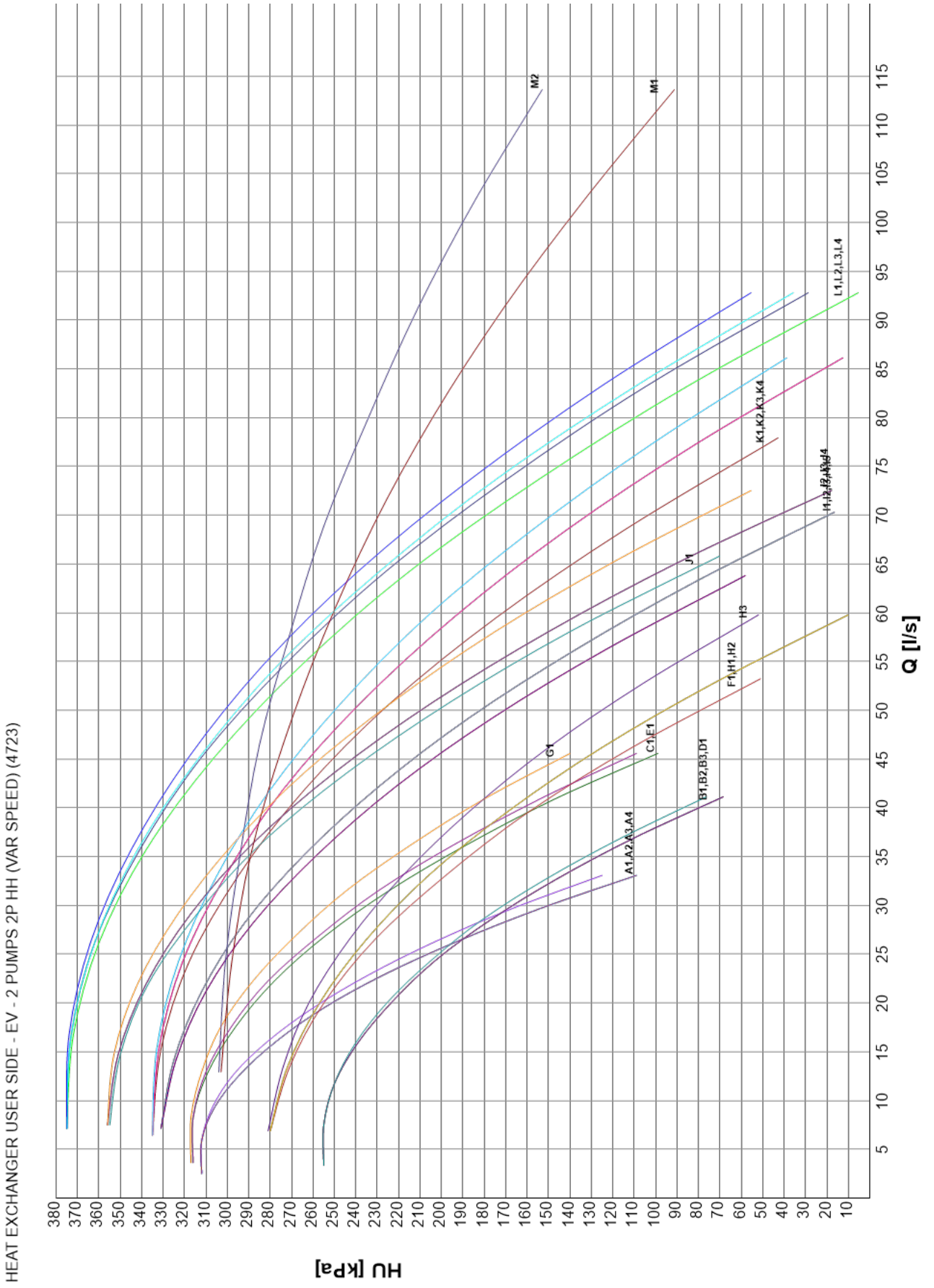
HEAT EXCHANGER USER SIDE - EV - 2 PUMPS 2P HH (VAR SPEED) (4723)

SIZE	Version	CH		PUMP					CH
		Pfgross	Qfgross	Curve	Model	N.	F.L.A.	F.L.I.	HU
		[kW] (1)	[l/s] (1)			Pole	[A]	[kW]	[kPa]
0522	E	523,4	25,03	A1	TPD 80-330/2 IE3	2	21	11,00	206
	SL-E	506,9	24,24						214
0532	K	533,6	25,52	A2					201
	SL-K	517,6	24,75						209
0572	E	566,2	27,08	A3					195
	SL-E	573,9	27,44						191
0602	K	597,5	28,57	A4					167
	SL-K	560,8	26,82						187
0612	E	605,1	28,94	B1	TPD 100-250/2 IE3	2	21	11,00	174
	SL-E	596,7	28,53						177
0622	K	623,9	29,84	B2					168
	SL-K	604,9	28,93						174
0642	E	642,8	30,74	B3					161
	SL-E	623,5	29,81						168
0672	K	674,5	32,25	C1	TPD 100-310/2 IE3	2	28	15,00	219
	SL-K	627,6	30,01						235
0702	E	701,5	33,55	D1	TPD 100-250/2 IE3	2	21	11,00	144
	SL-E	700,1	33,48						145
0732	K	726,0	34,72	E1	TPD 100-310/2 IE3	2	28	15,00	206
	SL-K	719,3	34,40						209
0792	E	786,8	37,62	F1	NB 80-160/151	2	26	15,00	172
	SL-E	770,8	36,86						176
0802	K	800,9	38,30	G1	TPD 100-310/2 IE3	2	28	15,00	200
	SL-K	772,0	36,92						210
0862	E	861,4	41,20	H1	NB 80-160/151	2	26	15,00	159
	SL-E	832,8	39,83						167
0892	K	889,8	42,55	H2					150
	SL-K	840,2	40,18						165
0922	E	922,4	44,11	H3					162
	SL-E	914,2	43,72						164
0972	K	967,2	46,25	I1	NB 80-160/161	2	35	18,50	206
	SL-K	917,4	43,87						220
0982	E	983,9	47,05	I2					201
	SL-E	966,7	46,23						206
1032	K	1034	49,45	I3					185
	SL-K	979,4	46,84						202
1062	E	1055	50,46	I4					167
	SL-E	1043	49,89						171
1082	K	1079	51,62	I5					159
	SL-K	1057	50,56						167
1122	K	1123	53,72	J1	NB 80-160/167 IE3	2	40	22,00	175
	SL-K	1119	53,51						176
1132	E	1130	54,02	J2					182
	SL-E	1115	53,34						187
1192	K	1186	56,69	J3					161
	SL-K	1164	55,64						169
1202	E	1198	57,29	J4					180
	SL-E	1184	56,60						185

HEAT EXCHANGER USER SIDE - EV - 2 PUMPS 2P HH (VAR SPEED) (4723)

SIZE	Version	CH		PUMP					CH
		Pfgross	Qfgross	Curve	Model	N.	F.L.A.	F.L.I.	HU
		[kW] (1)	[l/s] (1)			Pole	[A]	[kW]	[kPa]
1242	K	1243	59,46	K1	NB 100-160/167 IE3	2	37	22,00	175
	SL-K	1222	58,44						181
1252	E	1248	59,67	K2					193
	SL-E	1230	58,83						198
1382	K	1383	66,16	K3					156
	SL-K	1303	62,30						179
1402	E	1395	66,70	K4					168
	SL-E	1352	64,64						180
1452	K	1450	69,32	L1	NB 100-160/176 IE3	2	51	30,00	184
	SL-K	1403	67,09						197
1482	E	1483	70,92	L2					187
	SL-E	1436	68,69						200
1552	K	1551	74,19	L3					171
	SL-K	1476	70,61						193
1633	K	1628	77,86	L4					161
	SL-K	1603	76,66						168
1703	K	1702	81,42	M1	NB 125-200/176-154 IE3	2	75	45,00	200
	SL-K	1677	80,21						203
1863	K	1859	88,91	M2					216
	SL-K	1774	84,84						225

(1) Values refer to nominal conditions
CH Cooling 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 - EV - 2 PUMPS 2P HH (VAR SPEED) (4723)
HU [kPa]
Q [l/s]
M2
M1
L1,L2,L3,L4
K1,K2,K3,K4
J1
H3
F1,H1,H2
C1,E1
B1,B2,B3,D1
A1,A2,A3,A4
G1

HEAT EXCHANGER USER SIDE - EV - 2 PUMPS 2P LH (FIX SPEED) (4711)

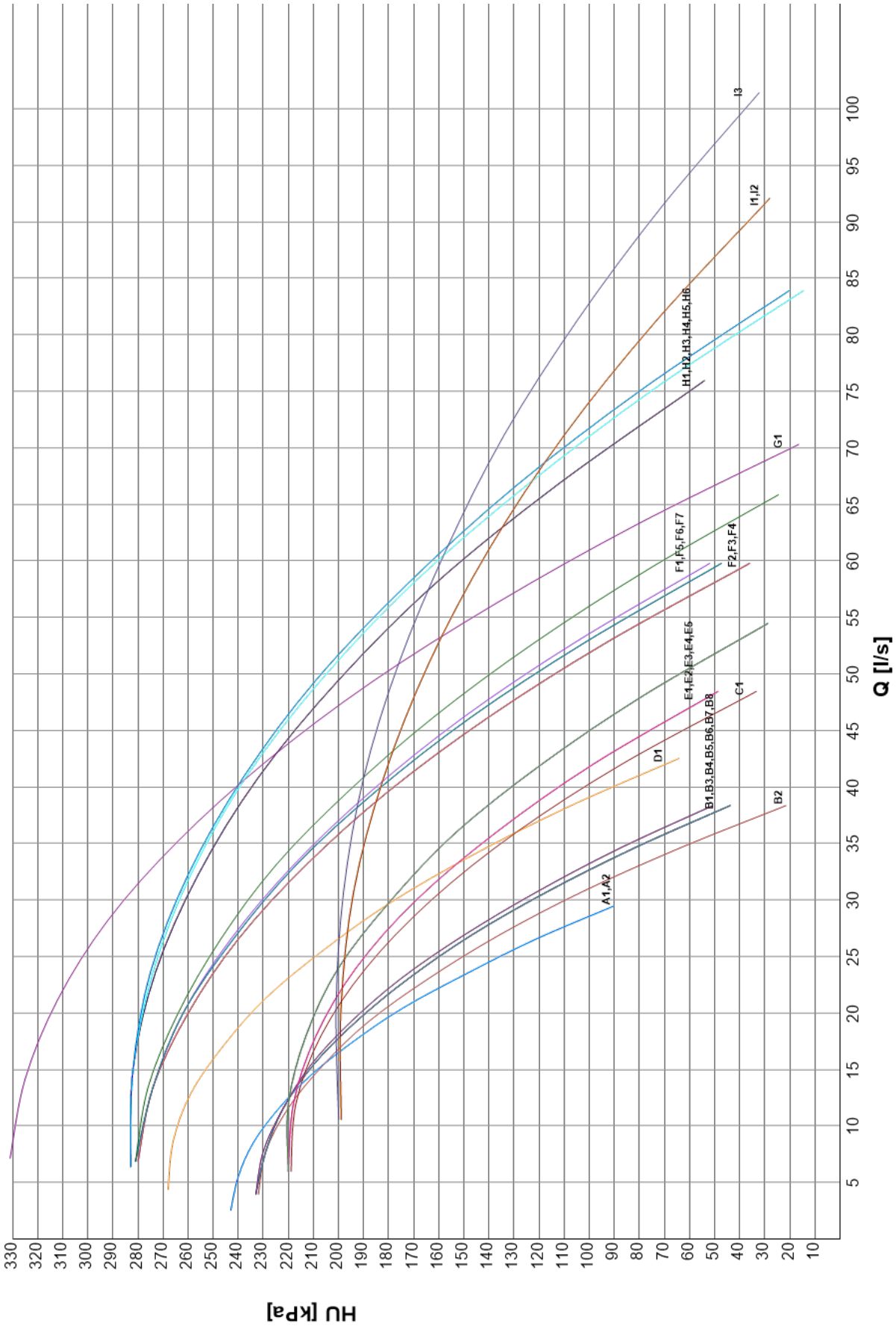
SIZE	Version	CH		PUMP					CH
		Pfgross	Qfgross	Curve	Model	N.	F.L.A.	F.L.I.	HU
		[kW] (1)	[l/s] (1)			Pole	[A]	[kW]	[kPa]
0522	E	523,4	25,03	A1	TPD 100-240/2 IE3	2	14	7,500	135
	SL-E	506,9	24,24						143
0532	K	533,6	25,52	A2					131
	SL-K	517,6	24,75						138
0572	E	566,2	27,08	B1	NB 65-125/137 IE3	2	14	7,500	145
	SL-E	573,9	27,44						143
0602	K	597,5	28,57	B2					122
	SL-K	560,8	26,82						136
0612	E	605,1	28,94	B3					131
	SL-E	596,7	28,53						134
0622	K	623,9	29,84	B4					124
	SL-K	604,9	28,93						131
0642	E	642,8	30,74	B5					117
	SL-E	623,5	29,81						124
0672	K	674,5	32,25	B6					104
	SL-K	627,6	30,01						123
0702	E	701,5	33,55	B7					97,1
	SL-E	700,1	33,48						97,7
0732	K	726,0	34,72	B8					86,4
	SL-K	719,3	34,40						89,4
0792	E	786,8	37,62	C1	NB 80-160/147-127	2	21	11,00	118
	SL-E	770,8	36,86						123
0802	K	800,9	38,30	D1	NB 65-125/144 IE3	2	20	11,00	107
	SL-K	772,0	36,92						120
0862	E	861,4	41,20	E1	NB 80-160/147-127	2	21	11,00	104
	SL-E	832,8	39,83						113
0892	K	889,8	42,55	E2					94,5
	SL-K	840,2	40,18						111
0922	E	922,4	44,11	E3					106
	SL-E	914,2	43,72						108
0972	K	967,2	46,25	E4					91,3
	SL-K	917,4	43,87						107
0982	E	983,9	47,05	E5					85,8
	SL-E	966,7	46,23						91,5
1032	K	1034	49,45	F1	NB 80-160/151	2	26	15,00	128
	SL-K	979,4	46,84						145
1062	E	1055	50,46	F2					110
	SL-E	1043	49,89						114
1082	K	1079	51,62	F3					102
	SL-K	1057	50,56						110
1122	K	1123	53,72	F4					85,7
	SL-K	1119	53,51						87,3
1132	E	1130	54,02	F5					92,6
	SL-E	1115	53,34						97,6
1192	K	1186	56,69	F6					72,0
	SL-K	1164	55,64						80,2
1202	E	1198	57,29	F7					90,8
	SL-E	1184	56,60						95,6

HEAT EXCHANGER USER SIDE - EV - 2 PUMPS 2P LH (FIX SPEED) (4711)

SIZE	Version	CH		PUMP					CH
		Pfgross	Qfgross	Curve	Model	N.	F.L.A.	F.L.I.	HU
		[kW] (1)	[l/s] (1)			Pole	[A]	[kW]	[kPa]
1242	K	1243	59,46	G1	NB 80-160/161	2	35	18,50	112
	SL-K	1222	58,44						120
1252	E	1248	59,67	H1	NB 100-160/160-154 IE3	2	33	18,50	152
	SL-E	1230	58,83						157
1382	K	1383	66,16	H2					116
	SL-K	1303	62,30						138
1402	E	1395	66,70	H3					129
	SL-E	1352	64,64						140
1452	K	1450	69,32	H4					97,1
	SL-K	1403	67,09						111
1482	E	1483	70,92	H5					101
	SL-E	1436	68,69						114
1552	K	1551	74,19	H6					85,0
	SL-K	1476	70,61						107
1633	K	1628	77,86	I1	NB 125-250/249 IE3	4	37	18,50	86,0
	SL-K	1603	76,66						90,4
1703	K	1702	81,42	I2					72,6
	SL-K	1677	80,21						77,2
1863	K	1859	88,91	I3					79,6
	SL-K	1774	84,84						93,4

(1) Values refer to nominal conditions
CH Cooling 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 - EV - 2 PUMPS 2P LH (FIX SPEED) (4711)



HEAT EXCHANGER USER SIDE - EV - 2 PUMPS 2P LH (VAR SPEED) (4722)

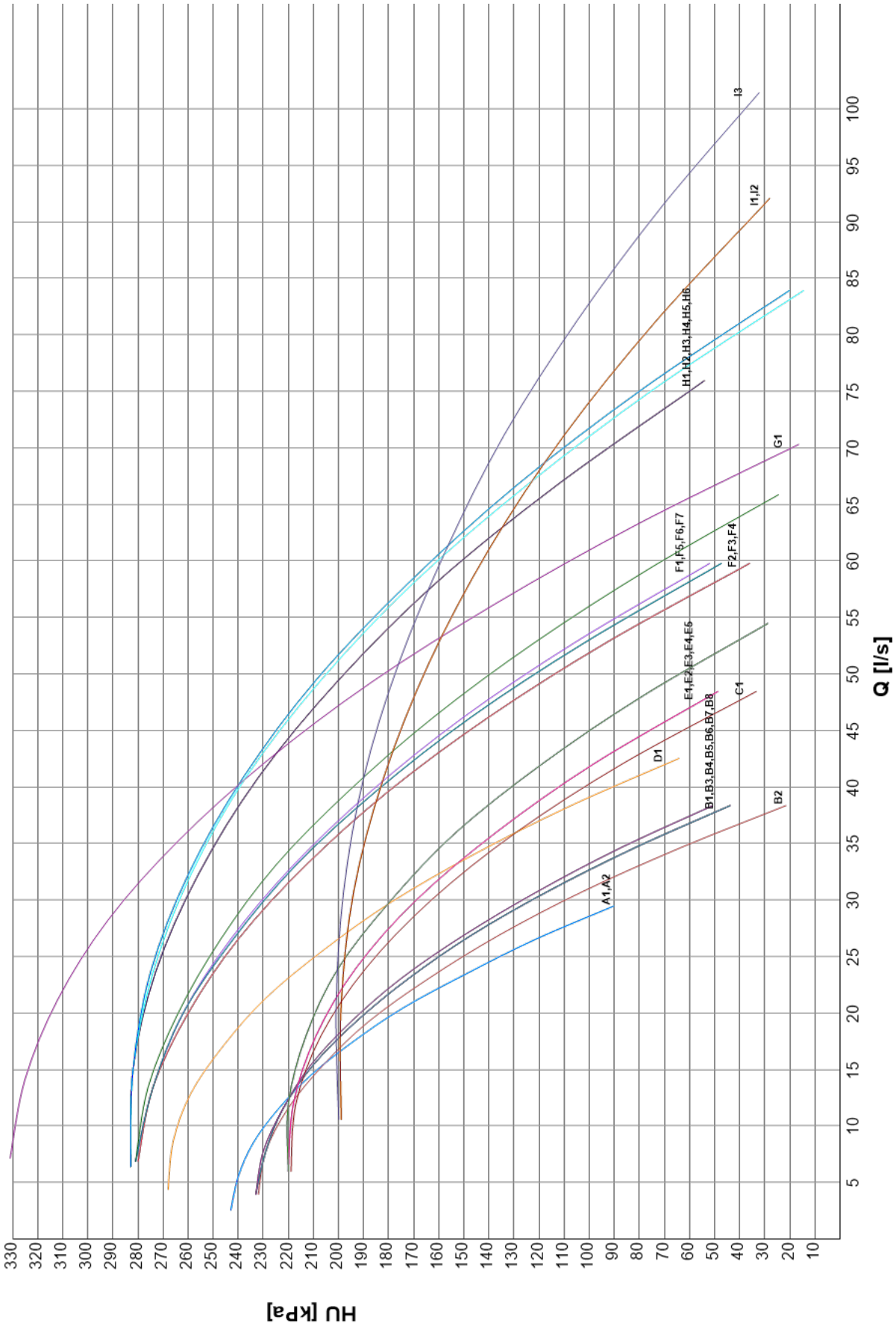
SIZE	Version	CH		PUMP					CH
		Pfgross	Qfgross	Curve	Model	N.	F.L.A.	F.L.I.	HU
		[kW] (1)	[l/s] (1)			Pole	[A]	[kW]	[kPa]
0522	E	523,4	25,03	A1	TPD 100-240/2 IE3	2	14	7,500	135
	SL-E	506,9	24,24						143
0532	K	533,6	25,52	A2					131
	SL-K	517,6	24,75						138
0572	E	566,2	27,08	B1	NB 65-125/137 IE3	2	14	7,500	145
	SL-E	573,9	27,44						143
0602	K	597,5	28,57	B2					122
	SL-K	560,8	26,82						136
0612	E	605,1	28,94	B3					131
	SL-E	596,7	28,53						134
0622	K	623,9	29,84	B4					124
	SL-K	604,9	28,93						131
0642	E	642,8	30,74	B5					117
	SL-E	623,5	29,81						124
0672	K	674,5	32,25	B6					104
	SL-K	627,6	30,01						123
0702	E	701,5	33,55	B7					97,1
	SL-E	700,1	33,48						97,7
0732	K	726,0	34,72	B8					86,4
	SL-K	719,3	34,40						89,4
0792	E	786,8	37,62	C1	NB 80-160/147-127	2	21	11,00	118
	SL-E	770,8	36,86						123
0802	K	800,9	38,30	D1	NB 65-125/144 IE3	2	20	11,00	107
	SL-K	772,0	36,92						120
0862	E	861,4	41,20	E1	NB 80-160/147-127	2	21	11,00	104
	SL-E	832,8	39,83						113
0892	K	889,8	42,55	E2					94,5
	SL-K	840,2	40,18						111
0922	E	922,4	44,11	E3					106
	SL-E	914,2	43,72						108
0972	K	967,2	46,25	E4					91,3
	SL-K	917,4	43,87						107
0982	E	983,9	47,05	E5					85,8
	SL-E	966,7	46,23						91,5
1032	K	1034	49,45	F1	NB 80-160/151	2	26	15,00	128
	SL-K	979,4	46,84						145
1062	E	1055	50,46	F2					110
	SL-E	1043	49,89						114
1082	K	1079	51,62	F3					102
	SL-K	1057	50,56						110
1122	K	1123	53,72	F4					85,7
	SL-K	1119	53,51						87,3
1132	E	1130	54,02	F5					92,6
	SL-E	1115	53,34						97,6
1192	K	1186	56,69	F6					72,0
	SL-K	1164	55,64						80,2
1202	E	1198	57,29	F7					90,8
	SL-E	1184	56,60						95,6

HEAT EXCHANGER USER SIDE - EV - 2 PUMPS 2P LH (VAR SPEED) (4722)

SIZE	Version	CH		PUMP					CH
		Pfgross	Qfgross	Curve	Model	N.	F.L.A.	F.L.I.	HU
		[kW] (1)	[l/s] (1)			Pole	[A]	[kW]	[kPa]
1242	K	1243	59,46	G1	NB 80-160/161	2	35	18,50	112
	SL-K	1222	58,44						120
1252	E	1248	59,67	H1	NB 100-160/160-154 IE3	2	33	18,50	152
	SL-E	1230	58,83						157
1382	K	1383	66,16	H2					116
	SL-K	1303	62,30						138
1402	E	1395	66,70	H3					129
	SL-E	1352	64,64						140
1452	K	1450	69,32	H4					97,1
	SL-K	1403	67,09						111
1482	E	1483	70,92	H5					101
	SL-E	1436	68,69						114
1552	K	1551	74,19	H6					85,0
	SL-K	1476	70,61						107
1633	K	1628	77,86	I1	NB 125-250/249 IE3	4	37	18,50	86,0
	SL-K	1603	76,66						90,4
1703	K	1702	81,42	I2					72,6
	SL-K	1677	80,21						77,2
1863	K	1859	88,91	I3					79,6
	SL-K	1774	84,84						93,4

(1) Values refer to nominal conditions
CH Cooling 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 - EV - 2 PUMPS 2P LH (VAR SPEED) (4722) (3520)



14.1 Variable flow control

Pump energy consumption significantly impacts plant running costs, but it can be considerably reduced thanks to the use of variable speed pumps (inverter driven pumps), capable of adjusting the water flow rate according to the actual plant thermal load.
Mitsubishi Electric Hydronics & Cooling Systems has developed the VPF control series (Variable Primary Flow), that provides different water flow regulation logics specifically devoted to various hydraulic plant solutions: only a primary circuit, primary and secondary circuits, single unit or multi-unit systems controlled with external controller (Manager 3000+, ClimaPRO+) or with 1541, 1542 Multi Manager options.
The VPF systems adjust the pump speeds on the basis of the plant's thermal load and optimize the unit's thermoregulation algorithm for variable flow operation, in a dynamic and simultaneous way. This ensures the highest energy savings, stable operation, and complete reliability.

VPF SYSTEM (delta P control)
For plants with only a primary circuit

VPF - Plant and unit requirements

The VPF logic provides the variable flow control for the plant's primary circuit.

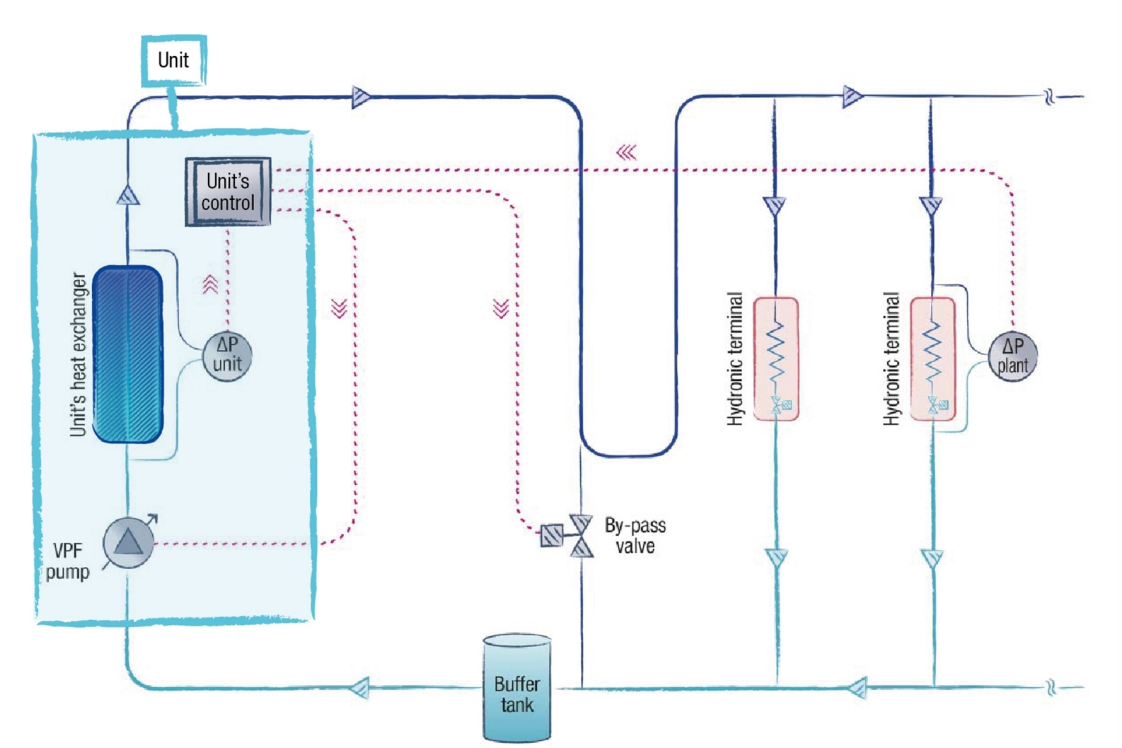
- Type of plant: primary circuit only, that feeds hydronic terminals fitted with a 2-way regulating valve

- Hydronic module: modulating regulation devices (0-10V signal) or variable speed pumps

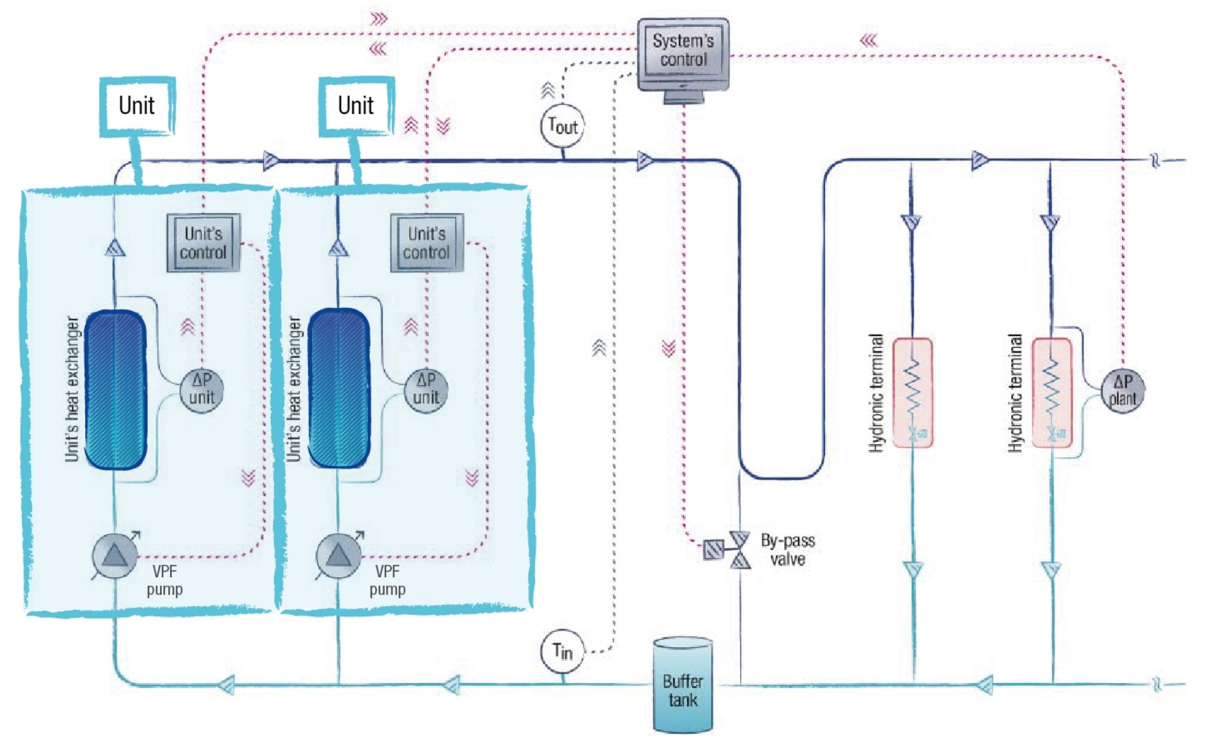
- Unit thermoregulation: control of the leaving water temperature

- Monitored parameter: delta P on relevant users' hydronic terminal

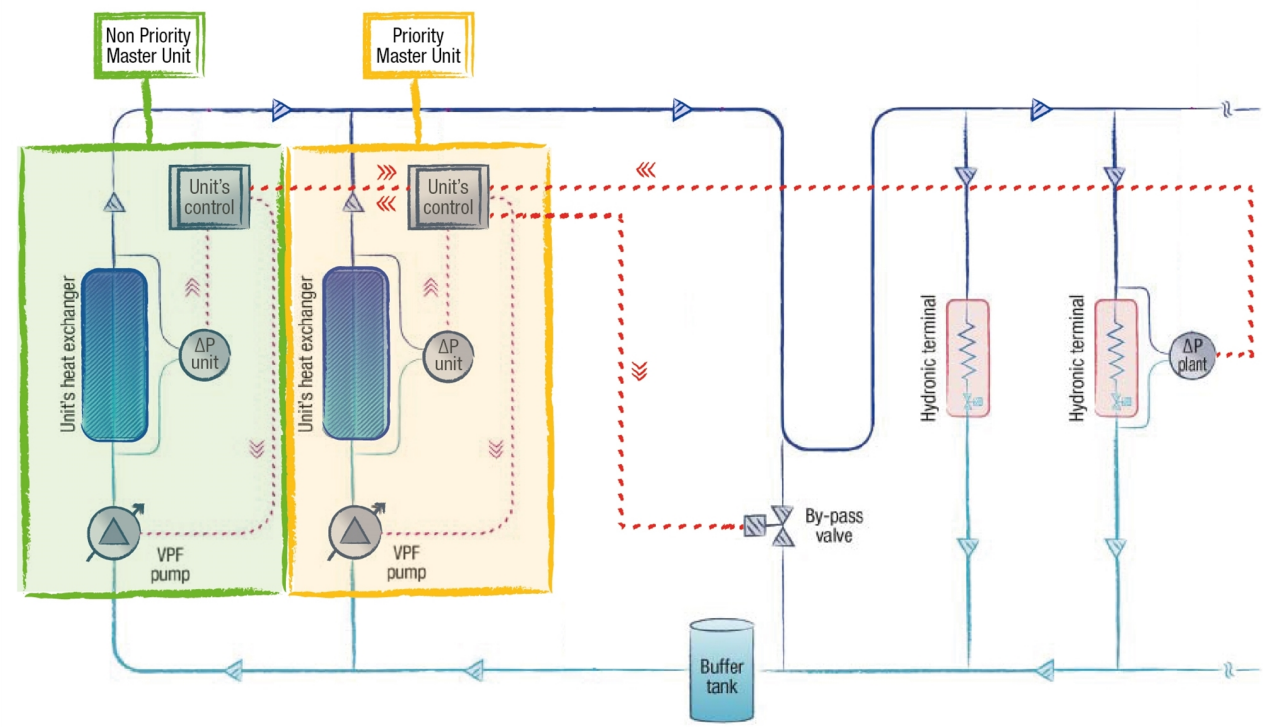
Plant diagram for single unit system



Plant diagram for multi-unit with external control system (Manager3000+ or ClimaPRO+)



Plant diagram for multi-unit system with Multi Manager



VPF - Operating logic

Water flow regulation

The VPF system monitors the differential pressure on the plant side (ΔP) and adjusts the pump speed in order to keep it within a defined range (ΔPmin ΔPmax).

- If ΔPmin ≤ ΔP ≤ ΔPmax
The plant water flow is appropriate to the thermal load, the pump speed is kept constant.

- If ΔP > ΔPmax
The plant water flow exceeds what is necessary to properly cover the thermal load, the pump speed is reduced to save pump energy.

- If ΔP < ΔPmin
The plant water flow is too low to ensure the proper feed to the hydronic terminals, the pump speed is increased.

With the VPF system, the water flow can be reduced to 50% of the unit nominal water flow, with regards to the selection conditions, provided that the minimum water flow required by the unit's heat exchanger is respected (the control of the heat exchanger's minimum water flow is described below).
The pump speed regulation is performed with little progressive adjustments while continuously monitoring the values of both the delta P on the plant side and the water temperature on the heat exchanger. The absence of abrupt water flow changes prevents fluctuation due to possible conflicts with the unit's thermoregulation function (compressor regulation).

Control of the unit's minimum water flow

Under no circumstances can the primary circuit water flow be reduced below the minimum water flow required by the unit's heat exchanger.
The monitoring of the unit's water flow is performed through a factory installed differential pressure transducer on the unit's heat exchanger.
If the differential pressure on the plant side requests a users' water flow lower than the unit's minimum water flow, the VPF system commands the gradual opening of the hydraulic by-pass valve (safety function). This ensures that the minimum water flow required by the unit's heat exchanger is always provided. As soon as the hydronic terminals request an increase of the water flow ($\Delta P < \Delta Pmin$), the VPF closes the by-pass valve.

Multi-unit systems

The VPF control logic is also the same for multi-unit systems.
The plant side differential pressure transducer reading and the by-pass valve opening are managed by the multi-unit control system (Manager3000+, ClimaPRO+, Multi Manager Master).
Each unit autonomously adjusts its pump speed on the basis of the information provided by the multi-unit control system.
When the plant load requests the activation of a stand-by unit, the multi-unit control system calculates the starting speed of its pump in order to avoid excessive water flow variation of the running units.

In case of multi-unit system with Multi Manager, at least one unit must be set as Priority Master (opt 1541). To grant redundancy to the system, more than one unit can be configured as Priority Master. All the Priority Masters must be connected to the differential pressure transducer and the by-pass valve. The Multi Manager system only takes into account the signal read and sent by the Master of the moment (a specific filtering device is part of the supply; see the table below, note (8).
The Non Priority Master cannot be connected to differential pressure transducer and by-pass valve and cannot managed the VPF function. In the event that a Non Priority Master is elected as the Master of the system, the VPF function is suspended.

VPF - Devices and installation

Device	Accessory name		
	VPF (w/o DP)(SU, MM_PR) (1)	VPF (w DP)(SU, MM_PR) (2)	VPF (M3000, CPRO, MM_N-PR) (3)
Differential pressure transducer on the unit's heat exchanger and related controller expansion board	Factory installed	Factory installed	Factory installed
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)	Factory installed	Factory installed	Factory installed on the multi-unit external control system (Manager3000, ClimaPRO) Not included with option 1542 (Non Priority Master unit) (5)
Plant side differential pressure transducer	Not included (the supply is the customer's responsibility) (4)	Factory supplied, installation is the client's responsibility (4)(5)	Factory supplied with the multi-unit external control system (Manager3000, ClimaPRO); installation is the client's responsibility Not included with option 1542 (Non Priority Master unit) (4)(6)
Plant side hydraulic by-pass valve	Not included (the supply is the customer's responsibility) (7)(8)	Not included (the supply is the customer's responsibility) (7)(8)	Not included (the supply is the customer's responsibility) (7)

(1) VPF for unit without plant differential pressure transducer included (for single unit plant and Priority Master unit)
(2) VPF for unit with plant differential pressure transducer included (for single unit plant and Priority Master unit)
(3) VPF for multi-unit plant with external controller (Manager3000+, ClimaPRO+) and Non Priority Master unit
(4) It is recommended to install the differential pressure transducer on the most hydraulically critical hydronic terminal, to ensure it has a proper water flow in any load condition.
(5) Technical features of the differential pressure transducer supplied:
Model: Huba Control 692.9 120071C1
Pressure range: 0 ... + 1 bar
Output: 4-20mA
Electrical connection: DIN EN 175301-803-A (IP 65)
Pressure connection adapters: male threaded G 1/8"
(6) It is the customer's responsibility to configure the multi-unit control system (Manager3000+, ClimaPRO+ or Multi Manager) with option VPF.
(7) See attached table for information on the hydraulic by-pass design.
(8) In case of a multi-unit plant with more than one Master Priority unit (opt 1541) please specify it when emailing our sales. An additional device will be add to manage the multiple signals coming from unit's controller to the by-pass valve.

The following table provides the indications for a correct hydraulic by-pass design.

Heat exchanger minimum flow (m^3/h) (1)	Minimum by-pass diameter	Minimum by-pass valve diameter	Suggested valve model	Kvs	Suggested actuator model
From 19 to 30	DN50 (2”)	DN50 (2”)	VVG41.50	40	SKB60
Up to 37	DN65 (2" ½)	DN65 (2" ½)	VVF31.65	49	SKB60
Up to 60	DN80 (3“)	DN80 (3“)	VVF31.80	78	SKB60
Up to 95	DN100 (4“)	DN100 (4“)	VVF31.90	124	SKC60
Up to 150	DN125 (5“)	DN125 (5“)	VVF31.91	200	SKC60
Up to 230	DN150 (6”)	DN150 (6”)	VVF31.92	300	SKC60

((1) In case of a multi-unit system, the unit with the highest minimum water flow should be the reference.

VPF.D SYSTEM (delta T control)
For plants with primary and secondary circuits separated by a hydraulic decoupler.

VPF.D - Plant and unit requirements

The VPF.D logic provides the variable flow control for the plant’s primary circuit.

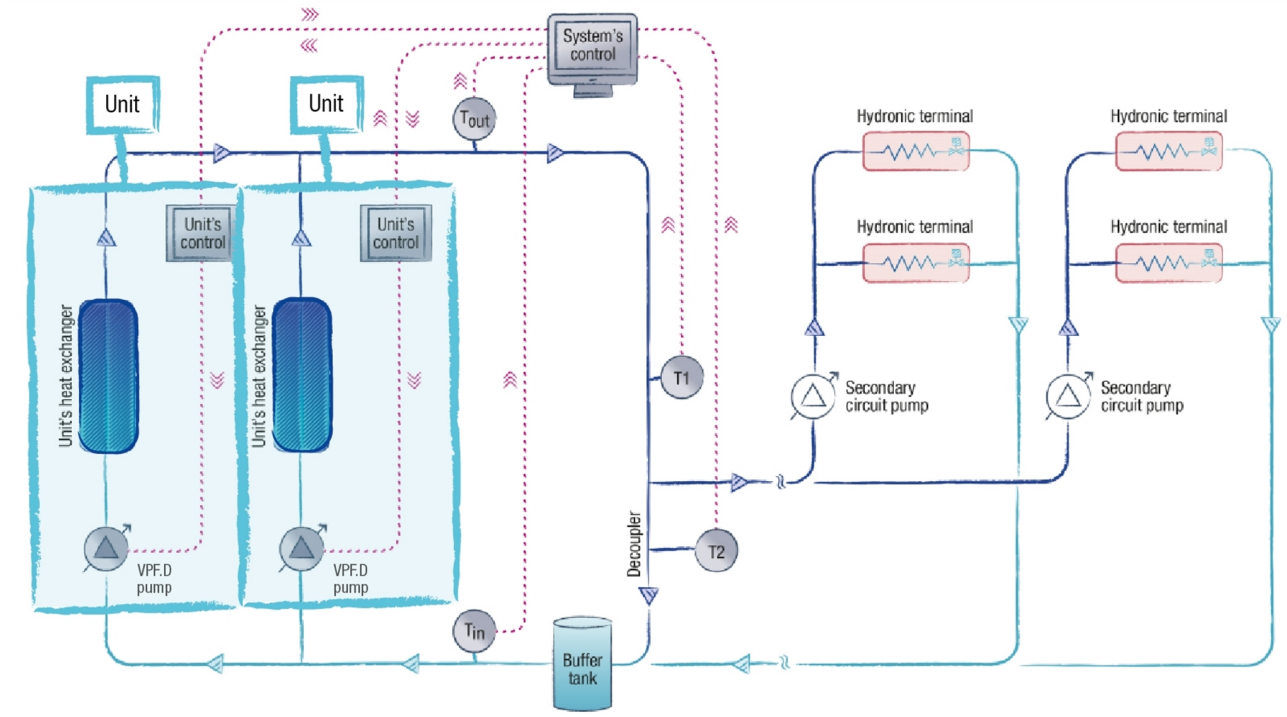
- Type of plant: primary and secondary circuits separated by a hydraulic decoupler

- Hydronic module: modulating regulation devices (0-10V signal) or variable speed pumps

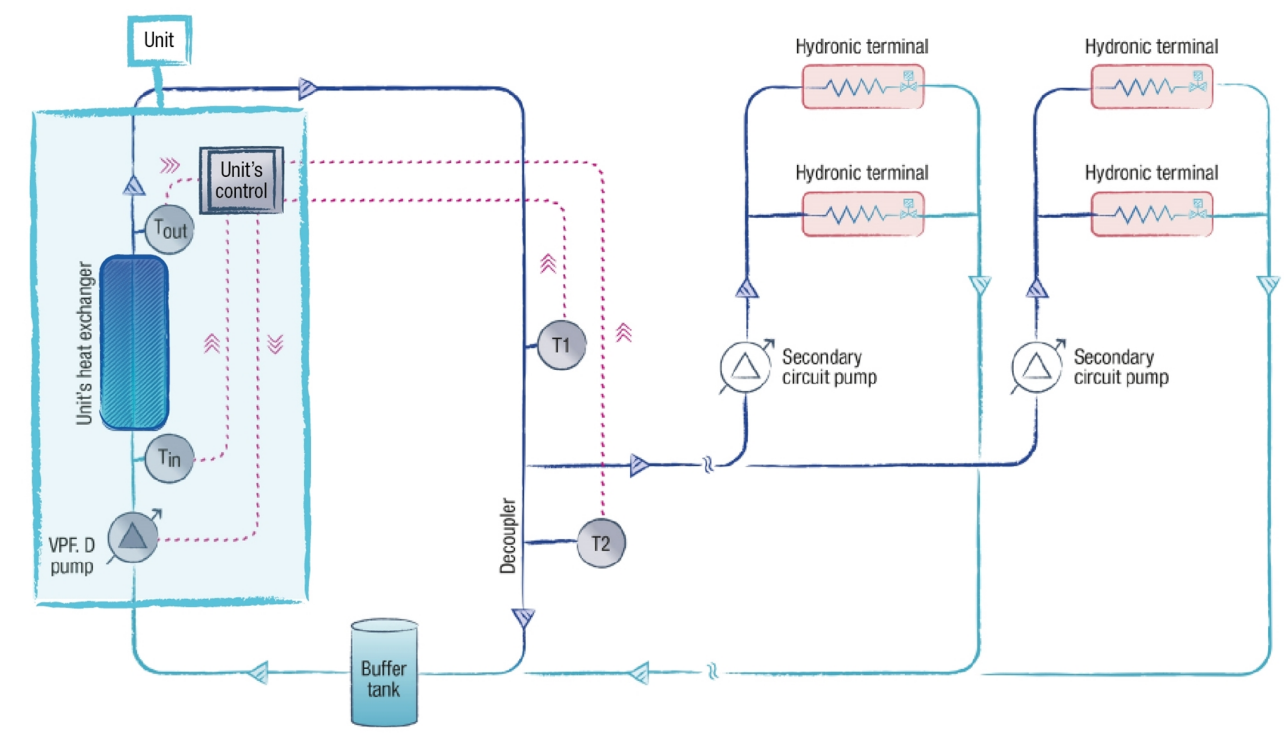
- Unit thermoregulation: control of the leaving water temperature

- Monitored parameter: delta T on primary circuit

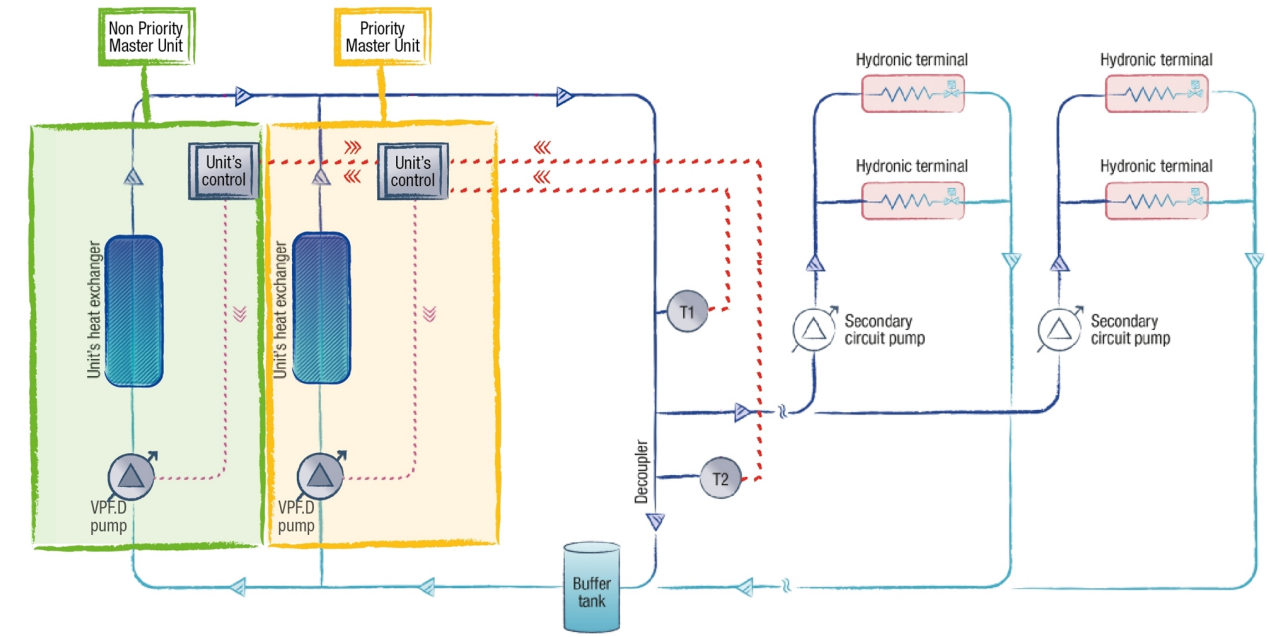
Plant diagram for multi-unit with external control system (Manager3000+ or ClimaPRO+)



Plant diagram for single unit system



Plant diagram for multi-unit system with Multi Manager



VPF.D - Operating logic

Water flow regulation

The VPF.D system monitors the temperature difference of the primary circuit (ΔT) (that corresponds to the temperature difference of the unit's heat exchanger in the case of a single unit system), and adjusts the primary circuit's pump speed in order to keep it within a defined range (ΔTmin ÷ ΔTmax). The secondary circuit water flow is completely independent and is to be managed by the client.

- If ΔTmin ≤ ΔT ≤ ΔTmax
The plant water flow is appropriate to the thermal load, the pump speed is kept constant.

- If ΔT < ΔTmax
The plant water flow exceeds what is necessary to properly cover the thermal load, the pump speed is reduced to save pump energy.

- If ΔT > ΔTmin
The plant water flow is too low to ensure the proper feed to the users, the pump speed is increased.

To prevent the returning water of the secondary circuit from recirculating through the decoupler and mixing with the delivery water, which would cause serious plant regulation problems, the VPF.D provides a safety function based on the temperatures, which are detected by two probes on the plant side: T1 on the unit delivery line and T2 on the hydraulic decoupler. If during the water flow regulation of the circuits, the flow direction in the decoupler reverses (detected temperatures T1 < T2), the system forces a quick increase of the primary water flow until the correct direction of the flow in the decoupler is restored (detected temperatures T1 = T2).

With the VPF.D system, the water flow can be reduced to 50% of the unit nominal water flow, with regards to the selection conditions, provided that the minimum water flow required by the unit's heat exchanger is respected (the control of the heat exchanger's minimum water flow is described below).
The pump speed regulation is performed with little progressive adjustments while continuously monitoring the values of both the temperature difference on the primary circuit and the temperatures of the probes T1 and T2. The absence of abrupt water flow changes prevents fluctuation due to possible conflicts with the unit's thermoregulation function (compressor regulation).

Control of the unit's minimum water flow

Under no circumstances can the primary circuit water flow be reduced below the minimum water flow required by the unit's heat exchanger.
The unit's minimum water flow is ensured by setting the minimum pump speed (service menu parameter).

Multi-unit systems

The VPF.D control logic is also the same for multi-unit systems.
The reading of the temperature difference on the primary circuit and the reading of the temperature probes T1 and T2 is managed by the multi-unit control system (Manager3000+, ClimaPRO+, Multi Manager Master).
Each unit autonomously adjusts its pump speed on the basis of the information provided by the multi-unit control system.
When the plant load requests the activation of a stand-by unit, the multi-unit control system calculates the starting speed of its pump in order to avoid excessive water flow variation of the running units.

In case of multi-unit system with Multi Manager, at least one unit must be set as Priority Master (opt 1541). To grant redundancy to the system, more than one unit can be configured as Priority Master. All the Priority Masters must be connected to the temperature probes T1 and T2. The Multi Manager system only takes into account the signal read and sent by the Master of the moment.
The Non Priority Master cannot be connected to the temperature probes T1 and T2, and cannot managed the VPF.D function. In the event that a Non Priority Master is elected as the Master of the system, the VPF.D function is suspended.

VPF.D - Devices and installation

Dispositivo	Accessory name	
	VPF.D (SU, MM_PR) (1)	VPF.D(M3000, CPRO, MM_N-PR) (2)
2 plant side NTC temperature sensors and related controller expansion board	Factory supplied (probes supplied without wells), installation is the client's responsibility (3)	Factory supplied with the multi-unit external control system, Manager3000 or ClimaPRO (probes supplied without wells); installation is the client's responsibility Not included with option 1542 (Non Priority Master unit) (3)(4)

(1) VPF.D for single unit plant and Priority Master unit
(2) VPF.D for multi-unit plant with external controller (Manager3000+ or ClimaPRO+) and Non Priority Master unit
(3) It is recommended to install the temperature probes as shown in the enclosed plant diagrams (T1 on the unit delivery line, T2 on the hydraulic decoupler)
(4) It is the customer's responsibility to configure the multi-unit control system (Manager3000+, ClimaPRO+ or Multi Manager) with option VPF.D.

The following table provides the indications for a correct hydraulic decoupler design.

Heat exchanger minimun flow (m^3/h) (1)	Minimum hydraulic decoupler diameter
From 25 to 40	DN65 (2" ½)
Up to 60	DN80 (3“)
Up to 100	DN100 (4“)
Up to 150	DN125 (5“)
Up to 225	DN150 (6”)
Up to 375	DN200 (8”)

(1) In case of a multi-unit system, the unit with the highest minimum water flow should be the reference.

14.2 Compressor rephasing and electromagnetic compatibility

Power Factor, Displacement Power Factor and Total Harmonic Distortion

The harmonic waves do not contribute to the absorption of active power from the power source, but their presence causes:
- The presence of voltage harmonics that worsen the quality of the grid power voltage thus leading to possible malfunctions of the loads connected to this power grid.
- The worsening of the unit power factor PF, resulting in higher charges for the client from the electricity distribution company.

The Power Factor PF of a system is equal to the ratio between the active power and the apparent power and it is formulated in the following way:

$$PF = \frac{1}{\sqrt{1+THD_i^2}} DPF$$

DPF (Displacement Power Factor) is equal to the cosf of the pure current wave.
THD (Total Harmonic Distorsion) is the rate which describes the amount of the harmonic distortion. In particular THDi refers to the current wave and THDv to the voltage wave.

It is therefore clear that, whenever harmonics are present, the Power Factor PF is different from the Displacement Power Factor, and that the heavier the harmonics are, the greater the difference is.

In general, frequency converters are characterized by an intrinsic constant DPF (Displacement Power Factor) value between 0.97 and 0.99, while the Power Factor PF varies according to the load conditions, usually becoming worse when load partialization increases.

The following table displays the values of Power Factor PF and current Total Harmonic Distortion for the units:

Sizes	Versions	Maximum		Maximum (EC fans)		Nominal		Nominal (EC fans)	
		PF [-]	THDi [%]	PF [-]	THDi [%]	PF [-]	THDi [%]	PF [-]	THDi [%]
0532	K	0,88	41%	0,89	43%	0,86	44%	0,88	46%
	SL-K	0,87	41%	0,89	44%	0,85	46%	0,88	48%
0602	K	0,88	43%	0,89	46%	0,86	45%	0,88	48%
	SL-K	0,88	37%	0,89	40%	0,85	43%	0,88	45%
0622	K	0,88	37%	0,89	39%	0,86	44%	0,88	47%
	SL-K	0,88	36%	0,89	39%	0,85	45%	0,88	47%
0672	K	0,89	36%	0,90	38%	0,87	40%	0,89	43%
	SL-K	0,88	37%	0,90	39%	0,87	42%	0,89	44%
0732	K	0,89	29%	0,90	31%	0,88	38%	0,89	41%
	SL-K	0,89	35%	0,90	37%	0,87	39%	0,89	41%
0802	K	0,90	38%	0,91	40%	0,89	41%	0,90	44%
	SL-K	0,90	38%	0,91	40%	0,88	42%	0,90	44%
0892	K	0,90	34%	0,91	37%	0,89	43%	0,91	46%
	SL-K	0,90	28%	0,91	30%	0,88	45%	0,90	46%
0972	K	0,90	40%	0,91	42%	0,89	42%	0,91	45%
	SL-K	0,90	40%	0,91	42%	0,89	42%	0,91	44%
1032	K	0,90	40%	0,92	42%	0,90	42%	0,91	45%
	SL-K	0,90	40%	0,91	42%	0,89	43%	0,91	45%
1082	K	0,90	33%	0,91	36%	0,89	37%	0,90	40%
	SL-K	0,90	33%	0,91	36%	0,88	38%	0,90	40%
1122	K	0,89	29%	0,90	31%	0,88	33%	0,89	36%
	SL-K	0,89	28%	0,90	31%	0,87	33%	0,89	36%
1192	K	0,89	28%	0,90	30%	0,88	33%	0,89	36%
	SL-K	0,89	27%	0,90	30%	0,87	33%	0,90	36%
1242	K	0,90	27%	0,91	29%	0,88	32%	0,90	35%
	SL-K	0,89	27%	0,90	29%	0,88	32%	0,90	35%
1382	K	0,89	29%	0,90	31%	0,88	35%	0,89	38%
	SL-K	0,89	29%	0,90	31%	0,87	37%	0,89	39%
1452	K	0,89	27%	0,90	29%	0,88	34%	0,89	37%
	SL-K	0,89	28%	0,90	30%	0,87	35%	0,89	37%
1552	K	0,89	27%	0,90	29%	0,88	33%	0,89	36%
	SL-K	0,89	27%	0,90	29%	0,88	34%	0,90	37%
1633	K	0,90	31%	0,91	34%	0,88	34%	0,90	36%
	SL-K	0,89	31%	0,91	34%	0,88	34%	0,90	36%
1703	K	0,89	28%	0,90	30%	0,88	33%	0,89	36%
	SL-K	0,89	28%	0,90	30%	0,87	33%	0,89	36%
1863	K	0,89	27%	0,90	29%	0,88	32%	0,90	35%
	SL-K	0,89	27%	0,90	29%	0,88	33%	0,90	35%

Sizes	Versions	Maximum		Nominal	
		PF [-]	THDi [%]	PF [-]	THDi [%]
0522	E	0,89	42%	0,87	49%
	SL-E	0,89	42%	0,87	49%
0572	E	0,89	40%	0,88	48%
	SL-E	0,89	40%	0,88	47%
0612	E	0,90	40%	0,88	47%
	SL-E	0,90	40%	0,88	46%
0642	E	0,90	39%	0,89	46%
	SL-E	0,90	39%	0,89	46%
0702	E	0,90	37%	0,89	43%
	SL-E	0,90	37%	0,89	43%
0792	E	0,91	44%	0,90	45%
	SL-E	0,91	44%	0,90	45%
0862	E	0,91	42%	0,90	47%
	SL-E	0,91	42%	0,90	47%
0922	E	0,91	42%	0,91	45%
	SL-E	0,91	42%	0,91	45%
0982	E	0,92	42%	0,91	44%
	SL-E	0,92	42%	0,91	44%
1062	E	0,91	36%	0,90	41%
	SL-E	0,91	36%	0,90	40%
1132	E	0,90	30%	0,89	37%
	SL-E	0,90	30%	0,89	37%
1202	E	0,90	29%	0,89	36%
	SL-E	0,90	30%	0,89	36%
1252	E	0,91	30%	0,90	36%
	SL-E	0,91	30%	0,90	36%
1402	E	0,90	30%	0,89	40%
	SL-E	0,90	30%	0,89	40%
1482	E	0,90	30%	0,89	38%
	SL-E	0,90	30%	0,89	38%

MAXIMUM: Values calculated at Maximum conditions (considering toughest possible load conditions)

The data shown above refer to measurement performed with the unit powered by 3% THDv electricity grid. Grids with different characteristics can load to results that differ from those shown in the table.

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