

AQUAFORCE®

30XBE/30XBP

Air-cooled fixed-speed
screw chiller



Very economical operation
Low sound levels
Simple installation
Environmentally responsible
Exceptional reliability

Nominal cooling capacity
271 - 1684 kW - 50 Hz



CARRIER participates in the ECP programme for
LCP-HP Check ongoing validity of certificate:
www.eurovent-certification.com

The AquaForce™ 30XBE and 30XBP liquid chillers are the economic solution for commercial and industrial applications where high reliability and economic operation in all climate conditions are key customer requirements.

The AquaForce™ 30XBE and 30XBP liquid chillers are designed to meet current and future regulations for energy efficiency and operating sound levels. They use the latest Carrier technologies:

Carrier 06T twin-rotor fixed-speed screw compressors.

Low noise 6th generation of Carrier Flying Bird™ fans with AC motor (30XBE) or EC motor (30XBP).

Carrier flooded shell-and-tube evaporator with new copper tube design for low pressure drops

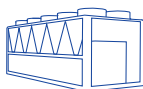
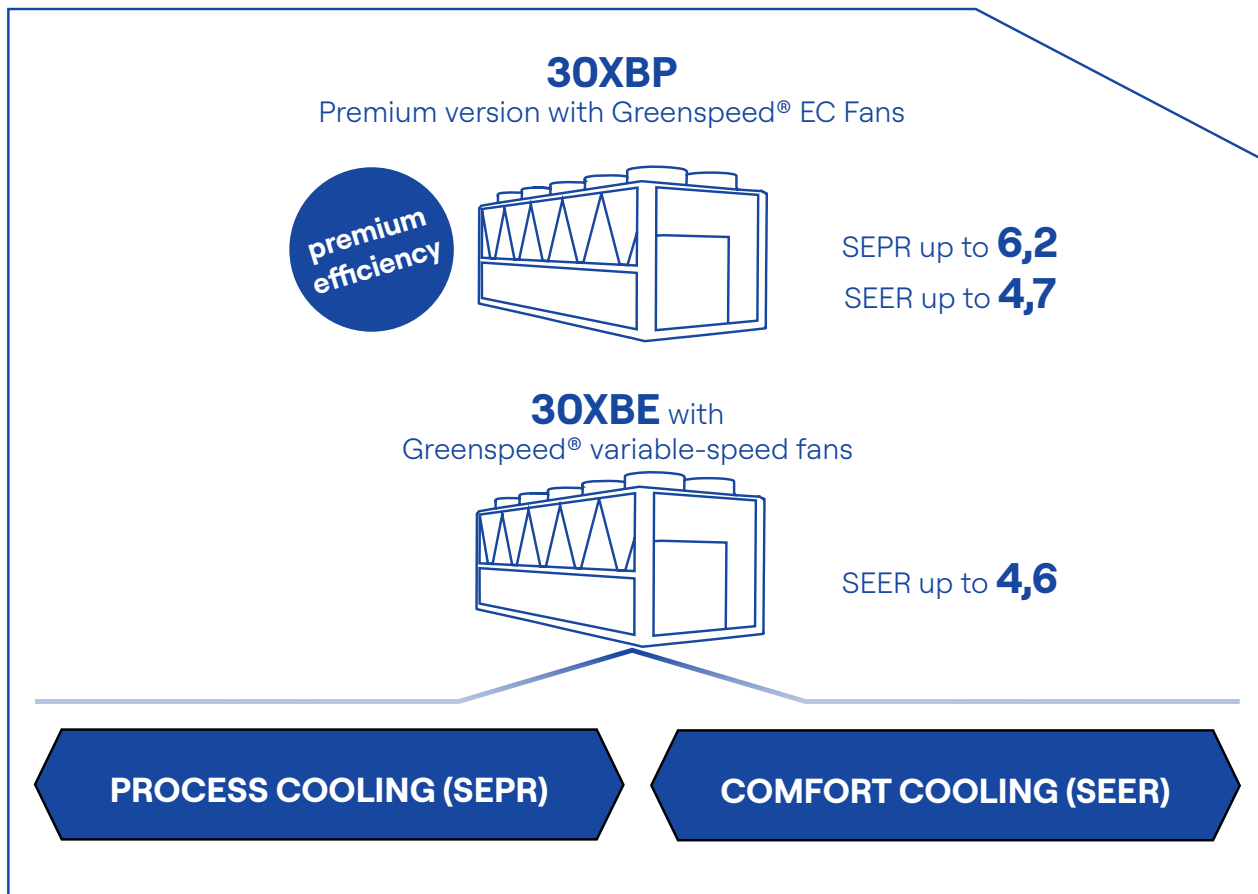
2nd generation of "V" shape Carrier Novation™ microchannel heat exchangers with optional Enviro-Shield coatings.

Carrier SmartVu™ control with color touch screen user interface that includes 10 languages and integrated web-server.



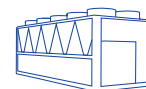
AquaForce®, the right solution for every application

Carrier's AquaForce® 30XBE range is available in two levels of efficiency to perfectly match each customer application and meet the European Ecodesign directive requirements.



30XBE with Greenspeed® intelligence

The AquaForce® 30XBE with Greenspeed® intelligence is equipped with variable-speed AC fan motors. It offers an economical solution to enhance seasonal energy efficiency levels for comfort applications. The 30XBE with Greenspeed® intelligence meets the 2021 EU Ecodesign SEER 12/7 °C requirements (Application thermal load variation from 0% to 100%).



30XBP

The AquaForce® 30XBP with Greenspeed® intelligence is the premium version with EC fans and additional heat exchange surface to improve both the full load and part load energy efficiency.

The 30XBP provides very cost effective operation in both process and comfort applications through the use of state of the art EC fan technology.

30XBE ranges Customer benefits

Absolute reliability

Carrier's AquaForce® 30XBE is the evolution of the 30XA range that counts thousands of installations worldwide. The reliability of the AquaForce® system is the result of intensive research, field experience combined with the highest quality standards. The AquaForce® range is equipped with the Carrier 06T twin screw compressors, well-known for its robustness, 99,7% of units without a compressor failure^①, and the fully aluminium Novation® microchannel heat exchangers with Super Enviro-shield™ coatings to deliver guaranteed long-term optimized performance.

① Quality rate measured over a period of 15 years operation.

Extensive scope of application

Carrier's AquaForce® 30XBE and 30XBP adapt effortlessly to a wide range of applications. Extended operating temperatures from -20 °C to 55 °C outdoor air temperatures and negative water temperatures make it ideal for various sectors of activity. From high-end office buildings and hotels to healthcare facilities, data centers and industrial projects, AquaForce® 30XBE and 30XBP are the perfect solutions to combine competitive price associated with high energy efficiency whatever the climate and wherever the location.



99,7%
of units without a
compressor failure



**Up to
40% less**
refrigerant charge



25%
smaller



**from
-20 °C
to 55 °C**



93 dB(A)

Environmental responsibility

Carrier's AquaForce® 30XBE ranges are a boost for green cities and contributes to a sustainable future. Combining a reduced load refrigerant (~40% vs traditional cu/al coils) thanks to the use of Novation® microchannel heat exchangers and high energy efficiency it significantly lowers energy consumption while reducing carbon dioxide emissions throughout its life cycle.

The AquaForce® PUREtec™ version, designed exclusively for ultra low GWP HFO R-1234ze(E), are available.

Compact

Designed with one "V shape" Novation® microchannel heat exchanger less, Carrier's AquaForce® 30XBE is 25% smaller than the previous 30XA generation. As an example, the 30XBE -500A model is 1.2 meters shorter than the previous 30XA-502A model while offering same energy efficiency ratio.

Low operating sound levels

The AquaForce® 30XBE and 30XBP range offers 4 sound levels to meet the most demanding technical requirements in noise sensitive environments. 30XBE is up to 6 dB(A) quieter than the AquaForce® 30XAV generation.

The range is equipped in standard with the 6th generation of Carrier Flying Bird fans. The new fan blade inspired by nature is the result of advanced research in our laboratory. The unit can be equipped in option with AC or EC motor to guarantee smooth fan speed variation and thus eliminate start-stop noise during part load operation.

For further acoustic comfort, the units can be equipped with an acoustic compressor and oil separator enclosure reducing radiated noise (option 15), with low speed fans (option 15LS).

Customer Benefits

The range is available in 2 efficiency levels.

- **30XBE standard unit with variable speed AC fan motors:**
The AquaForce™ 30XBE is equipped with fixed-speed screw compressors and variable-speed fans with AC motors. The 30XBE offers an economical solution to enhance seasonal energy efficiency levels for comfort applications.
(Average SEPR of 5,7, average SEER of 4,6, average EER of 3,1).
- **30XBP premium unit:**
The 30XBP premium unit is equipped with EC fans to improve both the full load and part load energy efficiency. The 30XBP provides very cost effective operation in both process and comfort applications through the use of state of the art EC fan technology.
(Average SEPR of 6,0, average SEER of 4,7, average EER of 3,2).

Very economical operation

Exceptionally high full load and part load energy efficiency:

- 30XBE version: SEER 12/7 °C up to 4.4 in accordance with EN14825.
- 30XBP version: SEER 12/7 °C up to 4.6 in accordance with EN14825.
- Twin-rotor screw compressor equipped with a high-efficiency motor and a variable capacity valve that permits exact matching of the cooling capacity to the load.
- Novation™ aluminium condenser with high-efficiency micro-channels.
- Flooded shell-and-tube evaporator with new generation of cooler tubes to reduce exchanger pressure drops, especially in applications with high percentage of glycol.
- Electronic expansion device permitting operation at a lower condensing pressure and improved utilisation of the evaporator heat exchange surface (superheat control).
- Economiser system with electronic expansion device for increased cooling capacity.

Low operating sound levels

- **Compressors:**
 - Discharge dampers integrated in the oil separator (Carrier patent).
 - Silencer on the economiser return line.
 - Compressor and oil separator acoustic enclosure, reducing radiated noise (option).
- **Condenser section:**
 - Condenser coils in wide angle V configuration, allowing quieter air flow across the coil.
 - Low-noise 6th generation Flying Bird fans, made of a composite material (Carrier patent), are now even quieter and do not generate intrusive low-frequency noise.
 - Inverter driven EC fans on 30XBP version eliminate start stop noise during part load operation.
 - Rigid fan mounting preventing start-up noise (Carrier patent).

Customer Benefits

Simple installation

- Integrated hydraulic module (option):
 - Centrifugal low or high-pressure water pump (as required), based on the pressure loss of the hydraulic installation.
 - Single or dual pump (as required) with run time balancing and automatic changeover to the back-up pump if a fault develops.
 - Water filter to protect pump against circulating debris.
 - High-capacity membrane expansion tank ensures pressurisation of the water circuit (option).
 - Thermal insulation and aluminium cladding (option).
 - Pressure sensor to check filter condition and for direct numerical display of the water flow rate with an estimate of the instantaneous cooling capacity at the control interface.
- Simplified electrical connections:
 - Main disconnect switch with high trip capacity.
 - Transformer to supply the integrated control circuit (400/24 V).
- Fast commissioning:
 - Systematic factory operation test before shipment.
 - Quick-test function for step-by-step verification of the controls, expansion devices, fans and compressors.

Environmental responsibility

- R-134a refrigerant:
 - Range designed for use with R-134a refrigerant with the possibility to upgrade to ultra-low global warming potential R-1234ze(E) by using the dedicated field retrofit kit.
 - 40% reduction in the refrigerant charge through the use of micro-channel heat exchangers.
- Leak-tight refrigerant circuit:
 - Reduction of leaks as no capillary tubes and flare connections are used.
 - Verification of pressure transducers and temperature sensors without transferring refrigerant charge.
 - Liquid line service valve for simplified maintenance (option).

Exceptional reliability

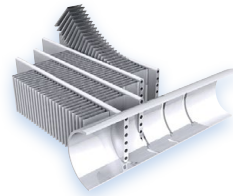
- Screw compressors:
 - Industrial-type screw compressors with oversized bearings and motor cooled by suction gas.
 - All compressor components are easily accessible on site minimising down-time.
 - Dedicated electronic compressor protection module.
- Air condenser:
 - 2nd generation of "V" shape Carrier Novation™ aluminium microchannel heat exchangers (MCHE) with high corrosion resistance. The all aluminium design eliminates the formation of galvanic currents between aluminium and copper that cause coil corrosion in saline or corrosive environments.
- Evaporator:
 - Thermal insulation with aluminium sheet finish (option) for improved resistance to mechanical and UV damage.
- Auto-adaptive control:
 - Control algorithm prevents excessive compressor cycling (Carrier patent).
 - Automatic compressor unloading in case of abnormally high condensing pressure. If condenser coil fouling or fan failure occurs, the AquaForce continues to operate, but at reduced capacity.
- Exceptional endurance tests:
 - Partnerships with specialised laboratories and use of sophisticated finite element stress analysis for the design of critical components.
 - Transport simulation test in the laboratory on a vibrating table. The test is based on a military standard and equivalent to 4000 km by truck.
 - Salt mist corrosion resistance test in the laboratory for increased corrosion resistance.

30XB Technical insights



6th generation of flying bird™ fans with ac or ec motor

- Exclusive Carrier design.
- Fan blade design inspired by nature.
- 30XBE standard version with variable-speed fans and AC motor.
- EC fans available as standard on 30XBP premium version.



2nd generation of "v" shape novation® micro channel heat exchangers

- Exclusive Carrier design.
- High reliability with long-life aluminum alloy.
- Significantly reduces refrigerant load (~40% vs cu/al coils).
- Enviro-shield™ coating for mildly corrosive environments.
- Super Enviro-shield™ coating for highly corrosive environments (industry or marine applications).



Fixed-speed single or dual pumps with ac motor (option)

- High static pressure (~180 kPa) available.
- Available on all sizes up to 400 kW.

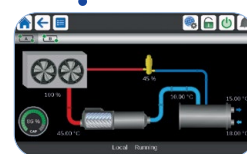


CARRIER fixed-speed 06t twin screw compressor with ac motor

- Exclusive Carrier design.
- Twin screw compressor designed for fixed speed operation.
- Sliding valve control (30%-100%).
- Bearing life exceeding 100 000 hours.
- 99,7% of units without compressor default.

Flooded shell and tube evaporator

- Exclusive Carrier design.
- Flooded technology for high energy efficiency.
- New generation of copper tubes with specific profile to reduce pressure drops when operating with glycol.



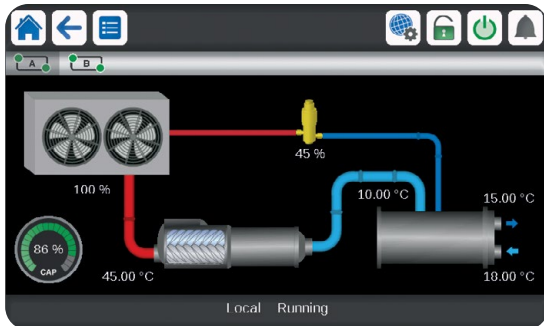
Advanced SmartVu™ with 5 inch color touch screen interface

- Exclusive Carrier design.
- 10 languages available: DE, EN, ES, FR, IT, NL, PT, TR, TU + one additional customer choice.
- Touch screen user interface.
- BACnet, J-Bus or LON communication interfaces.
- Optional wireless connectivity.
- Web server capabilities-easy remote access via internet.
- Trending capabilities.

Technical insights

SmartVu™ Control

SmartVu™, user interface



- New innovative smart control features:
 - An intuitive and user-friendly, coloured, 5" interface (7" optional).
 - Direct access to the unit's technical drawings and the main service documents.
 - Screen-shots with concise and clear information in local languages.
 - Complete menu, customised for different users (end user, service personnel and Carrier-factory technicians).
 - Easy access to the control panel with inclined touch screen mounting to ensure legibility under any lighting conditions.
 - Safe operation and unit setting: password protection ensures that unauthorised people cannot modify any advanced parameters.
 - Simple and «smart» intelligence uses data collection from the constant monitoring of all machine parameters to optimise unit operation.
- Energy management:
 - Internal time schedule clock controls chiller on/off times and operation at a second set-point.
 - The DCT (Data Collection Tool) records the alarms history to simplify and facilitate service operations.

Remote Management (Standard)

- Units with SmartVu™ control can be easily accessed from the internet, using a PC with an Ethernet connection. This makes remote control quick and easy and offers significant advantages for service operations.
- AquaForce is equipped with an RS485 serial port that offers multiple remote control, monitoring and diagnostic possibilities. When networked with other Carrier equipment through the CCN (Carrier Comfort Network - proprietary protocol), and in conjunction with one of Carrier's network products (Chiller System Manager or Plant system Manager) it forms part of a fully integrated and balanced HVAC system (optional).
- AquaForce also communicates with other building management systems via optional communication gateways.

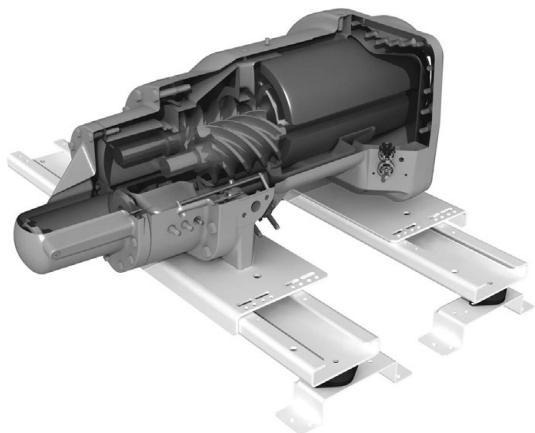
- The following commands/visualisations are possible from remote connection:
 - Start/stop of the machine.
 - Dual set-point management: through a dedicated contact is possible to activate a second set-point (for example, during unoccupied mode).
 - Demand limit setting: to limit the maximum chiller capacity to a predefined value.
 - Water pump control: these outputs control the contactors of one/two evaporator water pumps.
 - Automatic changeover of pumps in the event of a fault (only with option 116S).
 - Operation visualisation: indication if the unit is operating or in stand-by (no cooling load), (no cooling load) - alarm visualisation.

Remote Management (EMM option)

- The Energy Management Module (EMM) offers extended remote control possibilities:
 - Room temperature: Permits set-point reset based on the building indoor air temperature (if Carrier thermostat are installed).
 - Set-point reset: Allows reset of the cooling set-point based on a 4-20 mA or 0-10 V signal.
 - Demand limit: Permits limitation of the maximum chiller capacity based on 0-10 V signal.
 - Demand limit 1 and 2: Closing of these contacts limits the maximum chiller capacity to two predefined values.
 - User safety: This contact can be used for any customer safety loop; opening the contact generates a specific alarm.
 - Ice storage end: When ice storage has finished, this input permits return to the second set-point (unoccupied mode).
 - Time schedule override: closing this contact cancels the programmed time schedule.
 - Out of service: This signal indicates that the chiller is completely out of service.
 - Chiller capacity: This analogue output (0-10 V) gives an immediate indication of the chiller capacity.
 - Alert indication: This volt-free contact indicates the necessity to carry out a maintenance operation or the presence of a minor fault.
 - Compressors running status: Set of outputs (one for each compressor) indicating which compressors are running.

Technical insights

06T Screw Compressor



99.7%^① of units without a compressor failure.

① Quality rate measured over a period of 15 years operation.

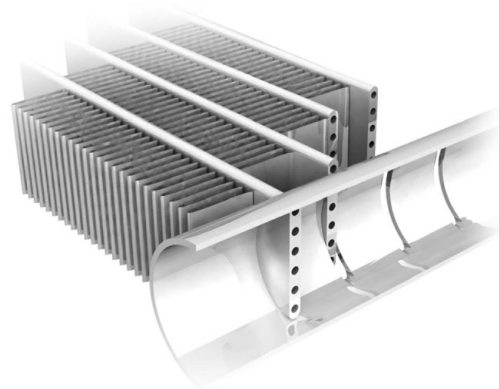
The Carrier 06T screw compressor benefits from Carrier's long experience in the development of twin-rotor screw compressors. The compressor is equipped with bearings with oversized rollers, oil pressure lubricated for reliable and durable operation, even at maximum load.

A variable control valve controlled by the oil pressure permits infinitely variable cooling capacity. This system allows optimal adjustment of the compressor cooling capacity and ensures exceptionally high stability of the chilled water leaving temperature.

Among the other advantages: if a fault occurs e.g. if the condenser is fouled or at very high outside temperature, the compressor does not switch off, but continues operation with a reduced capacity (unloaded mode).

The compressor is equipped with a separate oil separator that minimises the amount of oil in circulation in the refrigerant circuit and, with its integrated silencer, considerably reduces discharge gas pulsations for much quieter operation.

Novation® Heat Exchangers with Micro-Channel coil Technology



Already utilised in the automobile and aeronautical industries for many years, the Novation™ MCHE micro-channel heat exchanger used in the AquaForce is entirely made of aluminium. This one-piece concept significantly increases its corrosion resistance by eliminating the galvanic currents that are created when two different metals (copper and aluminium) come into contact in traditional heat exchangers. Unlike traditional heat exchangers the Novation™ MCHE heat exchanger can be used in moderate marine and urban environments (Carrier recommendation).

From an energy efficiency point-of-view the Novation™ MCHE heat exchanger is approximately 10% more efficient than a traditional coil and allows a 40% reduction in the amount of refrigerant used in the chiller. The low thickness of the Novation™ MCHE reduces air pressure losses by 50% and makes it susceptible to very little fouling (e.g. by sand). Cleaning of the Novation™ MCHE heat exchanger is very fast using a high-pressure washer.

Carrier Novation® MCHE with Super Enviro-shield® coating, the ideal customer choice.

To further enhance long-term performance, and to protect coils from early deterioration, Carrier offers (as options) dedicated treatments for installations in corrosive environments.

The Novation™ MCHE with Enviro-Shield protection (option 262) are recommended for installations in moderately corrosive environments. The Enviro-Shield protection utilises corrosion inhibitors which actively arrest oxidation in case of mechanical damage.

The Novation™ MCHE with the exclusive Super Enviro-Shield protection (option 263) are recommended for installations in corrosive environments. The Super Enviro-Shield protection consist in an extremely durable and flexible epoxy coating uniformly applied over all coil surfaces for complete isolation from the contaminated environment.

Technical insights

Novation® Heat Exchangers with Micro-Channel coil Technology

After a total of more than 7 000 hours of testing following various test standards in Carrier laboratories, the Carrier Novation® MCHE with Super Enviro-shield® coating appears to be the ideal customer choice to minimize the harmful effects of corrosive atmospheres and ensure long equipment life.

- Best corrosion resistance per ASTM B117/D610 test.
- Best heat transfer performance per Carrier Marine 1 test.
- Proven reliability per ASTM B117 test.

Coil Types (ranked by performance)	Visual Corrosion Evaluation	Heat Transfer Performance Degradation	Time to Failure	Test Campaign Conclusions
Super Enviro-shield® Novation™ MCHE	Very good	Very good	No coil leak	Best
Super Enviro-shield® Cu/Al coil	Very good	Good	No coil leak	Very good
Enviro-shield® Novation™ MCHE	Very good	Good	No coil leak	Very good
Al/Al coil	Very good	Good	No coil leak	Very good
Novation™ MCHE	Good	Good	No coil leak	Good
Cu/Cu coil	Good	Good	Leak	Acceptable
Blygold® Cu/Al coil	Good	Good	No coil leak	Acceptable
Precoat Cu/Al coil	Bad	Bad	No coil leak	Bad
Cu/Al coil	Bad	Bad	No coil leak	Bad

New Generation of Flying Bird VI fans with EC motor



The 30XBE and 30XBP utilize Carrier's 6th generation Flying Bird™ fan technology, engineered for maximum efficiency, super low noise, and wide operating range. The fan includes Carrier patented rotating shroud technology and back-swept blades with a unique wave-serration trailing edge inspired from nature.

It was designed and optimized for the 30XB ranges air management system configuration and heat exchanger technology and is offered with AC asynchronous motor or EC Motor depending on the versions. The fan meets the latest European eco-design requirements for fan efficiency. The fan uses Carrier's robust and proven injection molded composite-thermoplastic construction.

Options

Options	No.	Description	Advantages	Use for 30XBE / 30XBP
Corrosion protection, traditional coils	3A	Fins made of pre-treated aluminum (polyurethane and epoxy)	Improved corrosion resistance, recommended for moderate marine and urban environments	30XBE/30XBP 250-1700
Medium-temperature brine solution	5	Implementation of new control algorithms and redesigned evaporator to allow chilled brine solution production down to -12 °C when ethylene glycol is used (-8 °C with propylene glycol)	Covers specific applications such as ice storage and industrial processes	30XBE/30XBP 250-1700
Low-temperature brine solution	6	Implementation of new control algorithms and redesigned evaporator to allow chilled brine solution production down to -15 °C when ethylene glycol is used (-10 °C with propylene glycol)	Covers specific applications such as ice storage and industrial processes	30XBE/30XBP 250-1700
Light-brine solution, down to -3 °C	8	Implementation of new control algorithms to allow chilled brine solution production down to -3 °C when ethylene glycol is used (0 °C with propylene glycol)	Matches with most application requirements for ground-sourced heat pumps and fits with many industrial processes requirements	30XBE/30XBP 250-1700
Unit equipped for air discharge ducting	10	Fans equipped with discharge connection flanges - maximum available pressure 60 Pa	Facilitates connections to the discharge ducts	30XBE/30XBP 250-1700
Low noise level	15	Aesthetic and sound absorbing compressor enclosure	Noise level reduction	30XBE/30XBP 250-1700
Very low noise level	15LS	Aesthetic and sound absorbing compressor enclosure associated with low-speed fans	Noise level reduction in sensitive environments	30XBE/30XBP 250-1700
IP54 control box	20A	Increased leak tightness of the unit	Protects the inside of the electrical box from dust, water and sand. In general this option is recommended for installations in polluted environments	30XBE/30XBP 250A-1700A
Tropicalisation of the electrical box	22	Electrical box equipped with an electrical heater and a fan. Electrical connections on the compressors painted with a special varnish and covered with an anti-condensation foam.	Allows safe operation in typical "tropical" climate. This option is recommended for all applications where humidity inside the electrical box can reach 80% at 40 °C and unit can remain in stand-by for a long time under these conditions.	30XBE/30XBP 250-1700
Grilles and enclosure panels	23	Metal grilles on the 4 unit sides, plus side enclosure panels at each end of each coil	Improves aesthetics, protection against intrusion to the unit interior, coil and piping protection against impacts.	30XBE/30XBP 250-1700
Enclosure panels	23A	Side enclosure panels at each end of each coil	Improves aesthetics, coil and piping protection against impacts.	30XBE/30XBP 250-1700
Low inrush current	25C	Specific compressor loading and unloading sequence to limit the unit start-up current	Reduced start-up current	30XBE/30XBP 250-1700
Water exchanger frost protection	41A	Electric resistance heater on the water exchanger and discharge valve	Water exchanger frost protection down to -20 °C outside temperature	30XBE/30XBP 250-1700
Evaporator & hydraulic module frost protection	41B	Electric resistance heater on water exchanger, discharge valve and hydraulic module	Water exchanger and hydraulic module frost protection down to -20 °C outside temperature	30XBE/30XBP 250-500
Total heat recovery	50	Unit equipped with additional heat exchanger in parallel with the condenser coils.	Production of free hot-water simultaneously with chilled water production	30XBE/30XBP 250-1000
Lead/Lag operation	58	Unit equipped with supplementary water outlet temperature sensor kit (to be field installed) allowing Lead/Lag operation of two units connected in parallel	Optimised operation of two units connected in parallel operation with operating time equalisation	30XBE/30XBP 250-400
Single power connection point	81	Unit power connection via one main supply connection	Quick and easy installation	30XBE/30XBP 1100-1500
Evap. and pumps with aluminum jacket	88A	Evaporator and pumps covered with an aluminum sheet for thermal insulation protection	Improved resistance to aggressive climate conditions	30XBE/30XBP 250-400

Options

Options	No.	Description	Advantages	Use for 30XBE / 30XBP
Service valve set	92	Liquid line valve (evaporator inlet), compressor suction and discharge line valves and economiser line valve	Allow isolation of various refrigerant circuit components for simplified service and maintenance	30XBE/30XBP 250-1700
Compressor discharge valves	93A	Shut-off valve on the compressor discharge piping	Simplified maintenance	30XBE/30XBP 250-1700
Evaporator with one pass more	100A	Evaporator with one pass more on the water side	Optimise chiller operation when the chilled water circuit is designed with low waterflows (high evaporator delta T)	30XBE/30XBP 250-1700
21 bar evaporator	104	Reinforced evaporator for extension of the maximum water-side service pressure to 21 bar (standard 10 bar)	Covers applications with a high water column evaporator side (typically high-rise buildings)	30XBE/30XBP 250-1700
Reversed evaporator water connections	107	Evaporator with reversed water inlet/outlet	Easy installation on sites with specific requirements	30XBE/30XBP 250-1700
HP single-pump hydraulic module	116R	Hydraulic module equipped with water filter, one high pressure pump, drain valve and pressure transducers (expansion tank & aluminum jacket not included).	Easy and fast installation (plug & play). Increased system reliability	30XBE/30XBP 250-400
HP dual-pump hydraulic module	116S	Hydraulic module equipped with water filter, two high pressure pumps, drain valve and pressure transducers (expansion tank & aluminum jacket not included).	Easy and fast installation (plug & play). Increased system reliability	30XBE/30XBP 250-400
Lon gateway	148D	Bi-directional communication board complying with Lon Talk protocol	Connects the unit by communication bus to a building management system	30XBE/30XBP 250-1700
Bacnet over IP	149	Bi-directional high-speed communication using BACnet protocol over Ethernet network (IP)	Easy and high-speed connection by ethernet line to a building management system. Allows access to multiple unit parameters	30XBE/30XBP 250-1700
Modbus over IP and RS485 communication gateway	149B	Bi-directional high-speed communication using the Modbus over Ethernet network (IP) protocol	Easy, quick connection via Ethernet line to a building technical management system. Allows access to several unit parameters.	30XBE/30XBP 250-1700
Energy Management Module	156	EMM Control board with additional inputs/outputs. See Energy Management Module option chapter	Extended remote control capabilities (Set-point reset, ice storage end, demand limits, boiler on/off command...)	30XBE/30XBP 250-1700
7" user interface	158A	Control supplied with a 7 inch colour touch screen user interface	Enhanced ease of use.	30XBE/30XBP 250-1700
Input contact for Refrigerant leak detection	159	0-10 V signal to report any refrigerant leakage in the unit directly on the controller (the leak detector itself must be supplied by the customer)	Immediate customer notification of refrigerant losses to the atmosphere, allowing timely corrective actions	30XBE/30XBP 250-1700
Dual relief valves on 3-way valve	194	Three-way valve upstream of dual relief valves on the evaporator and the oil separator	Valve replacement and inspection facilitated without refrigerant loss. Comforms to European standard EN378/BGVD4	30XBE/30XBP 250-1700
Compliance with Swiss regulations	197	Additional tests on the water heat exchangers: supply (additional of PED documents) supplementary certificates and test certifications	Conformance with Swiss regulations	30XBE/30XBP 250-1700
Compliance with Russian regulations	199	EAC certification	Conformance with Russian regulations	30XBE/30XBP 250-1700
Compliance with Australian regulations	200	Unit approved to Australian code	Conformance with Australian regulations	30XBE/30XBP 250-1700
Insulation of the evap. in/out ref.lines	256	Thermal insulation of the evaporator entering/leaving refrigerant lines with flexible, UV resistant insulation	Prevents condensation on the evaporator entering/leaving refrigerant lines	30XBE/30XBP 250-1700

Options

Options	No.	Description	Advantages	Use for 30XBE / 30XBP
Enviro-Shield anti-corrosion protection	262	Coating by conversion process which modifies the surface of the aluminum producing a coating that is integral to the coil. Complete immersion in a bath to ensure 100% coverage. Minimal heat transfer variation, tested 4000 hours salt spray per ASTM B117	Improved corrosion resistance, recommended for use in moderately corrosive environments	30XBE/30XBP 250-1700
Super Enviro-Shield anti-corrosion protection	263	Extremely durable and flexible epoxy polymer coating applied on micro channel heat exchangers by electro coating process, final UV protective topcoat. Minimal heat transfer variation, tested 6000 hours constant neutral salt spray per ASTM B117, superior impact resistance per ASTM D2794	Improved corrosion resistance, recommended for use in extremely corrosive environments	30XBE/30XBP 250-1700
Welded evaporator connection kit	266	Victaulic pipe adapters for welded joints	Easy installation	30XBE/30XBP 250-1700
Evaporator with aluminum jacket	281	Evaporator covered with an aluminum sheet for thermal insulation protection	Improved resistance to aggressive climate conditions	30XBE/30XBP 250-1700
230 V electrical plug	284	230 VAC power supply source provided with plug socket and transformer (180 VA, 0,8 Amps)	Permits connection of a laptop or an electrical device during unit commissioning or servicing	30XBE/30XBP 250-1700
Expansion tank	293	6 bar expansion tank integrated in the hydraulic module (requires hydraulic module option)	Easy and fast installation (plug & play), & Protection of closed water systems from excessive pressure	30XBE/30XBP 250-400
Mexico screw compressor	297	Screw compressor made in Mexico	-	30XB(E/P) 250-1700
Variable Water Flow control	299	Hydraulic control function package that permits control of the water flow rate based on different possible logics (at customer choice): constant ΔT , constant outlet pressure and "fixed-speed" control	When variable-speed pumps on the primary circuit, the VWF control modulates flow rate through the evaporator, minimising pump consumption while ensuring safe/optimised chiller operation	30XBE/XBP 250-400
Free-cooling dry cooler control	313	Remote control of 09PE or 09VE dry cooler based on a 0-10V signal.	Easy system management, extended control capabilities of a remote dry cooler used in free-cooling mode	30XBE/XBP 250-1700
Compliance with UAE regulation	318	Additional label on the unit with rated power input, rated current and EER following AHRI 550/590 (I-P)	Compliance with ESMA standard UAE.S 5010-5 :2019.	30XBE/30XBP 250-1700
Compliance with Qatar regulation	319	Specific nameplate on the unit with power supply 415 V+/-6%	Compliance with KAHRAMAA regulation in Qatar.	30XBE/30XBP 250-1700
Compliance with Morocco regulation	327	Specific documents according Morocco regulation	Conformance with Morocco regulations	30XBE/30XBP 250-1700
Delivery with plastic tarp	331	Plastic tarp covering units with strapping and campled on the wooden pallet.	Allow unit to avoid dust and dirt from the outside environment during stocking and shipping.	30XBE/30XBP 250-1700
Compliance with Turkish regulations	332	Specific CE labelling according Turkish regulation. This CE marking is valid for use of the equipment in Turkey only as it does not cover Ecodesign Directive 2009/125/CE	CE marking compliant with Turkey regulations	30XBE/30XBP 250-1700

Physical data, sizes 30XBE-250A to 800A

30XBE				250A	300A	350A	400A	450A	500A	600A	700A	750A	800A	
Cooling														
Standard unit Full load performances*	CA1	Nominal capacity	kW	277	300	322	392	444	494	623	676	730	782	
		EER	kW/kW	3,15	3,12	3,08	3,18	3,11	3,08	3,22	3,28	3,10	3,10	
Unit with option 15LS Full load performances*	CA1	Nominal capacity	kW	271	293	313	384	432	478	607	659	709	757	
		EER	kW/kW	3,13	3,08	3,00	3,16	3,03	2,93	3,13	3,20	2,97	2,93	
Seasonal energy efficiency**		SEER _{12/7°C} Comfort low temp.	kWh/kWh	4,47	4,46	4,40	4,33	4,56	4,55	4,55	4,62	4,56	4,55	
		ηs cool _{12/7°C}	%	176	175	173	170	179	179	179	182	179	179	
		SEPR _{12/7°C} Process high temp.	kWh/kWh	5,70	5,69	5,65	5,78	5,72	5,74	5,68	5,79	5,63	NA	
Unit with Option 5 Seasonal energy efficiency**		SEPR _{2/-8°C} Process medium temp.***	kWh/kWh	2,72	3,02	3,18	2,81	3,51	3,56	3,65	3,67	3,44	3,35	
Unit with Option 299 Seasonal energy efficiency**		SEER _{12/7°C} Comfort low temp.	kWh/kWh	4,47	4,47	4,43	4,49	NA	NA	NA	NA	NA	NA	
		ηs cool _{12/7°C}	%	176	176	174	177	NA	NA	NA	NA	NA	NA	
		SEPR _{12/7°C} Process high temp.	kWh/kWh	5,72	5,71	5,68	5,83	NA	NA	NA	NA	NA	NA	
Unit with Option 6 Seasonal energy efficiency**		SEPR _{2/-8°C} Process medium temp.***	kWh/kWh	3,29	3,46	3,52	3,26	3,42	3,5	3,5	3,62	3,38	3,34	
Unit with 15LS Seasonal energy efficiency**		SEER _{12/7°C} Comfort low temp.	kWh/kWh	4,49	4,48	4,41	4,33	4,56	4,57	4,56	4,62	4,56	4,58	
		ηs cool _{12/7°C}	%	176	176	173	170	179	180	179	182	179	180	
		SEPR _{12/7°C} Process high temp.	kWh/kWh	5,82	5,88	5,79	5,57	5,70	5,79	5,92	5,93	5,79	5,72	
Unit with Option 5 & 15LS Seasonal energy efficiency**		SEPR _{2/-8°C} Process medium temp.***	kWh/kWh	2,75	3,10	3,29	2,83	3,54	3,67	3,79	3,82	3,55	3,57	
Unit with Option 299 & 15LS Seasonal energy efficiency**		SEER _{12/7°C} Comfort low temp.	kWh/kWh	4,47	4,47	4,42	4,47	NA	NA	NA	NA	NA	NA	
		ηs cool _{12/7°C}	%	176	176	174	176	NA	NA	NA	NA	NA	NA	
		SEPR _{12/7°C} Process high temp.	kWh/kWh	5,84	5,91	5,82	5,61	NA	NA	NA	NA	NA	NA	
Unit with Option 6 & 15LS Seasonal energy efficiency**		SEPR _{2/-8°C} Process medium temp.***	kWh/kWh	3,35	3,58	3,71	3,38	3,64	3,61	3,63	3,78	3,50	3,55	
Sound levels														
Standard unit														
Sound power ^①			dB(A)	99	99	99	99	101	99	101	99	103	103	
Sound pressure at 10 m ^②			dB(A)	67	67	67	67	69	67	68	67	70	70	

* In accordance with standard EN14511-3:2022.

** In accordance with standard EN14825:2022.

*** With EG 30%.

CA1 Cooling mode conditions: Evaporator water entering/leaving temperature 12 °C / 7 °C, outside air temperature 35 °C, evaporator cooling factor 0 m².K/W.

ηs cool_{12/7°C} & SEER_{12/7°C} **Bold values compliant to Ecodesign regulation: (EU) No 2016/2281 for Comfort application.**

SEPR_{2/-8°C} **Bold values compliant to Ecodesign regulation: (EU) No 2015/1095 for Process application Medium Temperature.**

SEPR_{12/7°C} **Bold values compliant to Ecodesign regulation: (EU) No 2016/2281 for Process application High Temperature.**

NA Non Authorized for the specific application for CEE market.

① in dB ref=10¹² W, 'A' weighted. Declared dual-number noise emission values in accordance with ISO 4871 with an associated uncertainty of +/-3dB(A). Measured in accordance with ISO 9614-1 and certified by Eurovent.

② In dB ref 20μPa, 'A' weighted. Declared dual-number noise emission values in accordance with ISO 4871 with an associated uncertainty of +/-3dB(A). For information, calculated from the sound power Lw(A).



Eurovent certified values

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Physical data, sizes 30XBE-250A to 800A

30XBE		250A	300A	350A	400A	450A	500A	600A	700A	750A	800A
Unit + option 15[®]											
Sound power ^①	dB(A)	93	93	94	95	95	95	97	96	97	98
Sound pressure at 10 m ^②	dB(A)	61	61	62	63	63	63	65	63	64	65
Unit + option 15LS[®]											
Sound power ^①	dB(A)	87	87	87	90	91	91	93	92	94	94
Sound pressure at 10 m ^②	dB(A)	55	55	55	58	59	59	60	59	61	61
Dimensions											
Standard unit											
Length	mm	3604	3604	3604	4798	4798	4798	7186	7186	7186	7186
Width	mm	2253	2253	2253	2253	2253	2253	2253	2253	2253	2253
Height	mm	2322	2322	2322	2322	2322	2322	2322	2322	2322	2322
Operating weight^③											
Standard unit	l	3040	3071	3091	3674	3737	3798	4797	4943	5201	5514
Unit + option 15 [®]	l	3308	3339	3359	3973	4036	4097	5128	5274	5532	5845
Unit + option 50 [®]		3385	3417	3437	4106	4248	4590	5550	5696	6056	6368
Compressors		06T semi-hermetic screw compressor, 50 r/s									
Circuit A		1	1	1	1	1	1	1	1	1	1
Circuit B		1	1	1	1	1	1	1	1	1	1
No. of control stages		-	-	-	-	-	-	-	-	-	-
Refrigerant^④		R-134a (GWP=1430 following AR4)									
Circuit A	kg	39	37	37	52	53	55	60	61	69	69
	teqCO ₂	55,8	52,9	52,9	74,4	75,8	77,9	85,8	87,2	98,0	98,7
Circuit B	kg	40	38	39	40	40	37	61	64	61	67
	teqCO ₂	57,2	54,3	55,8	57,2	57,2	52,9	87,2	91,5	86,5	95,8
Oil		For more information, contact Carrier ERCD									
Circuit A	l	20,8	20,8	20,8	23,5	23,5	23,5	23,5	23,5	27,6	27,6
Circuit B	l	20,8	20,8	20,8	20,8	20,8	20,8	23,5	23,5	23,5	23,5
Capacity control		SmartVu™, , Electronic Expansion Valve (EXV)									
Minimum capacity	%	15	15	15	15	15	15	15	15	15	15
Air heat exchanger		Aluminum micro-channel coils (MCHE)									
Fans		FLYING-BIRD 6, axial fan with rotating impeller									
Standard unit											
Quantity		6	6	6	8	8	8	11	12	12	12
Maximum total air flow	l/s	28920	28920	28920	38560	38560	38560	53020	57840	57840	57840
Maximum rotation speed	r/s	15,7	15,7	15,7	15,7	15,7	15,7	15,7	15,7	15,7	15,7
Unit + option 15LS											
Maximum total air flow	l/s	23580	23580	23580	31440	31440	31440	43230	47160	47160	47160
Maximum rotation speed	r/s	11,7	11,7	11,7	11,7	11,7	11,7	11,7	11,7	11,7	11,7

① In dB ref=10¹² W, 'A' weighted. Declared dual-number noise emission values in accordance with ISO 4871 with an associated uncertainty of +/-3dB(A). Measured in accordance with ISO 9614-1 and certified by Eurovent.

② In dB ref 20µPa, 'A' weighted. Declared dual-number noise emission values in accordance with ISO 4871 with an associated uncertainty of +/-3dB(A). For information, calculated from the sound power Lw(A).

③ Options : 15 = Low noise, 15LS = Very Low noise.

④ Values are guidelines only. Refer to the unit name plate.



Eurovent certified values

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Physical data, sizes 30XBE-250A to 800A

30XBE		250A	300A	350A	400A	450A	500A	600A	700A	750A	800A
Water heat exchanger		Flooded multi-tube type									
Water volume	l	58	61	61	66	70	77	79	94	98	119
Max. water-side operating pressure without hydraulic module	kPa	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Hydraulic module (option)		Pump, Victaulic screen filter, relief valve, water and air drain valve, pressure sensors, expansion tank (option)									
Pump		Centrifugal pump, monocell, 48,3r/s, low or high pressure (as required), single or dual (as required)									
Expansion vessel volume	l	50	50	50	50	-	-	-	-	-	-
Max. water-side operating pressure with hydraulic module	kPa	400	400	400	400	-	-	-	-	-	-
Water connections without or with hydraulic module		Victaulic® type									
Standard & option 8, without option 116											
Nominal diameter	in	5	5	5	5	5	5	5	6	6	6
Actual outside diameter	mm	141,3	141,3	141,3	141,3	141,3	141,3	141,3	168,3	168,3	168,3
Options 5, 6 & 100A											
Nominal diameter	in	4	4	4	4	4	4	5	5	5	5
Actual outside diameter	mm	114,3	114,3	114,3	114,3	114,3	114,3	141,3	141,3	141,3	141,3
Options 100C											
Nominal diameter	in	5	5	5	5	5	5	6	6	6	6
Actual outside diameter	mm	141,3	141,3	141,3	141,3	141,3	141,3	168,3	168,3	168,3	168,3
Options 116											
Nominal diameter	in	4	4	4	4	-	-	-	-	-	-
Actual outside diameter	mm	114,3	114,3	114,3	114,3	-	-	-	-	-	-
Casing paint		Colour code RAL 7035									

Physical data, sizes 30XBE-850A to 1700A

30XBE				850A	900A	1000A	1100A	1200A	1300A	1400A	1500A	1700A	
Cooling													
Standard unit Full load performances*	CA1	Nominal capacity	kW	825	899	983	1143	1262	1330	1441	1512	1684	
		EER	kW/kW	3,08	3,12	3,17	3,22	3,19	3,16	3,05	3,07	3,21	
Unit with option 15LS Full load performances*	CA1	Nominal capacity	kW	795	878	969	1113	1226	1290	1392	1464	1639	
		EER	kW/kW	2,89	2,99	3,03	3,11	3,05	2,98	2,82	2,89	3,10	
Standard unit Seasonal energy efficiency**		SEER _{12/7°C} Comfort low temp.	kWh/kWh	4,56	4,56	4,60	4,58	4,61	4,55	4,55	4,55	4,56	
		η _{s cool} _{12/7°C}	%	179	179	181	180	181	179	179	179	179	
		SEPR _{12/7°C} Process high temp.	kWh/kWh	5,55	5,54	5,83	5,76	5,71	5,68	5,56	5,44	5,83	
Unit with Option 5 Seasonal energy efficiency**		SEPR _{2/-8°C} Process medium temp.***	kWh/kWh	3,53	3,44	3,55	3,52	3,47	3,6	3,63	3,18	3,73	
Unit with Option 299 Seasonal energy efficiency**		SEER _{12/7°C} Comfort low temp.	kWh/kWh	NA	NA	NA	NA	NA	NA	NA	NA	NA	
		η _{s cool} _{12/7°C}	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	
		SEPR _{12/7°C} Process high temp.	kWh/kWh	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Unit with option 6 Seasonal energy efficiency**		SEPR _{2/-8°C} Process medium temp.***	kWh/kWh	3,47	3,39	3,47	3,29	2,63	3,45	3,53	3,20	3,48	
Unit with 15LS Seasonal energy efficiency**		SEER _{12/7°C} Comfort low temp.	kWh/kWh	4,56	4,57	4,56	4,60	4,62	4,59	4,56	4,55	4,58	
		η _{s cool} _{12/7°C}	%	179	180	179	181	182	181	179	179	180	
		SEPR _{12/7°C} Process high temp.	kWh/kWh	5,80	5,76	5,88	5,90	5,81	5,71	5,68	5,52	5,81	
Unit with option 5 & 15LS Seasonal energy efficiency**		SEPR _{2/-8°C} Process medium temp.***	kWh/kWh	3,66	3,55	3,78	3,61	3,31	3,22	3,27	3,28	3,80	
Unit with Option 299 & 15LS Seasonal energy efficiency**		SEER _{12/7°C} Comfort low temp.	kWh/kWh	NA	NA	NA	NA	NA	NA	NA	NA	NA	
		η _{s cool} _{12/7°C}	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	
		SEPR _{12/7°C} Process high temp.	kWh/kWh	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Unit with option 6 & 15LS Seasonal energy efficiency**		SEPR _{2/-8°C} Process medium temp.***	kWh/kWh	3,59	3,47	3,7	3,58	3,44	3,67	3,67	3,45	3,77	
Sound levels													
Standard unit													
Sound power ^①				dB(A)	101	104	102	103	102	104	104	104	104
Sound pressure at 10 m ^②				dB(A)	68	71	69	70	69	71	71	71	70

* In accordance with standard EN14511-3:2022.
** In accordance with standard EN14825:2022.
*** With EG 30%.
CA1 Cooling mode conditions: Evaporator water entering/leaving temperature 12 °C / 7 °C, outside air temperature 35 °C, evaporator cooling factor 0 m².K/W.
η_{s cool}_{12/7°C} & SEER_{12/7°C} **Bold values compliant to Ecodesign regulation: (EU) No 2016/2281 for Comfort application.**
SEPR_{2/-8°C} **Bold values compliant to Ecodesign regulation: (EU) No 2015/1095 for Process application Medium Temperature.**
SEPR_{12/7°C} **Bold values compliant to Ecodesign regulation: (EU) No 2016/2281 for Process application High Temperature.**
NA Non Authorized for the specific application for CEE market.
① in dB ref=10⁻¹² W, 'A' weighted. Declared dual-number noise emission values in accordance with ISO 4871 with an associated uncertainty of +/-3dB(A). Measured in accordance with ISO 9614-1 and certified by Eurovent.
② In dB ref 20μPa, 'A' weighted. Declared dual-number noise emission values in accordance with ISO 4871 with an associated uncertainty of +/-3dB(A). For information, calculated from the sound power Lw(A).



Eurovent certified values

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Physical data, sizes 30XBE-850A to 1700A

30XBE		850A	900A	1000A	1100A	1200A	1300A	1400A	1500A	1700A
Unit + option 15[®]										
Sound power ^①	dB(A)	97	99	98	98	98	100	99	99	100
Sound pressure at 10 m ^②	dB(A)	64	66	65	65	65	67	66	66	66
Unit + option 15LS[®]										
Sound power ^①	dB(A)	94	95	94	94	94	99	95	96	96
Sound pressure at 10 m ^②	dB(A)	61	62	61	61	61	66	62	63	62
Dimensions										
Standard unit										
Length	mm	7186	8380	9574	11962	11962	11962	11962	13157	8380/ 8380
Width	mm	2253	2253	2253	2253	2253	2253	2253	2253	2253
Height	mm	2322	2322	2322	2322	2322	2322	2322	2322	2322
Operating weight^③										
Standard unit	kg	5563	6169	6665	7928	8069	8660	8735	9072	5935/ 5935
Unit + option 15 [®]	kg	5894	6499	6996	8302	8443	9034	9109	9446	6266/ 6266
Unit + option 50 [®]	kg	6726	7130	7619	-	-	-	-	-	-
Compressors		06T semi-hermetic screw compressor, 50 r/s								
Circuit A		1	1	1	1	1	1	1	1	1
Circuit B		1	1	1	1	1	1	1	1	1
Circuit C		-	-	-	-	-	-	-	-	1
Circuit D		-	-	-	-	-	-	-	-	1
No. of control stages		-	-	-	-	-	-	-	-	-
Refrigerant^④		R-134a (GWP=1430 following AR4)								
Circuit A	kg	69	72	79	82	84	115	121	124	75
	teqCO ₂	98,7	103,0	113,0	117,3	120,1	164,5	173,0	177,3	107,3
Circuit B	kg	67	74	83	118	130	121	127	130	67
	teqCO ₂	95,8	105,8	118,7	168,7	185,9	173,0	181,6	185,9	95,8
Circuit C	kg	-	-	-	-	-	-	-	-	75
	teqCO ₂	-	-	-	-	-	-	-	-	107,3
Circuit D	kg	-	-	-	-	-	-	-	-	67
	teqCO ₂	-	-	-	-	-	-	-	-	95,8
Oil		For more information, contact Carrier ERCD								
Circuit A	l	27,6	27,6	27,6	27,6	27,6	36,0	36,0	36,0	27,6
Circuit B	l	23,5	27,6	27,6	36,0	36,0	36,0	36,0	36,0	23,5
Circuit C	l	-	-	-	-	-	-	-	-	27,6
Circuit D	l	-	-	-	-	-	-	-	-	23,5

- ① in dB ref=10¹² W, 'A' weighted. Declared dual-number noise emission values in accordance with ISO 4871 with an associated uncertainty of +/-3dB(A). Measured in accordance with ISO 9614-1 and certified by Eurovent.
- ② In dB ref 20μPa, 'A' weighted. Declared dual-number noise emission values in accordance with ISO 4871 with an associated uncertainty of +/-3dB(A). For information, calculated from the sound power Lw(A).
- ③ Options : 15 = Low noise, 15LS = Very Low noise, 50 = heat recovery.
- ④ Values are guidelines only. Refer to the unit name plate.



Eurovent certified values

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Physical data, sizes 30XBE-850A to 1700A

30XBE		850A	900A	1000A	1100A	1200A	1300A	1400A	1500A	1700A
Capacity control		SmartVu™, Electronic Expansion Valve (EXV)								
Minimum capacity	%	15	15	15	15	15	15	15	15	8
Air heat exchanger		Aluminum micro-channel coils (MCHE)								
Fans		FLYING-BIRD 6, axial fan with rotating impeller								
Standard unit										
Quantity		12	14	16	19	20	20	20	22	28
Maximum total air flow	l/s	57840	67480	77120	91580	96400	96400	96400	106040	134960
Maximum rotation speed	r/s	15,7	15,7	15,7	15,7	15,7	15,7	15,7	15,7	15,7
Unit + option 15LS										
Maximum total air flow	l/s	47160	55020	62880	74670	78600	78600	78600	86460	110040
Maximum rotation speed	r/s	11,7	11,7	11,7	11,7	11,7	11,7	11,7	11,7	11,7
Water heat exchanger		Flooded multi-tube type								
Water volume	l	119	130	140	164	174	180	189	189	240
Max. water-side operating pressure without hydraulic module	kPa	1000	1000	1000	1000	1000	1000	1000	1000	1000
Water connections without or with hydraulic module		Victaulic® type								
Standard & option 8										
Nominal diameter	in	6	6	8	6	6	6	6	6	6
Actual outside diameter	mm	168,3	168,3	219,1	168,3	168,3	168,3	168,3	168,3	168,3
Options 5, 6 & 100A										
Nominal diameter	in	5	5	6	6	6	6	6	6	6/6
Actual outside diameter	mm	141,3	141,3	168,3	168,3	168,3	168,3	168,3	168,3	168,3/168,3
Options 100C										
Nominal diameter	in	6	6	8	-	-	-	-	-	-
Actual outside diameter	mm	168,3	168,3	219,1	-	-	-	-	-	-
Casing paint		Colour code RAL 7035								

Physical data, sizes 30XBP-250A to 800A

30XBP			250A	300A	350A	400A	450A	500A	600A	700A	750A	800A	
Cooling													
Standard unit	CA1	Nominal capacity	kW	277	301	323	392	445	500	623	677	730	782
		Full load performances*	kW/kW	3,21	3,18	3,14	3,23	3,16	3,23	3,27	3,34	3,14	3,13
Unit with Option 15LS	CA1	Nominal capacity	kW	271	293	313	384	432	486	607	659	709	757
		Full load performances*	kW/kW	3,17	3,11	3,03	3,20	3,05	3,13	3,16	3,23	2,99	2,95
Standard unit Seasonal energy efficiency**		SEER _{12/7°C} Comfort low temp.	kWh/kWh	4,66	4,64	4,55	4,50	4,62	4,67	4,66	4,77	4,61	4,58
		η _{s cool} _{12/7°C}	%	183	183	179	177	182	184	183	188	181	180
		SEPR _{12/7°C} Process high temp.	kWh/kWh	6,12	6,16	6,11	6,06	6,01	6,13	-	6,18	5,81	5,69
Unit with option 5 Seasonal energy efficiency**		SEPR _{2/-8°C} Process medium temp.***	kWh/kWh	2,86	3,26	3,39	2,97	3,67	3,80	3,84	4,02	3,61	3,63
Unit with Option 299 Seasonal energy efficiency**		SEER _{12/7°C} Comfort low temp.	kWh/kWh	4,59	4,57	4,52	4,61	NA	NA	NA	NA	NA	NA
		η _{s cool} _{12/7°C}	%	180	180	178	181	NA	NA	NA	NA	NA	NA
		SEPR _{12/7°C} Process high temp.	kWh/kWh	6,13	6,18	6,15	6,10	NA	NA	NA	NA	NA	NA
Unit with option 6 Seasonal energy efficiency**		SEPR _{2/-8°C} Process medium temp.***	kWh/kWh	3,51	3,72	3,78	3,64	3,62	3,72	3,68	3,96	3,55	3,61
Unit with Option 15LS Seasonal energy efficiency**		SEER _{12/7°C} Comfort low temp.	kWh/kWh	4,67	4,67	4,56	4,49	4,59	4,64	4,65	4,78	4,60	4,57
		η _{s cool} _{12/7°C}	%	184	184	179	176	181	183	183	188	181	180
		SEPR _{12/7°C} Process high temp.	kWh/kWh	6,09	6,18	6,08	5,88	5,90	6,11	6,07	6,23	5,85	5,85
Unit with option 5 & 15LS Seasonal energy efficiency**		SEPR _{2/-8°C} Process medium temp.***	kWh/kWh	2,85	3,25	3,42	2,94	3,64	3,7	3,93	3,97	3,64	3,68
Unit with Option 299 & 15LS Seasonal energy efficiency**		SEER _{12/7°C} Comfort low temp.	kWh/kWh	4,59	4,59	4,51	4,58	NA	NA	NA	NA	NA	NA
		η _{s cool} _{12/7°C}	%	181	181	177	180	NA	NA	NA	NA	NA	NA
		SEPR _{12/7°C} Process high temp.	kWh/kWh	6,11	6,20	6,11	5,91	NA	NA	NA	NA	NA	NA
Unit with option 6 & 15LS Seasonal energy efficiency**		SEPR _{2/-8°C} Process medium temp.***	kWh/kWh	3,47	3,74	3,89	3,52	3,75	3,79	3,77	3,93	3,59	3,67
Sound levels													
Standard unit													
Sound power ^①			dB(A)	99	99	99	99	101	99	101	99	103	103
Sound pressure at 10 m ^②			dB(A)	67	67	67	67	69	67	68	67	70	70

* In accordance with standard EN14511-3:2022.
 ** In accordance with standard EN14825:2022.
 *** With EG 30%.
 CA1 Cooling mode conditions: Evaporator water entering/leaving temperature 12 °C / 7 °C, outside air temperature 35 °C, evaporator cooling factor 0 m².K/W.
 η_{s cool}_{12/7°C} & SEER_{12/7°C} **Bold values compliant to Ecodesign regulation: (EU) No 2016/2281 for Comfort application.**
 SEPR_{2/-8°C} **Bold values compliant to Ecodesign regulation: (EU) No 2015/1095 for Process application Medium Temperature.**
 SEPR_{12/7°C} **Bold values compliant to Ecodesign regulation: (EU) No 2016/2281 for Process application High Temperature.**
 NA Non Authorized for the specific application for CEE market.
 ① in dB ref=10¹² W, 'A' weighted. Declared dual-number noise emission values in accordance with ISO 4871 with an associated uncertainty of +/-3dB(A). Measured in accordance with ISO 9614-1 and certified by Eurovent.
 ② In dB ref 20μPa, 'A' weighted. Declared dual-number noise emission values in accordance with ISO 4871 with an associated uncertainty of +/-3dB(A). For information, calculated from the sound power Lw(A).



Eurovent certified values

CARRIER participates in the ECP programme for LCP-HP Check ongoing validity of certificate: www.eurovent-certification.com

Physical data, sizes 30XBP-250A to 800A

30XBP		250A	300A	350A	400A	450A	500A	600A	700A	750A	800A
Unit + option 15[®]											
Sound power ^①	dB(A)	93	93	94	95	95	95	97	96	97	98
Sound pressure at 10 m ^②	dB(A)	61	61	62	63	63	63	65	63	64	65
Unit + option 15LS[®]											
Sound power ^①	dB(A)	87	87	87	90	91	91	93	92	94	94
Sound pressure at 10 m ^②	dB(A)	55	55	55	58	59	59	60	59	61	61
Dimensions											
Standard unit											
Length	mm	3604	3604	3604	4798	4798	5992	7186	7186	7186	7186
Width	mm	2253	2253	2253	2253	2253	2253	2253	2253	2253	2253
Height	mm	2322	2322	2322	2322	2322	2322	2322	2322	2322	2322
Operating weight^③											
Standard unit	kg	2999	3030	3049	3629	3692	4023	4726	4860	5127	5439
Unit + option 15 [®]	kg	3267	3298	3317	3928	3991	4322	5057	5191	5458	5770
Compressors		06T semi-hermetic screw compressor, 50 r/s									
Circuit A		1	1	1	1	1	1	1	1	1	1
Circuit B		1	1	1	1	1	1	1	1	1	1
No. of control stages		-	-	-	-	-	-	-	-	-	-
Refrigerant^④		R-134a (GWP=1430 following AR4)									
Circuit A	kg	39	37	37	52	53	59	60	61	69	69
	teqCO ₂	55,8	52,9	52,9	74,4	75,8	83,7	85,8	87,2	98,0	98,7
Circuit B	kg	40	38	39	40	40	36	61	64	61	67
	teqCO ₂	57,2	54,3	55,8	57,2	57,2	51,5	87,2	91,5	86,5	95,8
Oil		For more information, contact Carrier ERCD									
Circuit A	l	20,8	20,8	20,8	23,5	23,5	23,5	23,5	23,5	27,6	27,6
Circuit B	l	20,8	20,8	20,8	20,8	20,8	20,8	23,5	23,5	23,5	23,5
Capacity control		SmartVu™, Electronic Expansion Valve (EXV)									
Minimum capacity	%	15	15	15	15	15	15	15	15	15	15
Air heat exchanger		Aluminum micro-channel coils (MCHE)									
Fans		FLYING-BIRD 6, axial fan with rotating impeller									
Standard unit											
Quantity		6	6	6	8	8	9	11	12	12	12
Maximum total air flow	l/s	28920	28920	28920	38560	38560	43380	53020	57840	57840	57840
Maximum rotation speed	r/s	15,7	15,7	15,7	15,7	15,7	15,7	15,7	15,7	15,7	15,7
Unit + option 15LS											
Maximum total air flow	l/s	23580	23580	23580	31440	31440	35370	43230	47160	47160	47160
Maximum rotation speed	r/s	11,7	11,7	11,7	11,7	11,7	11,7	11,7	11,7	11,7	11,7

- ① in dB ref=10¹² W, 'A' weighted. Declared dual-number noise emission values in accordance with ISO 4871 with an associated uncertainty of +/-3dB(A). Measured in accordance with ISO 9614-1 and certified by Eurovent.
- ② In dB ref 20μPa, 'A' weighted. Declared dual-number noise emission values in accordance with ISO 4871 with an associated uncertainty of +/-3dB(A). For information, calculated from the sound power Lw(A).
- ③ Options : 15 = Low noise, 15LS = Very Low noise.
- ④ Values are guidelines only. Refer to the unit name plate.



Eurovent certified values

CARRIER participates in the ECP programme for
LCP-HP Check ongoing validity of certificate:
www.eurovent-certification.com

Physical data, sizes 30XBP-250A to 800A

30XBP		250A	300A	350A	400A	450A	500A	600A	700A	750A	800A
Water heat exchanger		Flooded multi-tube type									
Water volume	l	58	61	61	66	70	77	79	94	98	119
Max. water-side operating pressure without hydraulic module	kPa	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Hydraulic module (option)		Pump, Victaulic screen filter, relief valve, water and air drain valve, pressure sensors, expansion tank (option)									
Pump		Centrifugal pump, monocoil, 48,3r/s, low or high pressure (as required), single or dual (as required)									
Expansion vessel volume	l	50	50	50	50	-	-	-	-	-	-
Max. water-side operating pressure with hydraulic module	kPa	400	400	400	400	-	-	-	-	-	-
Water connections without or with hydraulic module		Victaulic® type									
Standard & option 8, without option 116											
Nominal diameter	in	5	5	5	5	5	5	5	6	6	6
Actual outside diameter	mm	141,3	141,3	141,3	141,3	141,3	141,3	141,3	168,3	168,3	168,3
Options 5, 6 & 100A											
Nominal diameter	in	4	4	4	4	4	4	5	5	5	5
Actual outside diameter	mm	114,3	114,3	114,3	114,3	114,3	114,3	141,3	141,3	141,3	141,3
Options 116											
Nominal diameter	in	4	4	4	4	-	-	-	-	-	-
Actual outside diameter	mm	114,3	114,3	114,3	114,3	-	-	-	-	-	-
Casing paint		Colour code RAL 7035									

Physical data, sizes 30XBP-850A to 1500A

30XBP				850A	900A	1000A	1100A	1200A	1300A	1400A	1500A
Cooling											
Standard unit	CA1	Nominal capacity	kW	837	899	982	1143	1262	1330	1441	1512
		Full load performances*	EER	3,27	3,15	3,21	3,28	3,24	3,20	3,08	3,11
Unit with Option 15LS	CA1	Nominal capacity	kW	813	872	969	1113	1227	1290	1391	1466
		Full load performances*	EER	3,13	2,98	3,06	3,16	3,06	3,01	2,84	2,91
Standard unit Seasonal energy efficiency**		SEER _{12/7°C} Comfort low temp.	kWh/kWh	4,68	4,61	4,69	4,70	4,72	4,62	4,63	4,62
		ηs cool _{12/7°C}	%	184	181	185	185	186	182	182	182
		SEPR _{12/7°C} Process high temp.	kWh/kWh	5,96	5,84	5,83	5,90	5,87	5,99	5,65	6,16
Unit with option 5 Seasonal energy efficiency**		SEPR _{2/-8°C} Process medium temp.***	kWh/kWh	3,83	3,67	3,66	3,77	3,66	3,70	3,72	3,24
Unit with Option 299 Seasonal energy efficiency**		SEER _{12/7°C} Comfort low temp.	kWh/kWh	NA	NA	NA	NA	NA	NA	NA	NA
		ηs cool _{12/7°C}	%	NA	NA	NA	NA	NA	NA	NA	NA
		SEPR _{12/7°C} Process high temp.	kWh/kWh	NA	NA	NA	NA	NA	NA	NA	NA
Unit with option 6 Seasonal energy efficiency**		SEPR _{2/-8°C} Process medium temp.***	kWh/kWh	3,75	3,64	3,58	3,45	3,73	3,59	3,69	3,42
Unit with Option 15LS Seasonal energy efficiency**		SEER _{12/7°C} Comfort low temp.	kWh/kWh	4,66	4,58	4,67	4,68	4,70	4,57	4,56	4,56
		ηs cool _{12/7°C}	%	183	180	184	184	185	180	179	179
		SEPR _{12/7°C} Process high temp.	kWh/kWh	5,97	5,87	5,91	6,17	6,12	5,98	5,77	5,98
Unit with option 5 & 15LS Seasonal energy efficiency**		SEPR _{2/-8°C} Process medium temp.***	kWh/kWh	3,75	3,65	3,72	3,55	3,49	3,41	3,45	3,46
Unit with Option 299 & 15LS Seasonal energy efficiency**		SEER _{12/7°C} Comfort low temp.	kWh/kWh	NA	NA	NA	NA	NA	NA	NA	NA
		ηs cool _{12/7°C}	%	NA	NA	NA	NA	NA	NA	NA	NA
		SEPR _{12/7°C} Process high temp.	kWh/kWh	NA	NA	NA	NA	NA	NA	NA	NA
Unit with option 6 & 15LS Seasonal energy efficiency**		SEPR _{2/-8°C} Process medium temp.***	kWh/kWh	3,69	3,64	3,65	3,69	3,70	3,93	3,87	3,50
Sound levels											
Standard unit											
Sound power ^①			dB(A)	101	104	102	103	102	104	104	104
Sound pressure at 10 m ^②			dB(A)	70	71	69	70	69	71	71	71
Unit + option 15 ^③											
Sound power ^①			dB(A)	97	99	98	98	98	100	99	99
Sound pressure at 10 m ^②			dB(A)	65	66	65	65	65	67	65	65
Unit + option 15LS ^③											
Sound power ^①			dB(A)	94	95	94	94	94	99	95	96
Sound pressure at 10 m ^②			dB(A)	61	62	61	61	61	66	62	63

- * In accordance with standard EN14511-3:2022.
 ** In accordance with standard EN14825:2022.
 *** With EG 30%.
 CA1 Cooling mode conditions: Evaporator water entering/leaving temperature 12 °C / 7 °C, outside air temperature 35 °C, evaporator cooling factor 0 m² K/W.
 $\eta_{s\ cool_{12/7°C}}$ & SEER_{12/7°C} **Bold values compliant to Ecodesign regulation: (EU) No 2016/2281 for Comfort application.**
 SEPR_{2/-8°C} **Bold values compliant to Ecodesign regulation: (EU) No 2015/1095 for Process application Medium Temperature.**
 SEPR_{12/7°C} **Bold values compliant to Ecodesign regulation: (EU) No 2016/2281 for Process application High Temperature.**
 NA Non Authorized for the specific application for CEE market.
 ① in dB ref=10¹² W, 'A' weighted. Declared dual-number noise emission values in accordance with ISO 4871 with an associated uncertainty of +/-3dB(A). Measured in accordance with ISO 9614-1 and certified by Eurovent.
 ② In dB ref 20μPa, 'A' weighted. Declared dual-number noise emission values in accordance with ISO 4871 with an associated uncertainty of +/-3dB(A). For information, calculated from the sound power Lw(A).
 ③ Options : 15 = Low noise, 15LS = Very Low noise.



Eurovent certified values

Physical data, sizes 30XBP-850A to 1500A

30XBP		850A	900A	1000A	1100A	1200A	1300A	1400A	1500A
Dimensions									
Standard unit									
Length	mm	8380	8380	9574	11962	11962	11962	11962	13157
Width	mm	2253	2253	2253	2253	2253	2253	2253	2253
Height	mm	2322	2322	2322	2322	2322	2322	2322	2322
Operating weight^③									
Standard unit	kg	5795	6080	6561	7812	7949	8565	8640	8941
Unit + option 15 ^④	kg	6126	6411	6892	8183	8320	8939	9014	9315
Compressors		06T semi-hermetic screw compressor, 50 r/s							
Circuit A		1	1	1	1	1	1	1	1
Circuit B		1	1	1	1	1	1	1	1
No. of control stages		-	-	-	-	-	-	-	-
Refrigerant^④		R-134a (GWP=1430 following AR4)							
Circuit A	kg	75	72	79	82	84	115	121	124
	teqCO ₂	107,3	103,0	113,0	117,3	120,1	164,5	173,0	177,3
Circuit B	kg	67	74	83	118	130	121	127	130
	teqCO ₂	95,8	105,8	118,7	168,7	185,9	173,0	181,6	185,9
Oil		For more information, contact Carrier ERCD							
Circuit A	l	27,6	27,6	27,6	27,6	27,6	36,0	36,0	36,0
Circuit B	l	23,5	27,6	27,6	36,0	36,0	36,0	36,0	36,0
Capacity control		SmartVu™, , Electronic Expansion Valve (EXV)							
Minimum capacity	%	15	15	15	15	15	15	15	15
Air heat exchanger		Aluminum micro-channel coils (MCHE)							
Fans		FLYING-BIRD 6, axial fan with rotating impeller							
Standard unit									
Quantity		14	14	16	19	20	20	20	22
Maximum total air flow	l/s	67480	67480	77120	91580	96400	96400	96400	106040
Maximum rotation speed	r/s	15,7	15,7	15,7	15,7	15,7	15,7	15,7	15,7
Unit + option 15LS									
Maximum total air flow	l/s	55020	55020	62880	78600	78600	78600	78600	86460
Maximum rotation speed	r/s	11,7	11,7	11,7	11,7	11,7	11,7	11,7	11,7

③ Options : 15 = Low noise, 15LS = Very Low noise.

④ Values are guidelines only. Refer to the unit name plate.

Physical data, sizes 30XBP-850A to 1500A

30XBP		850A	900A	1000A	1100A	1200A	1300A	1400A	1500A
Water heat exchanger		Flooded multi-tube type							
Water volume	l	119	130	140	164	174	180	189	189
Max. water-side operating pressure without hydraulic module	kPa	1000	1000	1000	1000	1000	1000	1000	1000
Hydraulic module (option)		Pump, Victaulic screen filter, relief valve, water and air drain valve, pressure sensors, expansion tank (option)							
Pump		Centrifugal pump, monocell, 48,3r/s, low or high pressure (as required), single or dual (as required)							
Expansion vessel volume	l	-	-	-	-	-	-	-	-
Max. water-side operating pressure with hydraulic module	kPa	-	-	-	-	-	-	-	-
Water connections without or with hydraulic module		Victaulic® type							
Standard & option 8									
Nominal diameter	in	6	6	8	6	6	6	6	6
Actual outside diameter	mm	168,3	168,3	219,1	168,3	168,3	168,3	168,3	168,3
Options 5, 6 & 100A									
Nominal diameter	in	5	5	6	6	6	6	6	6
Actual outside diameter	mm	141,3	141,3	168,3	168,3	168,3	168,3	168,3	168,3
Casing paint		Colour code RAL 7035							

Electrical data, 30XBE-250A to 1000A

30XBE		250A	300A	350A	400A	450A	500A	600A	700A	750A	800A	850A	900A	1000A
Power circuit supply														
Nominal voltage	V-ph-Hz	400-3-50												
Voltage range	V	360-440												
Control circuit supply		24 V via internal transformer												
Maximum operating input power^① - 30XBE														
Standard unit	kW	127	137	148	173	193	212	259	279	310	328	359	377	442
Unit + option 15LS	kW	121	132	142	166	186	204	249	268	299	317	348	366	428
Power factor at maximum power^② - 30XBE														
Standard unit														
Displacement Power Factor (Cos Phi)		0,88	0,87	0,87	0,88	0,88	0,88	0,88	0,88	0,87	0,87	0,88	0,87	0,88
Unit + option 15LS														
Displacement Power Factor (Cos Phi)		0,88	0,87	0,87	0,88	0,88	0,88	0,88	0,88	0,87	0,87	0,88	0,87	0,88
Nominal operating current draw^③ - 30XBE														
Standard unit	A	151	167	183	211	242	263	327	351	402	423	439	495	535
Unit + option 15LS	A	142	158	174	199	230	251	310	333	384	405	421	477	513
Maximum operating current draw (Un)^③ - 30XBE														
Standard unit	A	209	227	245	285	318	348	426	459	514	544	590	629	729
Unit + option 15LS	A	200	218	236	273	306	336	409	441	496	526	572	611	707
Maximum current (Un-10%)^③ - 30XBE														
Standard unit	A	221	240	259	301	336	368	450	485	544	576	625	667	773
Unit + option 15LS	A	212	231	250	289	324	356	433	467	526	558	607	649	751
Nominal start-up current^③ - 30XBE														
Standard unit	A	246	246	262	379	480	480	539	564	738	759	759	835	835
Unit + option 15LS	A	241	241	257	374	475	475	531	555	730	751	751	826	844
Unit + option 25C	A	184	177	193	317	411	411	413	438	631	637	637	666	659
Maximum start-up current(Un)^③ - 30XBE														
Standard unit	A	275	293	293	408	511	511	618	618	783	813	813	902	952
Unit + option 15LS	A	270	288	288	403	506	506	610	609	775	805	805	893	941
Unit + option 25C	A	213	224	224	346	442	442	492	492	676	691	691	733	756

① Values obtained at unit continuous maximum operating conditions (data given on the unit nameplate).

② Operating current of the smallest compressor(s) + fan current + locked rotor current or reduced start-up current of the largest compressor.

③ Standardised EUROVENT conditions, water-cooled exchanger water inlet/outlet = 12 °C / 7 °C, outdoor air temperature = 35 °C.

Electrical data, 30XBE-1100A to 1700A

30XBE		1100A	1200A	1300A	1400A	1500A	1700A
Power circuit supply							
Nominal voltage	V-ph-Hz	400-3-50					
Voltage range	V	360-440					
Control circuit supply		24 V via internal transformer					
Maximum operating input power^① - 30XBE							
Standard unit							
Circuit 1 ^(a)	kW	194	223	264	284	307	363
Circuit 2 ^(a)	kW	284	308	282	305	307	363
Option 081	kW	478	532	546	588	614	-
Unit + option 15LS							
Circuit 1 ^(a)	kW	187	216	255	274	297	351
Circuit 2 ^(a)	kW	275	298	273	296	297	351
Option 081	kW	461	514	528	570	594	-
Power factor at maximum power^① - 30XBE							
Standard unit							
Displacement Power Factor (Cos Phi)		0,89	0,89	0,89	0,89	0,89	0,90
Unit + option 15LS							
Displacement Power Factor (Cos Phi)		0,89	0,89	0,89	0,89	0,89	0,90
Nominal operating current draw^② - 30XBE							
Standard unit							
Circuit 1 ^(a)	A	251	267	334	347	382	439
Circuit 2 ^(a)	A	350	386	347	379	382	439
Option 081	A	601	652	681	726	764	-
Unit + option 15LS							
Circuit 1 ^(a)	A	239	255	319	332	366	417
Circuit 2 ^(a)	A	334	367	332	364	366	417
Option 081	A	572	621	650	695	731	-
Maximum operating current draw (Un)^③ - 30XBE							
Standard unit							
Circuit 1 ^(a)	A	316	362	430	460	498	586
Circuit 2 ^(a)	A	463	500	460	495	498	586
Option 081	A	778	862	889	954	995	-
Unit + option 15LS							
Circuit 1 ^(a)	A	304	350	415	445	482	566
Circuit 2 ^(a)	A	447	483	445	480	482	566
Option 081	A	751	833	860	925	963	-

① Values obtained at unit continuous maximum operating conditions (data given on the unit nameplate).

② Operating current of the smallest compressor(s) + fan current + locked rotor current or reduced start-up current of the largest compressor.

③ Standardised EUROVENT conditions, water-cooled exchanger water inlet/outlet = 12 °C / 7 °C, outdoor air temperature = 35 °C.

(a) When the machines are equipped with two power supplies, circuit 1 supplies the refrigerant circuit A and circuit 2 supplies the refrigerant circuit B or for units 30XB 1550A to 1700A units: Circuit 1 supplies circuits A and B, circuit 2 supplies circuits C and D.

Electrical data, 30XBE-1100A to 1700A

30XBE		1100A	1200A	1300A	1400A	1500A	1700A
Maximum current (Un-10%)^① - 30XBE							
Standard unit							
Circuit 1 ^(a)	A	335	384	466	498	529	621
Circuit 2 ^(a)	A	501	531	498	526	529	621
Option 081	A	835	915	963	1023	1057	-
Unit + option 15LS							
Circuit 1 ^(a)	A	323	372	451	483	513	601
Circuit 2 ^(a)	A	485	514	483	511	513	601
Option 081	A	808	886	934	994	1025	-
Nominal start-up current^② - 30XBE							
Standard unit							
Circuit 1 ^(a)	A	587	587	629	629	629	759
Circuit 2 ^(a)	A	629	629	629	629	629	759
Option 081	A	944	979	982	1014	1018	-
Option 081 & Opt 25C	A	687	702	729	744	744	-
Unit + option 15LS							
Circuit 1 ^(a)	A	587	587	629	629	629	751
Circuit 2 ^(a)	A	629	629	629	629	629	751
Option 081	A	927	961	966	998	1001	-
Option 081 & Opt 25C	A	671	684	714	729	727	-
Maximum start-up current(Un)^② - 30XBE							
Standard unit							
Circuit 1 ^(a)	A	587	587	629	629	629	813
Circuit 2 ^(a)	A	629	629	629	629	629	813
Option 081	A	1059	1097	1097	1132	1136	-
Option 081 & Opt 25C	A	802	820	844	862	862	-
Unit + option 15LS							
Circuit 1 ^(a)	A	587	587	629	629	629	805
Circuit 2 ^(a)	A	629	629	629	629	629	805
Option 081	A	1042	1079	1081	1116	1119	-
Option 081 & Opt 25C	A	786	802	829	847	845	-

① Values obtained at unit continuous maximum operating conditions (data given on the unit nameplate).

② Operating current of the smallest compressor(s) + fan current + locked rotor current or reduced start-up current of the largest compressor.

③ Standardised EUROVENT conditions, water-cooled exchanger water inlet/outlet = 12 °C / 7 °C, outdoor air temperature = 35 °C.

(a) When the machines are equipped with two power supplies, circuit 1 supplies the refrigerant circuit A and circuit 2 supplies the refrigerant circuit B or for units 30XB 1550A to 1700A units: Circuit 1 supplies circuits A and B, circuit 2 supplies circuits C and D.

Electrical data, 30XBP-250A to 1000A

30XBP		250A	300A	350A	400A	450A	500A	600A	700A	750A	800A	850A	900A	1000A
Power circuit supply														
Nominal voltage	V-ph-Hz	400-3-50												
Voltage range	V	360-440												
Control circuit supply		24 V via internal transformer												
Maximum operating input power^① - 30XBP														
Standard unit	kW	126	137	147	172	192	210	257	278	308	327	357	375	440
Unit + option 15LS	kW	124	135	145	170	189	208	254	274	304	323	353	371	434
Power factor at maximum power^① - 30XBP														
Standard unit														
Displacement Power Factor (Cos Phi)		0,90	0,89	0,89	0,90	0,89	0,89	0,90	0,90	0,89	0,89	0,89	0,88	0,89
Unit + option 15LS														
Displacement Power Factor (Cos Phi)		0,90	0,89	0,89	0,90	0,89	0,89	0,90	0,90	0,89	0,89	0,89	0,88	0,89
Nominal operating current draw^② - 30XBP														
Standard unit	A	145	161	177	203	234	255	315	339	390	411	427	483	521
Unit + option 15LS	A	142	158	174	199	230	251	310	333	384	405	420	476	512
Maximum operating current draw (Un)^③ - 30XBP														
Standard unit	A	203	221	239	277	310	340	414	447	502	532	578	617	715
Unit + option 15LS	A	200	218	236	273	306	336	409	441	496	526	571	610	706
Maximum current (Un-10%)^③ - 30XBP														
Standard unit	A	215	234	253	293	328	360	438	473	532	564	613	655	759
Unit + option 15LS	A	212	231	250	289	324	356	433	467	526	558	606	648	750
Nominal start-up current^② - 30XBP														
Standard unit	A	243	243	259	376	477	477	534	558	733	754	754	829	848
Unit + option 15LS	A	241	241	257	374	475	475	531	555	730	751	751	826	844
Unit + option 25C	A	181	174	190	314	408	408	408	432	626	632	632	660	652
Maximum start-up current(Un)^② - 30XBP														
Standard unit	A	272	290	290	405	508	508	613	612	778	808	808	896	945
Unit + option 15LS	A	270	288	288	403	506	506	610	609	775	805	805	893	941
Unit + option 25C	A	210	221	221	343	439	439	487	486	671	686	686	727	749

① Values obtained at unit continuous maximum operating conditions (data given on the unit nameplate).

② Operating current of the smallest compressor(s) + fan current + locked rotor current or reduced start-up current of the largest compressor.

③ Standardised EUROVENT conditions, water-cooled exchanger water inlet/outlet = 12 °C / 7 °C, outdoor air temperature = 35 °C.

Electrical data, 30XBP-1100A to 1500A

30XBP		1100A	1200A	1300A	1400A	1500A
Power circuit supply						
Nominal voltage	V-ph-Hz	400-3-50				
Voltage range	V	360-440				
Control circuit supply		24 V via internal transformer				
Maximum operating input power^① - 30XBP						
Standard unit						
Circuit 1 ^(a)	kW	191	220	262	282	304
Circuit 2 ^(a)	kW	279	304	280	303	304
Option 081	kW	469	525	542	584	609
Unit + option 15LS						
Circuit 1 ^(a)	kW	188	217	258	278	301
Circuit 2 ^(a)	kW	276	301	277	300	301
Option 081	kW	463	518	535	578	602
Power factor at maximum power^① - 30XBP						
Standard unit						
Displacement Power Factor (Cos Phi)		0,88	0,89	0,88	0,89	0,89
Unit + option 15LS						
Displacement Power Factor (Cos Phi)		0,88	0,89	0,88	0,89	0,89

① Values obtained at unit continuous maximum operating conditions (data given on the unit nameplate).

(a) When the machines are equipped with two power supplies, circuit 1 supplies the refrigerant circuit A and circuit 2 supplies the refrigerant circuit B or for units 30XBP 1550A to 1700A units: Circuit 1 supplies circuits A and B, circuit 2 supplies circuits C and D.

Electrical data, 30XBP-1100A to 1500A

30XBP		1100A	1200A	1300A	1400A	1500A
Nominal operating current draw^① - 30XBP						
Standard unit						
Circuit 1 ^(a)	A	245	261	330	343	377
Circuit 2 ^(a)	A	340	377	343	375	377
Option 081	A	584	638	672	717	754
Unit + option 15LS						
Circuit 1 ^(a)	A	240	256	324	337	372
Circuit 2 ^(a)	A	334	371	337	369	372
Option 081	A	574	627	661	706	743
Maximum operating current draw (Un)^② - 30XBP						
Standard unit						
Circuit 1 ^(a)	A	312	358	428	458	495
Circuit 2 ^(a)	A	455	495	458	493	495
Option 081	A	766	853	885	950	990
Unit + option 15LS						
Circuit 1 ^(a)	A	307	353	422	452	490
Circuit 2 ^(a)	A	450	490	452	487	490
Option 081	A	756	842	874	939	979
Maximum current (Un-10%)^③ - 30XBP						
Standard unit						
Circuit 1 ^(a)	A	331	380	464	496	526
Circuit 2 ^(a)	A	493	526	496	524	526
Option 081	A	823	906	959	1019	1052
Unit + option 15LS						
Circuit 1 ^(a)	A	326	375	458	490	521
Circuit 2 ^(a)	A	488	521	490	518	521
Option 081	A	813	895	948	1008	1041
Nominal start-up current^④ - 30XBP						
Standard unit						
Circuit 1 ^(a)	A	587	587	629	629	629
Circuit 2 ^(a)	A	629	629	629	629	629
Option 081	A	927	964	972	1004	1006
Option 081 & Opt 25C	A	678	691	719	734	733
Unit + option 15LS						
Circuit 1 ^(a)	A	587	587	629	629	629
Circuit 2 ^(a)	A	629	629	629	629	629
Option 081	A	922	959	966	998	1001
Option 081 & Opt 25C	A	674	685	714	729	727
Maximum start-up current(Un)^⑤ - 30XBP						
Standard unit						
Circuit 1 ^(a)	A	587	587	629	629	629
Circuit 2 ^(a)	A	629	629	629	629	629
Option 081	A	1042	1082	1087	1122	1124
Option 081 & Opt 25C	A	793	809	834	852	851
Unit + option 15LS						
Circuit 1 ^(a)	A	587	587	629	629	629
Circuit 2 ^(a)	A	629	629	629	629	629
Option 081	A	1037	1077	1081	1116	1119
Option 081 & Opt 25C	A	789	803	829	847	845

① Values obtained at unit continuous maximum operating conditions (data given on the unit nameplate).

② Operating current of the smallest compressor(s) + fan current + locked rotor current or reduced start-up current of the largest compressor.

③ Standardised EUROVENT conditions, water-cooled exchanger water inlet/outlet = 12 °C / 7 °C, outdoor air temperature = 35 °C.

(a) When the machines are equipped with two power supplies, circuit 1 supplies the refrigerant circuit A and circuit 2 supplies the refrigerant circuit B and for units 30XBP 1550A to 1700A units: Circuit 1 supplies circuits A and B, circuit 2 supplies circuits C and D.

Electrical data, 30XB with option Cu/Al heat exchanger

30XB with option 254 or 255		250A	300A	350A	400A	450A	500A	600A	700A	750A	800A	850A	900A	1000A
Power circuit supply														
Nominal voltage	V-ph-Hz	400-3-50												
Voltage range	V	360-440												
Control circuit supply		24 V via internal transformer												
Maximum operating input power^① - 30XB														
Standard unit	kW	127	137	150	173	193	214	259	279	312	331	363	384	446
Unit + option 15LS	kW	121	132	144	166	186	207	249	268	301	320	352	373	433
Power factor at maximum power^② - 30XB														
Standard unit														
Displacement Power Factor (Cos Phi)		0,88	0,87	0,87	0,88	0,88	0,88	0,88	0,88	0,87	0,87	0,88	0,87	0,88
Unit + option 15LS														
Displacement Power Factor (Cos Phi)		0,88	0,87	0,87	0,88	0,88	0,88	0,88	0,88	0,87	0,87	0,88	0,87	0,88
Nominal operating current draw^③ - 30XB														
Standard unit	A	151	167	187	211	242	267	327	351	406	427	447	506	542
Unit + option 15LS	A	142	158	177	199	230	255	310	333	388	409	428	488	521
Maximum operating current draw (Un)^③ - 30XB														
Standard unit	A	209	227	249	285	318	352	426	459	518	548	598	640	736
Unit + option 15LS	A	200	218	239	273	306	340	409	441	500	530	579	622	715
Maximum current (Un-10%)^③ - 30XB														
Standard unit	A	221	240	263	301	336	372	450	485	548	580	633	678	780
Unit + option 15LS	A	212	231	253	289	324	360	433	467	530	562	614	660	759
Nominal start-up current^③ - 30XB														
Standard unit	A	246	246	262	379	480	480	539	564	738	759	759	835	835
Unit + option 15LS	A	241	241	257	374	475	475	531	555	730	751	751	826	844
Unit + option 25C	A	184	177	193	317	411	411	413	438	631	637	637	666	659
Maximum start-up current(Un)^③ - 30XB														
Standard unit	A	275	293	293	408	511	511	618	618	783	813	813	902	952
Unit + option 15LS	A	270	288	288	403	506	506	610	609	775	805	805	893	941
Unit + option 25C	A	213	224	224	346	442	442	492	492	676	691	691	733	756

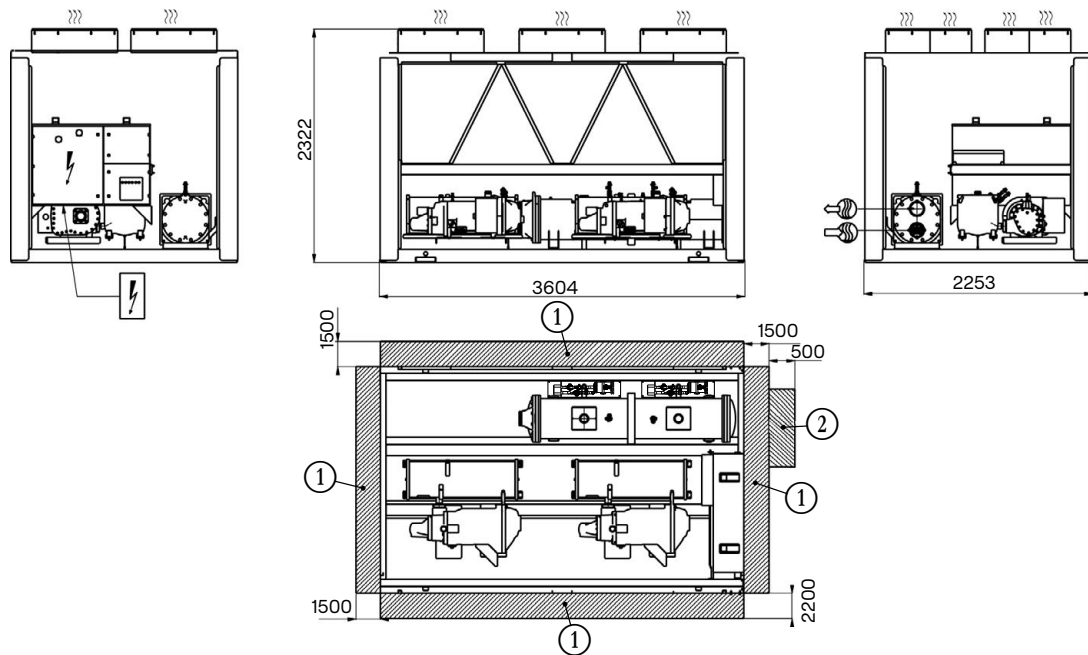
① Values obtained at unit continuous maximum operating conditions (data given on the unit nameplate).

② Operating current of the smallest compressor(s) + fan current + locked rotor current or reduced start-up current of the largest compressor.

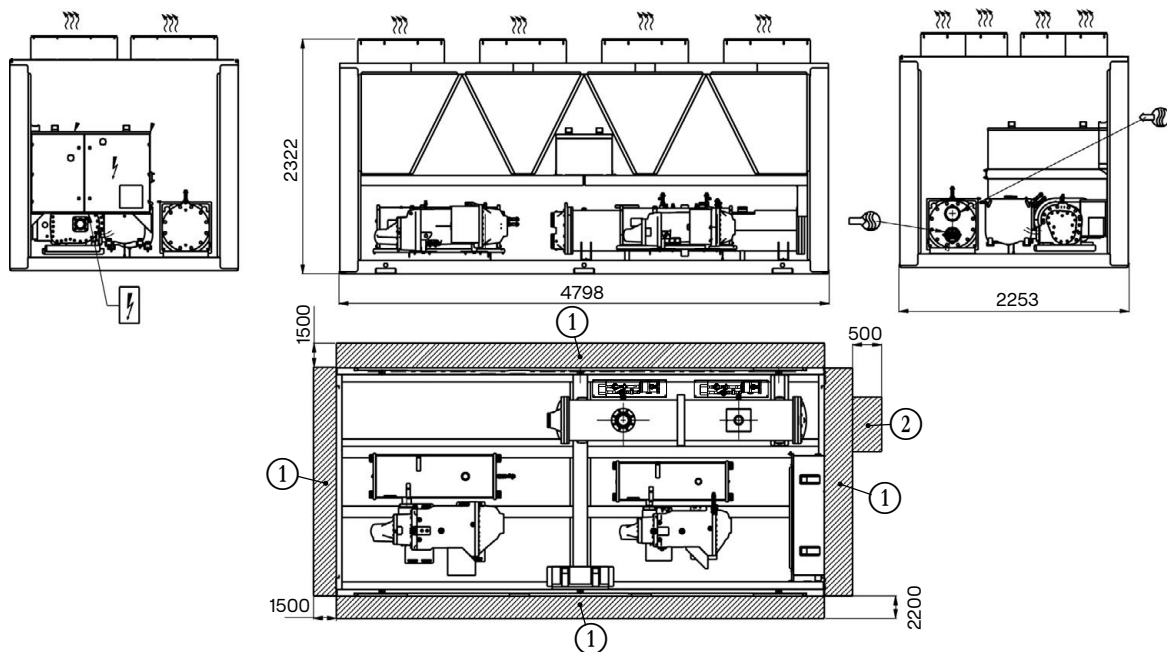
③ Standardised EUROVENT conditions, water-cooled exchanger water inlet/outlet = 12 °C / 7 °C, outdoor air temperature = 35 °C.

Dimensions / clearances

30XBE 250A to 350A, 30XBP 250A to 350A



30XBE 400A to 500A, 30XBP 400A to 450A



Legend

All dimensions are given in mm.

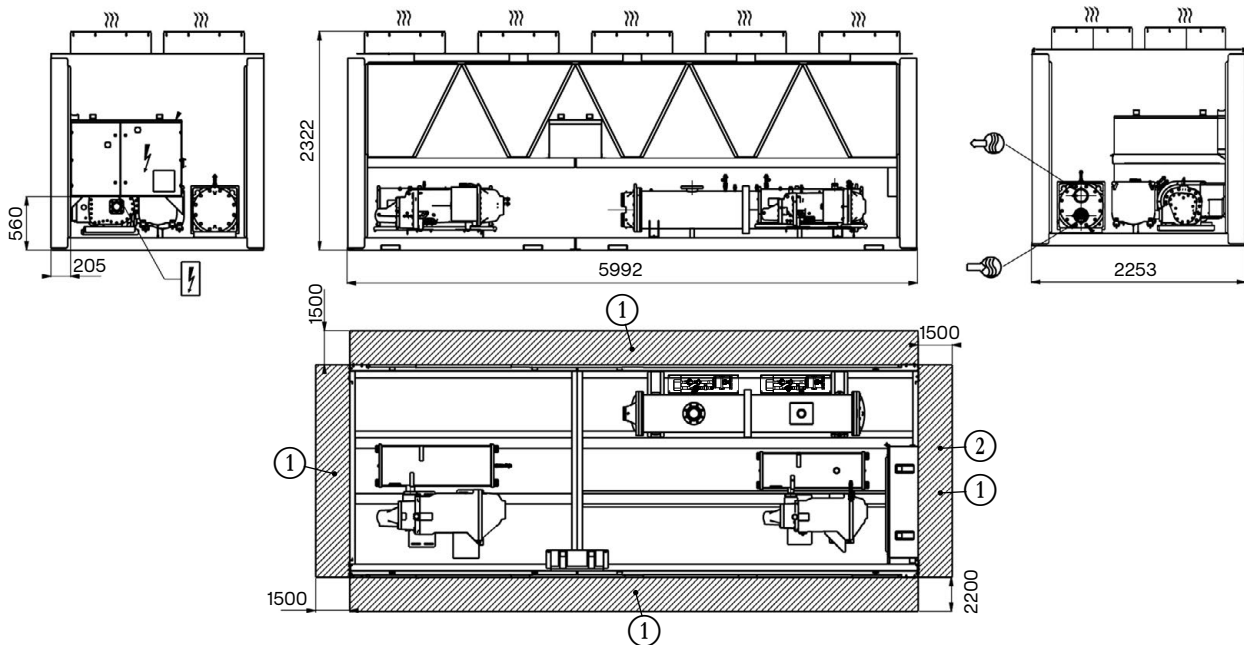
- ① Required clearances for maintenance (see note).
- ② Recommended space for evaporator tube removal.
- Water inlet for standard unit - for options 100A, 100C, 107 refer to the certified drawing.
- Water outlet for standard unit - for options 100A, 100C, 107 refer to the certified drawing.
- Air outlet – do not obstruct.
- Power supply and control connection.
- Slinging points.

NOTES:

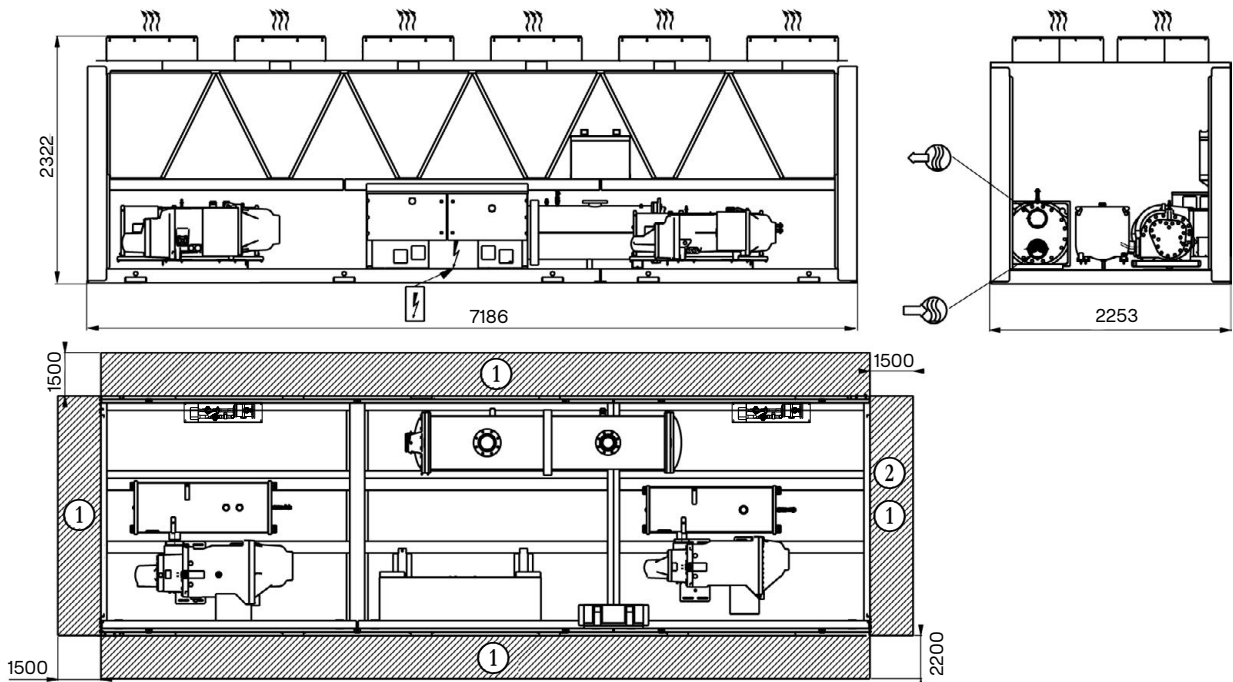
- Drawings are not contractually binding.
- Refer to unit nameplate for unit weight information.
- Before designing an installation, consult the certified dimensional drawings, provided with the unit (Appendix 4).
- If the installation includes several units or if this (these) is (are) close to walls, please refer to chapters 3.14 - "Multiple chiller installation" and 3.15 - "Distance to the wall" of the installation manual to determine the space required.

Dimensions / clearances

30XBP 500A, 30XBE 500A, 50 (heat recovery)



30XBE 600A to 900A, 30XBP 600A to 800A



Legend

All dimensions are given in mm.

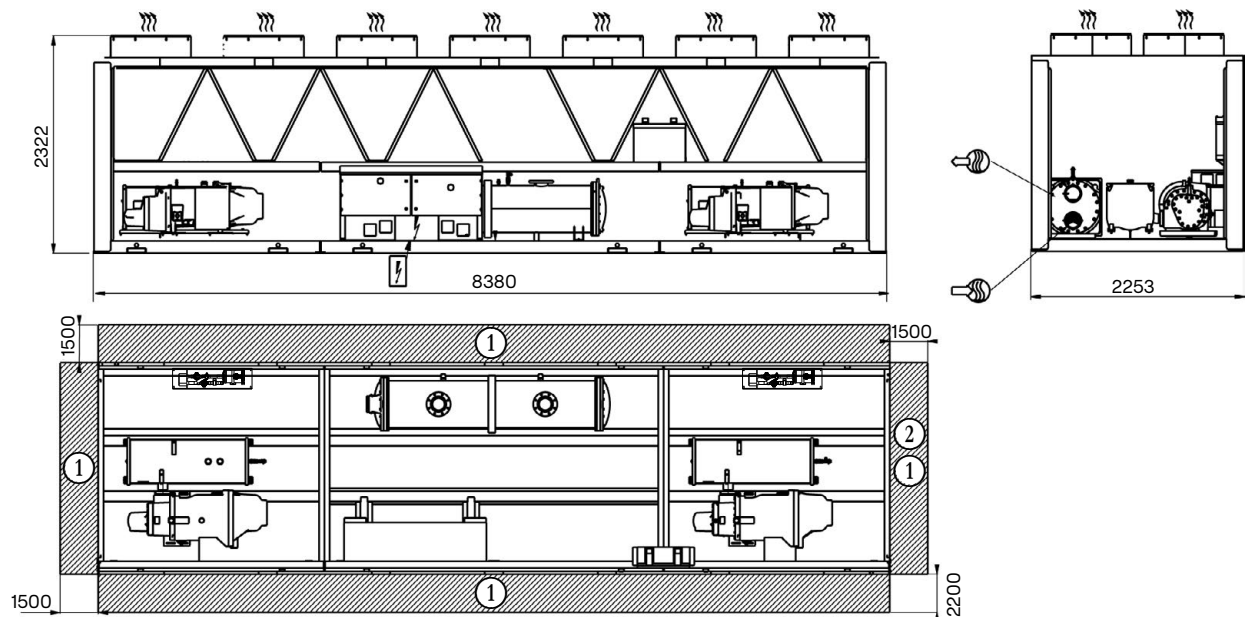
- ① Required clearances for maintenance (see note).
- ② Recommended space for evaporator tube removal.
- Water inlet for standard unit - for options 100A, 100C, 107 refer to the certified drawing.
- Water outlet for standard unit - for options 100A, 100C, 107 refer to the certified drawing.
-))) Air outlet – do not obstruct.
- Power supply and control connection.
- Slinging points.

NOTES:

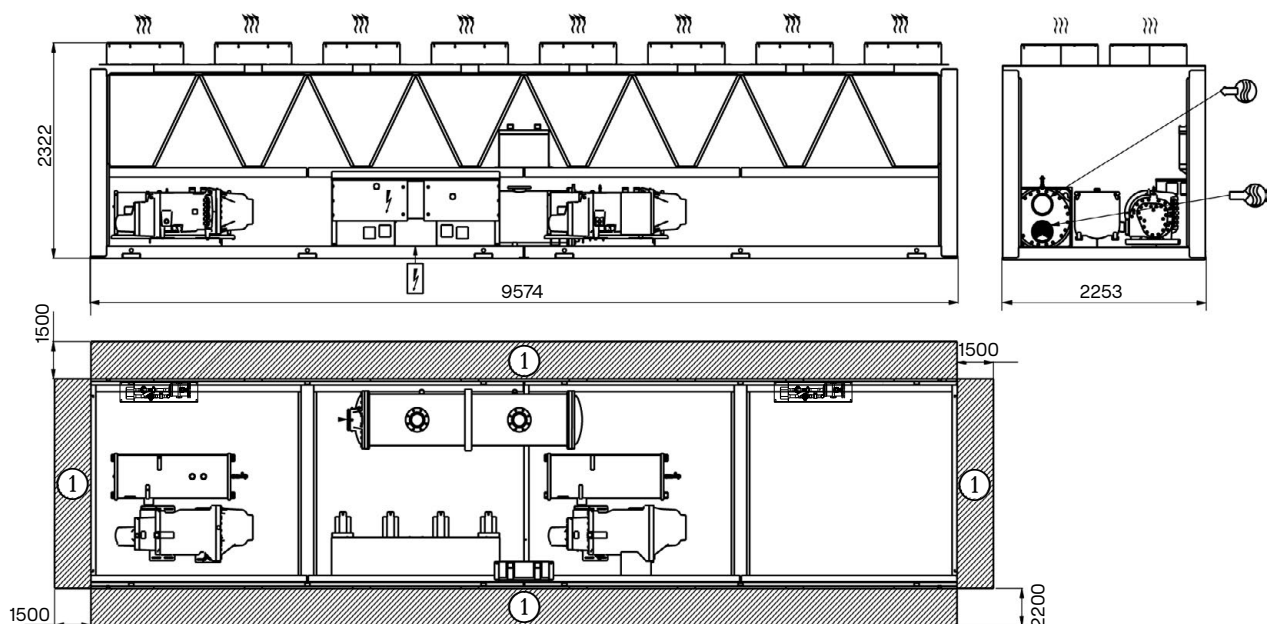
- Drawings are not contractually binding.
- Refer to unit nameplate for unit weight information.
- Before designing an installation, consult the certified dimensional drawings, provided with the unit (Appendix 4).
- If the installation includes several units or if this (these) is (are) close to walls, please refer to chapters 3.14 - "Multiple chiller installation" and 3.15 - "Distance to the wall" of the installation manual to determine the space required.

Dimensions / clearances

30XBE 900A, 30XBP 850A & 900A, 30XBE 850A with option 50



30XBE 1000A, 30XBP 1000A



Legend

All dimensions are given in mm.

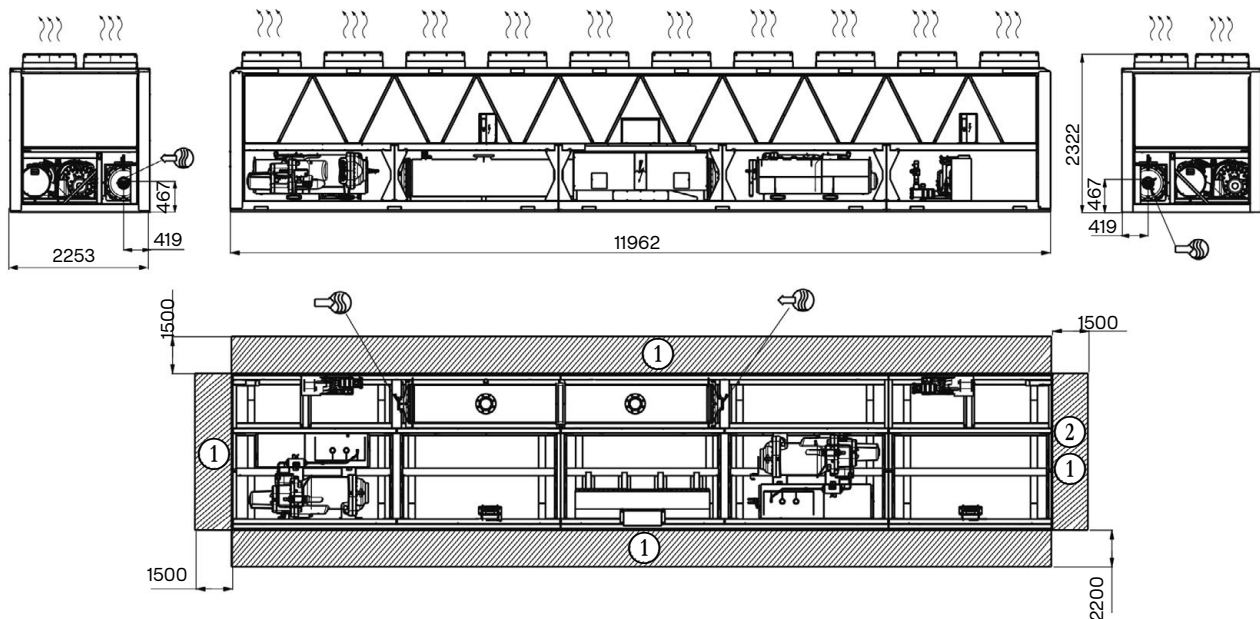
- ① Required clearances for maintenance (see note).
- ② Recommended space for evaporator tube removal.
- Water inlet for standard unit - for options 100A, 100C, 107 refer to the certified drawing.
- Water outlet for standard unit - for options 100A, 100C, 107 refer to the certified drawing.
- Air outlet – do not obstruct.
- Power supply and control connection.
- Sliding points.

NOTES:

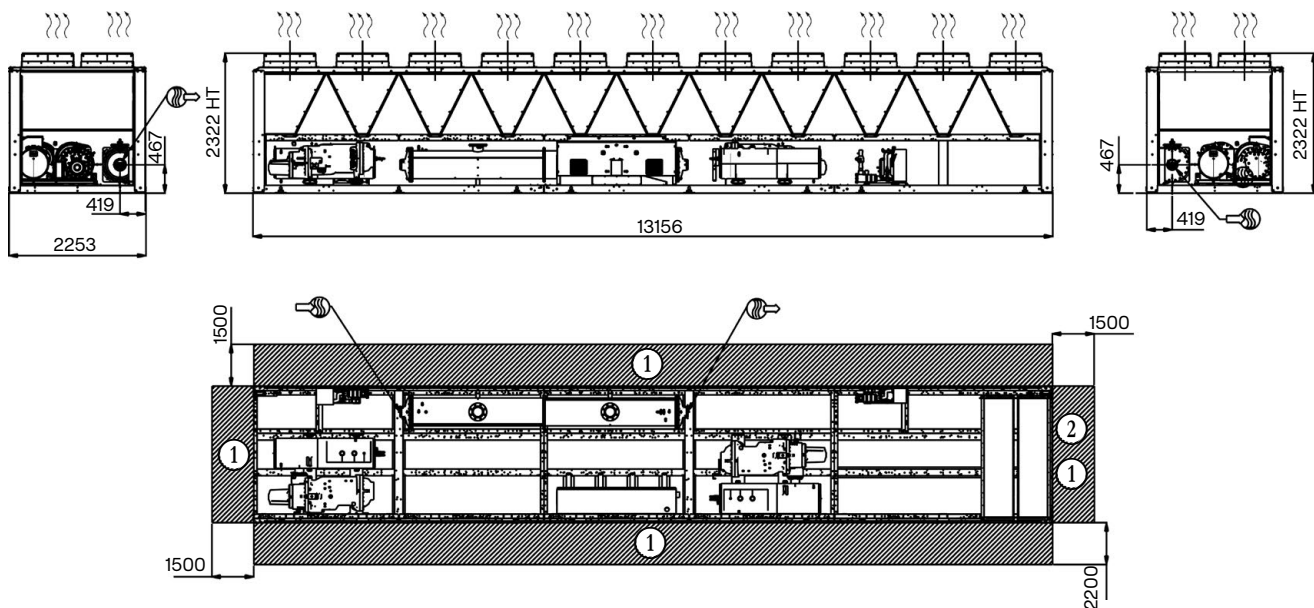
- Drawings are not contractually binding.
- Refer to unit nameplate for unit weight information.
- Before designing an installation, consult the certified dimensional drawings, provided with the unit (Appendix 4).
- If the installation includes several units or if this (these) is (are) close to walls, please refer to chapters 3.14 - "Multiple chiller installation" and 3.15 - "Distance to the wall" of the installation manual to determine the space required.

Dimensions / clearances

30XBE 1100A to 1400A, 30XBP 1100A to 1400A



30XB 1500A, 30XBP 1500A



Legend

All dimensions are given in mm.

① Required clearances for maintenance (see note).

② Recommended space for evaporator tube removal.

Water inlet for standard unit - for options 100A, 100C, 107 refer to the certified drawing.

Water outlet for standard unit - for options 100A, 100C, 107 refer to the certified drawing.

Air outlet – do not obstruct.

Power supply and control connection.

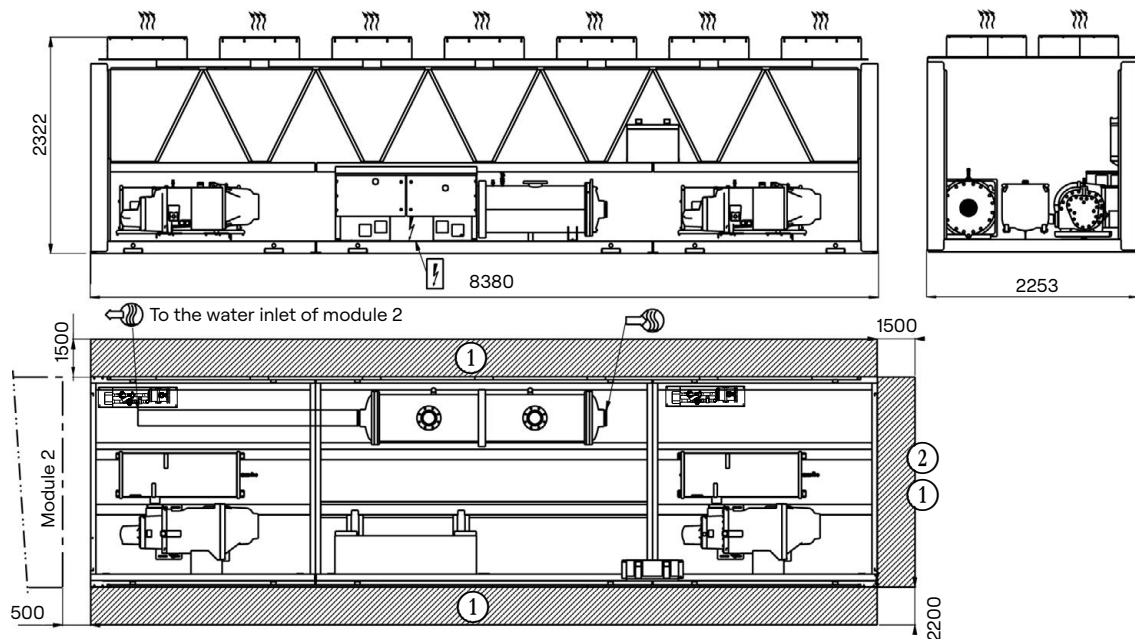
Slinging points.

NOTES:

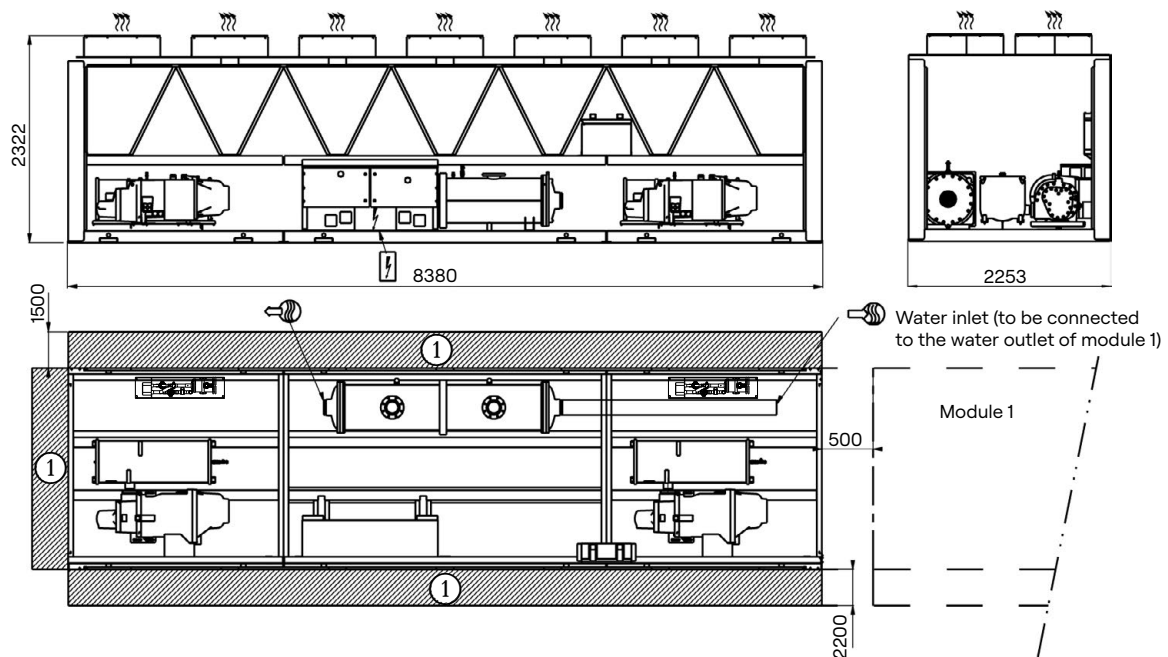
- Drawings are not contractually binding.
- Refer to unit nameplate for unit weight information.
- Before designing an installation, consult the certified dimensional drawings, provided with the unit (Appendix 4).
- If the installation includes several units or if this (these) is (are) close to walls, please refer to chapters 3.14 - "Multiple chiller installation" and 3.15 - "Distance to the wall" of the installation manual to determine the space required.

Dimensions / clearances

30XBE 1700A module 1/2



30XBE 1700A module 2/2



Legend

All dimensions are given in mm.

- ① Required clearances for maintenance (see note).
- ② Recommended space for evaporator tube removal.
- Water inlet for standard unit - for options 100A, 100C, 107 refer to the certified drawing.
- Water outlet for standard unit - for options 100A, 100C, 107 refer to the certified drawing.
- Air outlet – do not obstruct.
- Power supply and control connection.
- Sliding points.

NOTES:

- Drawings are not contractually binding.
- Refer to unit nameplate for unit weight information.
- Before designing an installation, consult the certified dimensional drawings, provided with the unit (Appendix 4).
- If the installation includes several units or if this (these) is (are) close to walls, please refer to chapters 3.14 - "Multiple chiller installation" and 3.15 - "Distance to the wall" of the installation manual to determine the space required.

Техника для климата

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