Geyser 2

6÷78 kW

General
A range of reversible heat pumps featuring Scroll compressors set up for fluid injection and extended operating limits

Configurations
/HT: reversible heat pump in 15 sizes

/HT HWS: reversible heat pump with total recovery

/MT: reversible heat pump in 17 sizes

/MT HWS: reversible heat pump with total recovery

Strengths
- Extended operating limits and power ranges
- Compatible with Ecodesign
- Compact dimensions
- Automatic management of domestic hot water (HWS version)

WESTERN™ AIRCONDITIONING

Geyser 2

Geyser 2

PRODUCT DESCRIPTION

A range of reversible heat pumps featuring Scroll compressors set up for fluid injection and extended operating limits

BODY

The structure of the unit is made of galvanized sheet-iron coated with polyester powder in RAL 5017/7035 at 180°C, which makes it highly resistant to weather conditions.

The panels are easy to remove, thus giving full access to rubber components.

All bodies have a condensation collection tank with drain.

REFRIGERANT

The unit is charged with refrigerant R410A, with GWP=2088 (value at 100 years).

COMPRESSORS

Hermetic scroll compressor, complete with thermal overload protection included in the electric motor windings, crankcase heater and rubber vibration damping supports. The compressor is specifically designed for operation in heat pump mode. Additionally, the optimized compression ratio at high operating pressures allows for higher efficiency if compared with conventional scroll compressors.

The model sizes 13 through 41 in the /HT version are supplied with a fluid injection compressor which also produces high temperature domestic water in extremely low external temperature conditions.

SOURCE-SIDE HEAT EXCHANGER

It consists of a coil with copper tubes and aluminium fins having a large exchange surface with fin pitch sized to maximize heat exchange and to reduce the noise impact.

A subcooler is fitted at the base of the heat exchanger, and an additional refrigerant circuit prevents the formation of ice in the lower part of the coil, thus facilitating the outflow of condensate during the defrosting cycles.

This technical solution reduces the number of defrosting cycles and removes any residual ice from the coil at the end of the process.

There is a metal mesh to protect the finned pack.

For installations within a kilometre of the coast, the use of Cu/Al coils with anti-corrosion treatment is strongly recommended.

USER-SIDE HEAT EXCHANGER

The heat exchanger is made of braze-welded stainless steel AISI 316 plates and it is insulated with a shell of closed-cell foam material that reduces heat losses and prevents the formation of condensate.

The heat exchanger is provided with a temperature probe for freeze protection, a probe for measuring the temperature of the input and output water and a paddle flow switch that is standardly supplied with it.

FANS

Axial flow fans directly coupled to the 6-pin electric motor featuring an external rotor, protection level IP56 Each fan is housed in shaped nozzles and includes an accident-prevention grid, pursuant to standard UNI EN 294.

The controller manages the speed of the fans through a phase cutting speed regulator in order to optimize the operating conditions and efficiency. In addition to this, it allows the unit to operate in heat pump mode even with high external temperatures.The controller is also designed to reduce the noise level in the selected time bands by modulating the fan speed, at the same time keeping the best operating efficiencies.

With this accessory, EC fans, with electronically commutated brushless motor, are used for the ventilating section. These guarantee very high efficiency levels for all working conditions and allow a 15% saving on the power absorbed by each fan working at full capacity.

Through a 0-10V analogue signal sent to each fan, the microprocessor also carries out condensation control by continuous adjustment of the air flow rate as the external air temperature changes, with a further reduction in electrical absorption and noise emission.

REFRIGERANT CIRCUIT

Each refrigerant circuit comprises:

- charging valve
- liquid sight glass
- solenoid valve
- non-return valve
- replaceable solid cartridge dehydrator filter
- two thermostatic expansion valves (one for operation in chiller mode and the other for operation in heat pump mode) with external pressure equalization
- pressure transducer
- high and low pressure switches
- safety valve (excluding sizes 7, 9 and 11 for the /HT version, and sizes 8, 10 and 12 for the /MT version). All the sizes feature a high pressure safety switch with manual resetting and a transducer-operated high pressure alarm with automatic resetting for a limited number of occurrences.

The models of the /HT version from size 13 through 41 are supplied with an additional circuit for fluid injection to the compressor.

ELECTRICAL CONTROL PANEL

The electrical control panel is supplied with a master disconnector switch, a protection for the auxiliary power circuits, a compressor contactor and an electronic controller for unit registration featuring an interface display that is used to view and to set the machine parameters.

The electrical control panel comprises:

- Pump relay or overload cutout and contactor (in /1P and /1PS versions)
- general alarm potential free contacts.
- The electronic controller is designed for management of the following functions:
  - inlet control for water temperature regulation;
  - freeze protection;
  - compressor time setting;
  - high pressure alert management (in many cases this is useful to prevent the unit from stopping);
  - alarm signals;
  - alarm resetting;
  - self-adjusting control to enable optimal operation even when the water level in the system is low;
  - digital input for external ON-OFF switching.
- The display shows the following parameters:
  - output water temperature;
  - condensation temperature;
  - temperature and differential setpoints;
  - alarms description.

The power supply for size 7 of the /HT version and for sizes 8 and 10 of the /MT version is standardly 230V/1~/50Hz as standard.

The power supply for size 9 through 41 of the /HT version and for sizes 12 through 42 of the /MT version is standardly 400V/3N~/50Hz as standard.

For single-phase models, the three-phase power supply is available as an accessory option. For three-phase models, the singe-phase power supply is available as an accessory option.

CONTROL

The unit is standardly supplied as standard with a parametric micro processor controller with a display interface which is used to view and set the machine parameters.

The control allows the following functions:

- water temperature adjustment, with control of the water entering the user-side heat exchanger
- freeze protection
- compressor timings
- high pressure alert management
- alarm message
- alarm reset
- digital input for general ON/OFF
- digital input for Summer/Winter selection

The controller standardly incorporates the following functions as standard:

- automatic management of domestic hot water

Some functions are only available if the unit is properly configured and enabled from the controller.

Management of defrost cycles

Sliding management of the defrost threshold ensures that, as the absolute humidity of outdoor air decreases, the frequency of the defrost cycles gradually decreases because they are carried out only when the ice formed on the coil actually penalizes performance.

INSPECTIONS AND SAFETY

All the units are fitted with the following control and safety components:

- Anti-freeze probe causing anti-freeze alarm to trigger (automatic resetting at short intervals)
- High pressure switch (with manual reset)
- Low pressure switch (with automatic reset and limited interventions)
- Mechanical vane type flow switch included in the standard supply
- Condensation pressure control by means of speed regulator for operation at low external temperatures
- High pressure safety valve (excluding sizes 7, 9 and 11 for the /HT version, and sizes 8, 10 and 12 for the /MT version) All the sizes feature a high pressure safety switch with manual resetting and a transducer-operated high pressure alarm with automatic resetting for a limited number of occurrences.
- Protection against compressor overtemperature
- Water temperature probe on user side (inlet check)
- Evaporation pressure control performed by the speed regulator for operation at high external temperatures in domestic hot water production or recovery mode

TESTING

All the units are factory-tested and supplied complete with oil and refrigerant.

OPTIONS

/LN: low noise unit

The unit featuring the /LN option requires that the compressor be covered with a fully noise-proof shroud, made of noise absorbing and self-extinguishing material in expanded polyurethane with a density equal to 30 kg/m^3.

A rubber noise-insulating sheet, 2 mm thick, is placed in-between the two layers of expanded polyurethane.

/EAO: horizontal air ejection

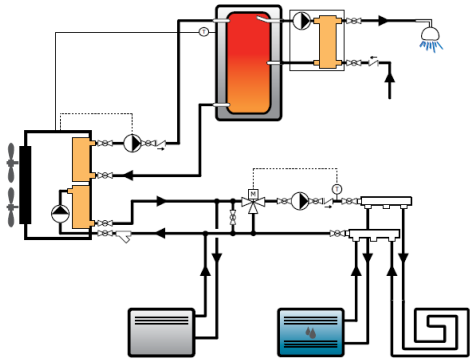
Geyser 2 MT: for unit sizes from 8 through 42 air ejection is standardly horizontal. For sizes from 50 through 92 air ejection is standardly vertical. The EAO option is available (horizontal air ejection).

Geyser 2 HT: for unit sizes from 7 through 41 air ejection is standardly horizontal. For sizes from 50 through 90 air ejection is standardly vertical. The EAO option is available (horizontal air ejection).

For further information refer to the "Dimensional drawings" section.

/HWS VERSION

The unit in this set-up has two heat exchangers: one is on the system side and it is used for air conditioning and heating; the other is exclusively used for domestic water production.



The unit fitted in the heat exchanger on the system side can produce either hot or cold water to meet the heating and cooling requirements of the building, depending on the seasons.

The unit feeding the heat exchanger for domestic hot water produces high temperature water which is sent to a storage tank outside the machine. This tank is selected and sized according to the requirements of the system.

The unit operates with various modes depending on the season, and such modes are selected according to the temperature conditions sensed by the probes and the stored setpoints. Switching times and logics have been designed to ensure maximum system efficiency and reliability.

This configuration must be necessarily matched with a suitably sized boiler where domestic hot water is stored. The water temperature is monitored by a probe, and the sensed temperature is used by the controller to adjust the production parameters.

Summer operation

The machine can operate in three possible modes.

- Chiller mode: the unit only produces chilled water for the system.
- Chiller mode and domestic hot water (ACS): the unit produces chilled water for the system and domestic hot water at the same time. Recovery of heat for domestic hot water production is total.
- Heat pump mode for domestic hot water production: when there is no refrigerant load and when requested by the domestic hot water probe, the unit heats the water inside the domestic hot water storage tank, using the finned pack coil as evaporator. The use of external hot air as a heat source contributes to achieving extremely high COPs.

The shift from one mode to another takes place fully automatically according to a priority logic in favour of domestic hot water production and, when there is a simultaneousness of loads, by recovering condensation energy for domestic hot water production.

Winter operation

The machine can operate in two possible modes.

- Heat pump mode for heating: the unit produces hot water for the heat exchanger on the system side for heating purposes.
- Heat pump mode for domestic hot water production: the unit produces high temperature hot water for the heater exchanger in the domestic hot water storage tank.

The shift from one mode to another takes place fully automatically according to a priority logic in favour of domestic hot water production.

HYDRAULIC MODULES

/1P Unit with pump

The unit includes:

- Circulator featuring a fixed speed EC motor (sized from 7 through 17 of the /HT version and sizes from 8 through 20 of the /MT version) or circulation pump (sizes from 22 through 41 of the /HT version and 23 through 42 for the /MT version)
- Expansion vessel
- a water drain valve from the hydraulic circuit;
- a safety valve set to 6 bar, which corresponds to the maximum allowable operating pressure.

/1PS Unit with pump and tank

In addition to the components of the 1P unit, this unit includes: an inertial, insulated accumulation tank.

/2P Unit with two pumps

The 2P option is available for sizes from 52 through 92 for the /MT version and sizes from 50 through 90 for the /HT version.

/1R Unit with pump on domestic hot water side

The unit is provided with a pump for the domestic hot water side. This module can only be matched with units in /HWS version and it may be combined with option 1P. The pump is supplied standardly as standard (installation by customer) for sizes from 8 through 42 for the /MT version and sizes from 7 through 41 for the /HT version.

The pump must be installed inside a technical compartment suitably protected against low temperatures and the risk of freezing for the relevant hydronic circuit.

This option includes the installation of the pump at the factory for the remaining sizes. The units in /HWS version without the 1R option must receive an OK signal to use the external pump.

DESCRIPTION OF ACCESSORIES

Refrigerant circuit accessories

VTE **Electronic expansion valve**

The use of this component is particularly advisable on units operating in very variable heat load or operating mode conditions, as in the case of joint management of air conditioning and high temperature water production. The use of an electronic thermostatic valve allows you to:

- maximize heat exchange at the evaporator
- minimize response times to changes in load and operating conditions
- optimize control of overheating
- ensure maximum energy efficiency

Hydraulic circuit accessories

GRPC **Filling unit with pressure gauge**

This accessory allows automatic filling of the hydraulic system and control of correct operating pressure, which can always be checked on the pressure gauge, and continuously maintains this pressure by replenishing with water if necessary.

RA **Antifreeze heater**

These are electric heaters inserted on the user-side heat exchanger, on the pumps and in the tank (depending on the configuration of the machine) to prevent damage to the hydraulic components due to ice formation during periods when the machine is stopped.

Based on normal operating conditions and the percentage of glycol in the system, an appropriate "antifreeze alarm" temperature is set in the control. When a temperature that is 1K higher than the antifreeze alarm threshold is detected at the outlet from the exchanger, the pump (if present) and the antifreeze heaters are switched on. If the temperature of the outgoing water reaches the antifreeze alarm threshold, the compressors are stopped, keeping the heaters and the pumps active, and the general alarm contact of the machine is activated.

RINT **Additional heaters (on user side)**

The accessory requires an additional immersed heater to be installed directly in the tank of the hydraulic module.

The additional heater is activated only when:

- the unit is in heat pump mode
- the external air temperature is below a settable threshold (service parameter)
- the tank inlet water temperature is below a settable threshold (service parameter)

The additional heaters can have a different capacities depending on the machine model, and they can be managed with stepped control (up to 4 steps).

V3 **Three-way valve for domestic hot water management**

This is a three-way on-off valve, complete with servo control. The unit controller can manage two separate hydraulic circuits through this valve: one for comfort and one for domestic hot water production.

The valve and the servo control are for indoor installation and they require the ambient temperature not to drop below -10°C.

Accessory supplied loose. Installation by the customer.

SID **Hydraulically disconnected tank**

This accessory is mandatory on units fitted with the "Automatic management of domestic hot water" accessory and a hydraulic module with tank (1PxS or 2PxS).

The tank fitted in the unit will have an inlet and outlet, flush with the machine profile, and will be disconnected from the remaining hydraulic circuit. This will allow correct enabling of the 3-way valve for domestic hot water management, thus avoiding going through the buffer tank during domestic hot water production.

PFP **User-side pump with Pulse function**

As standard, the unit is set to keep the system-side circulation pump on all the time, even when the set point temperature is reached.

But when the unit is provided with this accessory, on reaching the set point, the controller will switch off the pump and start it again at regular intervals for a sufficient time to measure the water temperature. If the controller verifies that the water temperature is still in set point condition, it will switch off the pump again. Otherwise the controller will start the compressors again to meet the requirements of the system.

This accessory therefore allows electrical absorption due to pumping to be drastically reduced, especially in spring and autumn when the load is extremely low.

FW **Water filter**

To protect the elements of the hydraulic circuit (in particular, the exchangers), there are Y filters that can stop and settle the particles that are normally present in the water flow and would otherwise settle in the more delicate parts of the hydraulic circuit and damage its heat exchange capacity.

Installation of the water filter is mandatory even when it is not supplied as an accessory.

Fan accessories

VEC **EC fans**

With this accessory, EC fans, with electronically commutated brushless motor, are used for the ventilating section. These guarantee very high efficiency levels for all working conditions and allow a 15% saving on the power absorbed by each fan working at full capacity.

Through a 0-10V analogue signal sent to each fan, the microprocessor also carries out condensation control by continuous adjustment of the air flow rate as the external air temperature changes, with a further reduction in electrical absorption and noise emission. Units from size 6 through 18 fit fans from the EC series.

For further details, see the dedicated chapter: "Aeraulic load losses and options available for the fan section".

VEM **Oversize EC fans**

The increased EC fans allow to obtain the same benefits as EC fans and in addition allow to have a residual useful head of about 100Pa.

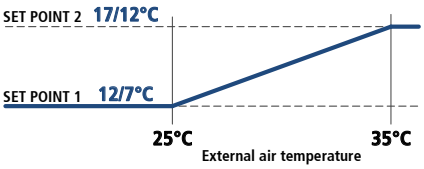
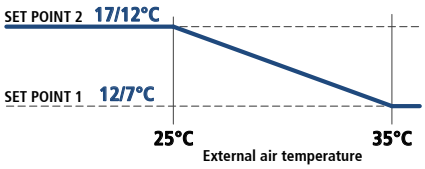
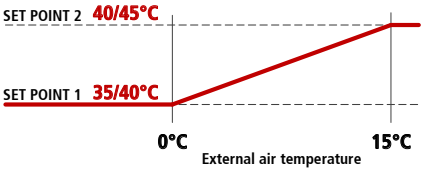
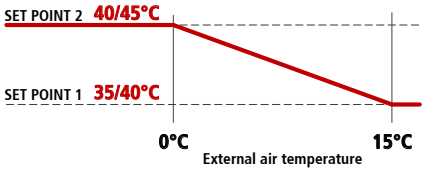
For further details, see the dedicated chapter: "Aeraulic load losses and options available for the fan section".

Electrical accessories

CSP **Set point compensation depending on external air temperature**

For units fitted with this accessory, the set point of the unit is set so that it can vary between two values, a maximum and a minimum, depending on the external air temperature. The compensation ramp and the maximum and minimum values of the set point can be changed by the user.

Unless otherwise specified in the order, the controller will be set to implement a positive compensation logic according to the temperatures shown in the following diagrams:

	Positive compensation	Negative compensation
Chiller		
Heat pump		

CP **Single potential free operating contacts**

For units fitted with this accessory, clean contacts from which the customer can acquire signals that are shown in the terminal board of the electrical control panel.

TERM **Remote-controlled user terminal panel**

This accessory allows the terminal normally situated on the machine to be replicated on a support situated at a distance. It is particularly suitable when the unit is placed in an area that is not easily accessible.

The accessory is supplied loose and is to be installed by the customer at a maximum distance of 120m from the unit. We advise using a cable of the following type: "TECO O.R. FE 2x2xAWG24 SN/ST/PUR".

For this accessory, there is a dedicated serial port.

RMMT **Maximum and minimum voltage relay**

This accessory constantly monitors the voltage value and the unit's power supply phase sequence. If the supply voltage does not fall within the set parameters or there is a phase reversal, an alarm is generated that stops the machine to prevent damage to its main parts

SERI **RS485 serial board**

This accessory is designed to implement the interface with a RS485 network and to provide for optical insulation of the controller from the RS485 serial network.

RIF **Power factor correction to cosφ ≥ 0.95**

With this accessory, an electrical control panel, containing power factor correction capacitors to make the cosφ of the unit greater than or equal to 0.95, is supplied with the unit. The capacitors should be connected (by the customer) to the electrical control panel of the unit in the specially prepared terminal board.

Besides reducing the absorbed reactive power, the use of this accessory also allows the maximum absorbed current to be lowered.

SETD **Double set point from digital input**

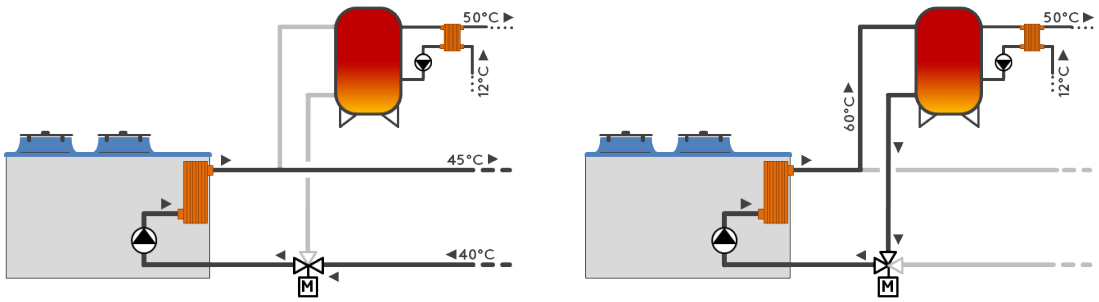
The accessory allows you to preset two different operating set points and manage the change from one to the other through a digital signal.

The set point temperatures must be specified when ordering. For optimization of the unit, reference will be made to the lower set point in chiller mode and the higher set point in heat pump mode.

Unless otherwise specified in the order, the controller will be set at the factory with the following temperatures:

- in chiller mode, set point 1 to 7°C and set point 2 to 12°C
- in heat pump mode (only for HP units) set point 1 to 45°C and set point 2 to 40°C

AS **Automatic management of domestic hot water**



This function enables the unit to control the temperature inside a domestic hot water storage tank and to manage a 3-way valve outside the unit (available as an accessory).

The water temperature in the domestic hot water tank is controlled through a dedicated probe situated in the tank.

Normally, the heat pump operates on the system to meet the comfort requirements of the building, but when the water temperature in the domestic hot water tank falls below a set threshold, the controller switches to domestic hot water production.

If the unit is operating as heat pump for heating, the 3-way valve will be switched and the set point changed.

On the other hand, if the unit is producing chilled water for air conditioning, the controller switches the unit to heat pump mode, gives it the set point for domestic hot water and turns the 3-way valve to the appropriate position. Once the temperature in the domestic hot water tank has reached the set value, the unit automatically returns to producing water for the heating or air conditioning system.

When there is a defrost request, the 3-way valve is always forced to position itself on the system, whatever operating mode it may be in.

Domestic hot water production is always given priority.

With this accessory there are two digital inputs in the electrical control panel for respectively deactivating domestic hot water production and the production of water for the heating/air conditioning system.

When the unit is working in "domestic hot water only" mode, the pump is normally off and is switched on only for the time required to meet the demand for domestic hot water production.

When this accessory is fitted, the machine must have control of pump operation. This means that either the unit is equipped with one of the hydronic modules available in the catalogue (therefore with at least one pump installed on it) or the relay for external pump management must be requested as accessory.

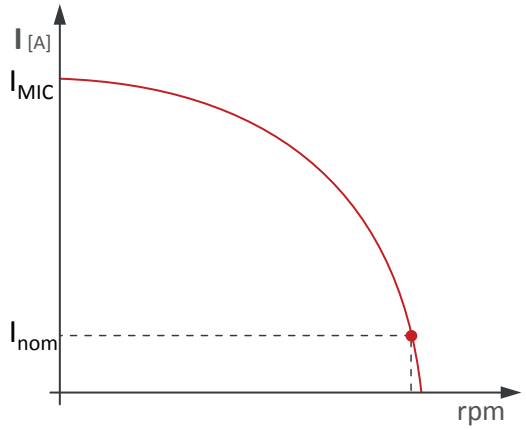
The probe to be fitted in the domestic hot water tank is supplied with the unit with a 5m long cable. The probe is used to measure the water temperature in the hottest part of the tank, so it must be positioned in a specially prepared pocket and secured using heat conducting paste. Installation by the customer.

SOFT **Electronic soft-starter**

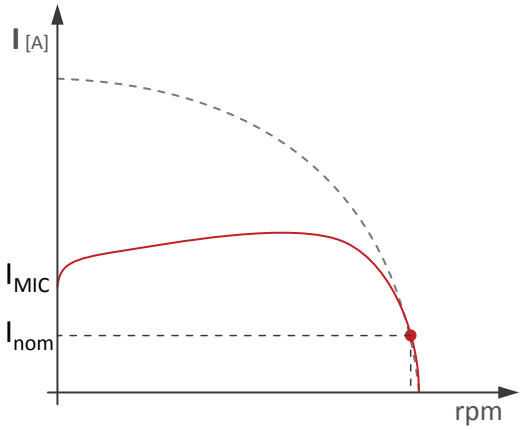
The scroll compressors have DOL (Direct On Line) starting and their torque (T) and current (I) characteristics are shown in the following diagrams:

For an individual compressor, the normal starting current ISC will be 4-5 times its rated current IN.

If the unit is equipped with the electronic soft-starter accessory, the starting of each compressor is done with an acceleration ramp that allows the effective value (rms value) of the inrush current of the individual compressor to be lowered.



Current trend without accessory Electronic soft-starter



Current trend with accessory Electronic soft-starter

SFS **Domestic hot water probe**

For domestic hot water production, the controller requires this accessory: it is a temperature probe with 6 m of cable placed in a special well of the tank for domestic hot water production. For correct positioning, please read the section entitled "How to install a heat pump".

GCA **Anti-legionella cycle management**

Allows management through a clock inside the electrical control panel: Time/Day/Week. During the selected period, it will be possible to change the set point on the hot water side to produce for example 60/65 [°C] suitable for neutralizing the bacterium.

PS **Domestic hot water production with timer**

With this accessory fitted, it will be possible to associate two different temperatures for domestic hot water with different times of the day: Normal and Saving. This allows the user to decide at what times of day the heat pump must concentrate domestic hot water production, while however still maintaining the Saving minimum temperature level managed with priority logic. For example, by concentrating water production at Normal temperature during night hours, the lowest electricity rates will be used and production of hot water before the hours of highest consumption will be guaranteed. In any case, with this system, the unit never stops controlling the temperature inside the domestic hot water tank, and if hot water is occasionally used outside normal hours, the unit will give priority to domestic hot water production until the water in the tank is back at the Saving set point temperature.

MSx Miniboss S

The accessory is designed to connect up to 4 units in parallel which are activated and deactivated according to power steps and are rotated so as to allow for identical use of all the units.

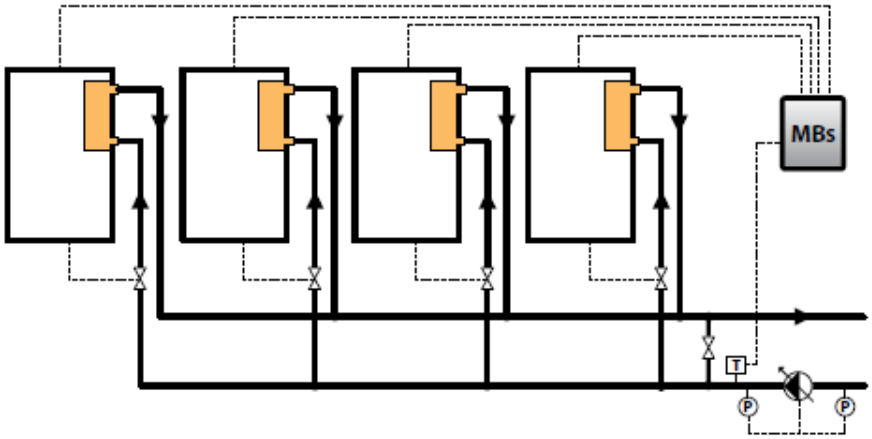
The connected units must be of the same type. The Miniboss S cannot control units that have active domestic hot water management.

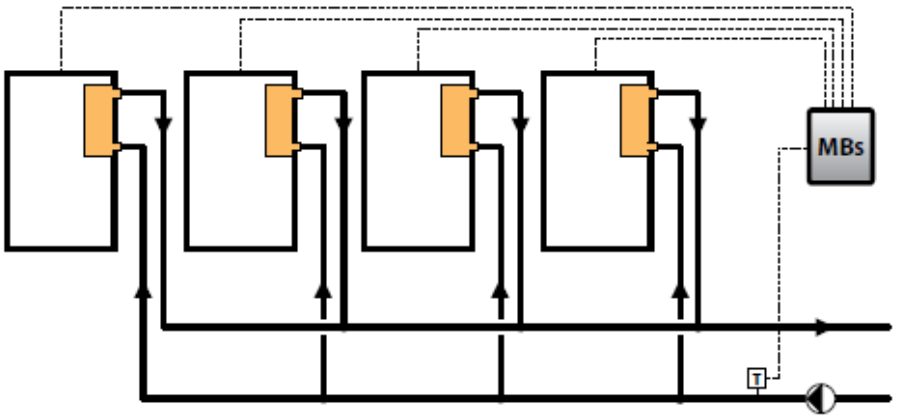
The following can be managed directly from the Miniboss S panel:

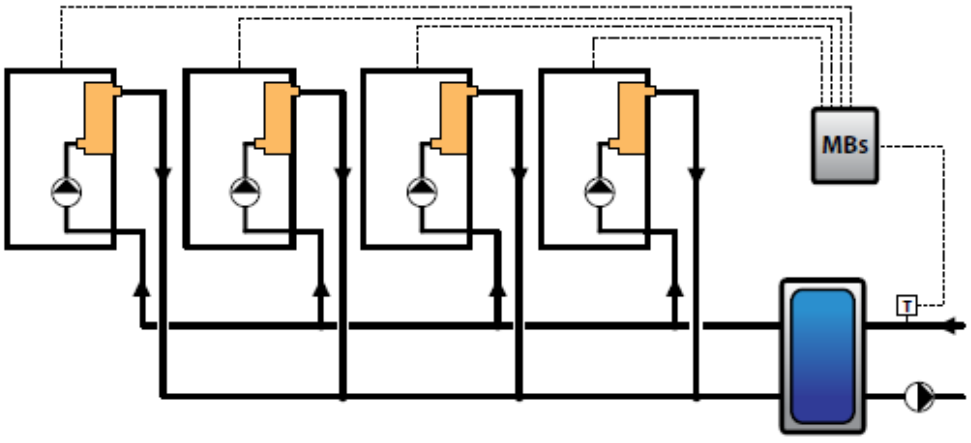
- summer/winter mode selection for all the machines;
- ON/OFF mode of each unit individually or the entire system.

This accessory is incorporated in one of the electrical control panels supplied with the unit (to be installed in a technical compartment). Provision for it should be made on one of the machines connected in parallel, and all the connected units must have the same configuration.

When ordering, the customer must specify the number of units to be managed in order to correctly programme the supervisor. Furthermore, the hydraulic circuit that connects the units must necessarily comply with one of the following diagrams.







For further information on use, refer to the specific documentation.

MMx **Miniboss M**

The accessory is designed for connection to up to 4 units in parallel. The main functions are:

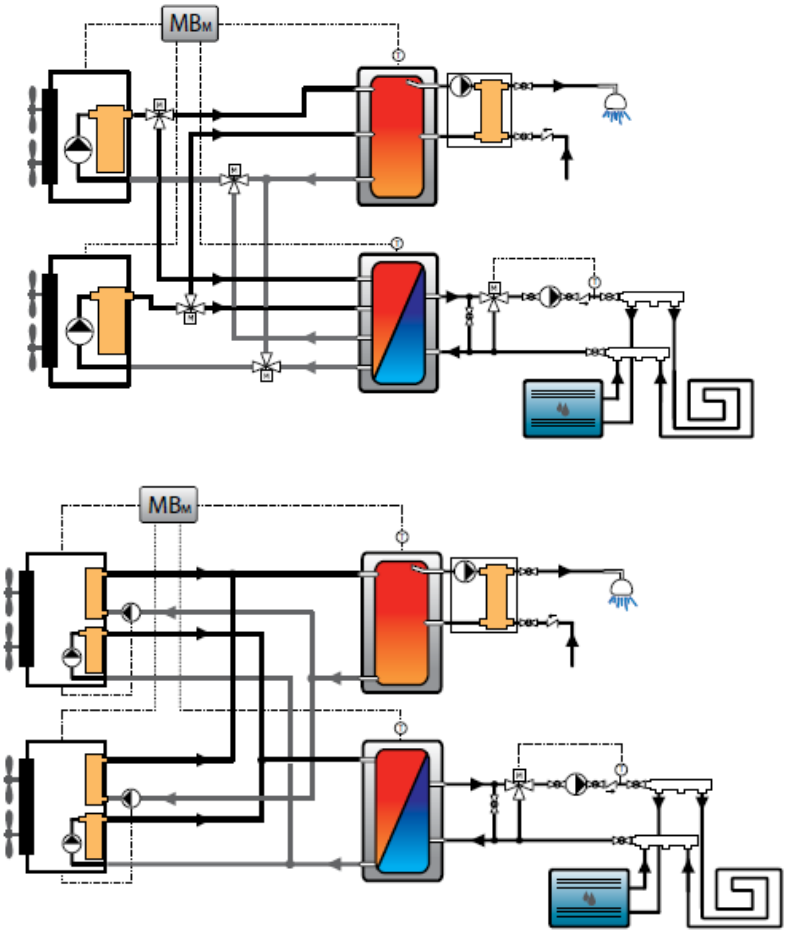
- management of units with HWS configuration;
- management of units with "automatic hot domestic water management":
- management of systems with hot/cold tank for air heating/conditioning and a hot tank for the production of domestic water.

In addition to the functions of the Miniboss S, the accessory offers:

- the system setpoint;
- the domestic hot water setpoint;
- the possibility to use a climatic curve for compensation of the system setpoint;
- summer/winter mode selection for all the machines;
- ON/OFF mode of each unit individually or the entire system.
- the switching of three-way valves;
- the possibility to control the operation of pumps outside the units.

This accessory is incorporated in one of the electrical control panels supplied with the unit (to be installed in a technical compartment). Provision for it should be made on one of the machines connected in parallel, and all the connected units must have the same configuration.

When ordering, the customer must specify the number of units to be managed in order to correctly programme the supervisor. Furthermore, the hydraulic circuit that connects the units must necessarily comply with one of the following diagrams.



For further information on use, refer to the specific documentation.

R1PR **Relay for management of 1 external heat recovery-side pump**

This accessory can be requested for units without heat recovery pumps (for DC units) and allows a pump outside the machine to be controlled.

R2PR **Relay for management of 2 external heat recovery-side pumps**

This accessory can be requested for units without heat recovery pumps (for DC units) and allows two pumps outside the machine to be controlled with a running/stand-by logic by implementing a rotation on the hours of operation.

A2/4 **Power supply**

Available option

- Sizes 6 and 8: 230V/1/50Hz power supply, supplied standardly Options 240V/1/50Hz, 400V/3+N/50Hz and 415V/3+N/50Hz
- Sizes 10 and 14: standard 400V/3+N/50Hz power supply Options 230V/1/50Hz, 240/1/50Hz and 415V/3+N/50Hz
- Sizes 16 through 37: standard 400V/3+N/50Hz power supply Option 415V/3+N/50Hz

Other accessories

The unit is delivered so that it can be disassembled easily on site if this makes the installation operations easier.

A unit requested with this option is supplied:

- screwed instead of riveted
- with plugged and not welded pipes
- without refrigerant charge
- untested
- covered by the warranty only if reassembled and screwed together by personnel authorized by the factory

GABB **Packaging in wooden crate**

The unit is protected by a made-to-measure wooden crate. The accessory is mandatory if shipping by container is required.

AG **Rubber anti-vibration mounts**

These allow you to reduce the vibrations transmitted from the unit to the surface it is standing on.

Accessory supplied loose.

ANTC **Coil treated with anti-corrosion paints**

The treatment is applied exclusively to finned pack coils with copper tubes and aluminium fins and consists of aluminium passivation and coating with a polyurethane base; a double layer of paint, of which the first passivates the aluminium and acts as primer and the second is a polyurethane based surface coating. The product has high resistance to corrosion and all environmental conditions.

The choice of whether or not to treat the exchanger should be made in relation to the environment in which the unit is to be installed and through observation of other structures and machinery with exposed metal surfaces present in the destination environment.

The cross observation criterion is the most valid method of selection currently available without having to carry out preliminary tests or measurements with instruments. The identified reference environments are:

- marine coastal
- industrial
- urban with a high housing density
- rural

Please note that in cases where different conditions co-exist, even for short periods, the choice must be suitable for preserving the exchanger in the harsher environmental conditions and not in conditions between the worst and best situation.

Particular attention must be given to cases where an environment that is not particularly aggressive becomes aggressive as a consequence of a local and/or temporal concomitant cause such as, for example, due to the presence of a heating flue outlet or an industrial kitchen or a solvent extraction fan in a small craft business.

PREA **Unit suitable to be disassembled on site**

The unit is delivered so that it can be disassembled easily on site if this makes the installation operations easier.

A unit requested with this option is supplied:

- screwed instead of riveted
- with plugged and not welded pipes
- without refrigerant charge
- untested
- covered by the warranty only if reassembled and screwed together by personnel authorized by the factory

TECHNICAL SPECIFICATIONS

GEYSER 2 MT

			8	10	12	16	18	20	23	25
GEYSER 2 MT										
Cooling (A35°C; W7°C) (EN 14511 values)										
Refrigeration capacity	(1)	kW	6,1	7,5	9,8	13,2	14,3	16,6	19,1	20,5
Total absorbed power	(1)	kW	2,2	2,5	2,9	4,2	4,5	5,1	6	6,5
EER	(1)		2,84	2,97	3,39	3,16	3,19	3,26	3,16	3,14
EER energy class (Eurovent)	(1)		C	C	A	A	A	A	A	A
Cooling (A35°C; W18°C) (EN 14511 values)										
Refrigeration capacity	(6)	kW	8,4	10,2	13,9	18,4	20,1	22,5	25,5	28,6
Total absorbed power	(6)	kW	2,3	2,7	3,1	4,5	4,9	5,5	6,6	7,3
EER	(6)		3,68	3,8	4,48	4,07	4,12	4,1	3,85	3,92
EER energy class (Eurovent)	(6)		B	A	A	A	A	A	A	A
Heating (A7°C; W35°C) (EN 14511 values)										
Heating capacity	(2)	kW	6,8	9	11,3	15,1	16,7	19,5	22,5	24,1
Total absorbed power	(2)	kW	1,7	2,2	2,6	3,6	4	4,4	5,2	5,6
COP	(2)		3,98	4,17	4,41	4,19	4,15	4,4	4,34	4,27
COP energy class (Eurovent)	(2)		B	A	A	A	A	A	A	A
Heating (A7°C; W45°C) (EN 14511 values)										
Heating capacity	(3)	kW	6,6	8,8	11	14,6	16,3	18,8	21,6	23,3
Total absorbed power	(3)	kW	2	2,7	3,1	4,4	4,9	5,3	6,2	6,7
COP	(3)		3,23	3,3	3,53	3,34	3,3	3,57	3,5	3,49
COP energy class (Eurovent)	(3)		A	A	A	A	A	A	A	A
Total recovery /HWS (W7°C;W45°C) (EN 14511 values)										
Refrigeration capacity	(7)	kW	6	7,9	10,6	12,4	14,5	16,9	20	21,3
Heating capacity	(7)	kW	7,8	9,9	13	15,9	18,2	21,3	25,3	27
Total absorbed power	(7)	kW	1,8	2,1	2,5	3,6	3,8	4,5	5,4	5,8
EER	(7)		3,3	3,85	4,26	3,45	3,79	3,77	3,73	3,69
COP	(7)		4,28	4,84	5,24	4,43	4,77	4,75	4,71	4,68
Compressors										
Compressors/Circuits		n°/n°	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1
Capacity reduction steps		n°	1	1	1	1	1	1	1	1
Refrigerant charge		kg	1,4	1,4	2,1	2,9	2,9	4,2	4,8	4,8
Fans										
Quantity		n°	1	1	1	2	2	2	2	2
Total air flow rate		m³/h	3900	3900	3600	7800	7800	7200	14000	14000

(1) Outside air temperature 35°C; evaporator inlet-outlet water temperature 12/7°C. Values compliant with standard EN 14511

(2) Outside air temperature 7°C DB, 6°C WB; condenser inlet-outlet water temperature 30/35 °C Values compliant with standard EN 14511

(3) Outside air temperature 7°C DB, 6°C WB; condenser inlet/outlet water temperature 40/45°C. Values compliant with standard EN 14511

(4) Values obtained from the sound power level (conditions: note 9), related to a distance of 10 m from the unit in free field with directivity factor Q=2. Non-binding values See NOISE LEVELS section.

(5) The weight refers to the unit without any accessory. The introduction of a few accessories such as copper/aluminum coils, hydraulic modules or the recovery exchangers can lead to weight increased that can exceed 10%. For further details refer to the specific drawing of the selected configuration.

(6) Outside air temperature 35°C; evaporator inlet/outlet water temperature 23/18°C Values compliant with standard EN 14511

(7) evaporator inlet/outlet water temperature 12/7°C Total recovery unit inlet/outlet water temperature 40/45 Values compliant with standard EN 14511

** Basic unit without included accessories

GEYSER 2 MT

			8	10	12	16	18	20	23	25
GEYSER 2 MT										
User-side heat exchanger										
Quantity		n°	1	1	1	1	1	1	1	1
Water flow rate (CH) (A35; W7)	(1)	m³/h	1,06	1,3	1,7	2,29	2,47	2,87	3,3	3,55
Water flow rate (CH) (A35; W18)	(6)	m³/h	1,46	1,77	2,41	3,17	3,47	3,89	4,41	4,93
Water flow rate (HP) (A7; W35)	(2)	m³/h	1,17	1,55	1,94	2,6	2,87	3,35	3,87	4,15
Water flow rate (HP) (A7; W45)	(3)	m³/h	1,12	1,5	1,88	2,49	2,78	3,21	3,69	3,99
Head loss (CH) (A35; W7)	(1)	kPa	13	11	14	15	14	16	15	14
Head loss (CH) (A35; W18)	(6)	kPa	22	18	24	25	24	26	24	23
Head loss (HP) (A7; W35)	(2)	kPa	22	18	24	25	24	26	24	23
Head loss (HP) (A7; W45)	(3)	kPa	17	14	20	19	20	21	20	19
Heat exchangers /HWS										
Evaporator water flow rate (W7; W45)	(7)	m³/h	1,04	1,37	1,83	2,14	2,5	2,92	3,46	3,68
Condenser water flow rate (W7; W45)	(7)	m³/h	1,35	1,72	2,26	2,76	3,16	3,7	4,39	4,69
Evaporator head loss (W7; W45)	(7)	kPa	13	12	16	13	15	17	17	15
Condenser head loss (W7; W45)	(7)	kPa	19	17	23	20	21	23	23	21
Noise levels										
Sound power lev.	(9)	dB(A)	64	65,5	67	69	70,5	71	73	74,5
Sound pressure lev.	(4)	dB(A)	33	34,5	36	38	39,5	40	42	43,5
Sound power lev. LN vers.	(9)	dB(A)	62	63,5	65	67	68,5	69	71	72,5
Sound pressure lev. LN vers.	(4)	dB(A)	31	32,5	34	36	37,5	38	40	41,5
Dimensions and weights**										
Length		mm	925	925	925	925	925	925	1105	1105
Depth		mm	600	600	600	600	600	600	721	721
Height		mm	700	700	700	1350	1350	1350	1385	1385
Operating weight	(5)	kg	88	93	102	135	151	166	212	233

(1) Outside air temperature 35°C; evaporator inlet-outlet water temperature 12/7°C. Values compliant with standard EN 14511

(2) Outside air temperature 7°C DB, 6°C WB; condenser inlet-outlet water temperature 30/35 °C Values compliant with standard EN 14511

(3) Outside air temperature 7°C DB, 6°C WB; condenser inlet/outlet water temperature 40/45°C. Values compliant with standard EN 14511

(4) Values obtained from the sound power level (conditions: note 9), related to a distance of 10 m from the unit in free field with directivity factor Q=2. Non-binding values See NOISE LEVELS section.

(5) The weight refers to the unit without any accessory. The introduction of a few accessories such as copper/aluminum coils, hydraulic modules or the recovery exchangers can lead to weight increased that can exceed 10%. For further details refer to the specific drawing of the selected configuration.

(6) Outside air temperature 35°C; evaporator inlet/outlet water temperature 23/18°C Values compliant with standard EN 14511

(7) evaporator inlet/outlet water temperature 12/7°C Total recovery unit inlet/outlet water temperature 40/45 Values compliant with standard EN 14511

(9) Unit operating at rated capacity, with no accessories of any kind - external air temperature 35°C and water input/output temperature from/to heat exchanger on user side equal to 12/7°C. Values taken by measurements made in accordance with standard ISO 3744 and the Eurovent certification programme, where applicable. Binding values See NOISE LEVELS section.

** Basic unit without included accessories

GEYSER 2 MT

			29	34	38	42	52	62	72	82	92
GEYSER 2 MT											
Cooling (A35°C; W7°C) (EN 14511 values)											
Refrigeration capacity	(1)	kW	24,3	29,3	32,1	38,3	38,8	46,4	52,4	59,7	65,6
Total absorbed power	(1)	kW	7,8	9	10,4	11,2	13,9	15,3	18,7	20,8	23,5
EER	(1)		3,11	3,27	3,1	3,41	2,8	3,04	2,8	2,87	2,79
EER energy class (Eurovent)	(1)		A	A	A	A	C	B	C	C	C
Cooling (A35°C; W18°C) (EN 14511 values)											
Refrigeration capacity	(6)	kW	33,4	40,7	45,2	52,3	54	63,9	72,3	82,7	86,8
Total absorbed power	(6)	kW	8,5	9,7	11,4	12,4	14,9	16,8	20	23,3	26,8
EER	(6)		3,93	4,19	3,98	4,22	3,63	3,8	3,61	3,56	3,23
EER energy class (Eurovent)	(6)		A	A	A	A	C	A	C	C	E
Heating (A7°C; W35°C) (EN 14511 values)											
Heating capacity	(2)	kW	27,9	32,6	37,1	41	45,1	50,9	60,6	69,2	76,5
Total absorbed power	(2)	kW	6,8	7,7	8,4	9,6	11,2	12,4	14,2	16,6	18,3
COP	(2)		4,11	4,24	4,41	4,27	4,04	4,1	4,27	4,16	4,18
COP energy class (Eurovent)	(2)		A	A	A	A	B	A	A	A	A
Heating (A7°C; W45°C) (EN 14511 values)											
Heating capacity	(3)	kW	26,7	31,4	35,7	39,7	43,2	48,9	58,4	66,9	74,4
Total absorbed power	(3)	kW	7,9	9,3	10,1	11,4	13,2	14,9	17,3	20,1	22
COP	(3)		3,37	3,39	3,55	3,47	3,28	3,29	3,38	3,33	3,39
COP energy class (Eurovent)	(3)		A	A	A	A	A	A	A	A	A
Total recovery /HWS (W7°C;W45°C) (EN 14511 values)											
Refrigeration capacity	(7)	kW	25,2	31,7	34,1	42,3	38,9	48	57,3	66,3	73,6
Heating capacity	(7)	kW	31,9	39,2	42,8	51,8	51,5	62	73,3	83,8	93,5
Total absorbed power	(7)	kW	6,8	7,6	8,8	9,7	12,8	14,2	16,2	17,7	20,3
EER	(7)		3,68	4,17	3,88	4,36	3,03	3,39	3,54	3,74	3,63
COP	(7)		4,66	5,16	4,87	5,34	4,02	4,38	4,52	4,72	4,62
Compressors											
Compressors/Circuits		n°/n°	1 / 1	1 / 1	1 / 1	1 / 1	2/1	2/1	2/1	2/1	2/1
Capacity reduction steps		n°	1	1	1	1	2	2	2	2	2
Refrigerant charge		kg	6,1	6,1	8,5	8,5	13	13	16	17	17
Fans											
Quantity		n°	2	2	2	2	1	1	1	1	1
Total air flow rate		m³/h	18000	18000	17000	17000	18000	17000	17000	20000	20000

(1) Outside air temperature 35°C; evaporator inlet-outlet water temperature 12/7°C. Values compliant with standard EN 14511

(2) Outside air temperature 7°C DB, 6°C WB; condenser inlet-outlet water temperature 30/35 °C Values compliant with standard EN 14511

(3) Outside air temperature 7°C DB, 6°C WB; condenser inlet/outlet water temperature 40/45°C. Values compliant with standard EN 14511

(4) Values obtained from the sound power level (conditions: note 9), related to a distance of 10 m from the unit in free field with directivity factor Q=2. Non-binding values See NOISE LEVELS section.

(5) The weight refers to the unit without any accessory. The introduction of a few accessories such as copper/aluminum coils, hydraulic modules or the recovery exchangers can lead to weight increased that can exceed 10%. For further details refer to the specific drawing of the selected configuration.

(6) Outside air temperature 35°C; evaporator inlet/outlet water temperature 23/18°C Values compliant with standard EN 14511

(7) evaporator inlet/outlet water temperature 12/7°C Total recovery unit inlet/outlet water temperature 40/45 Values compliant with standard EN 14511

** Basic unit without included accessories

GEYSER 2 MT

			29	34	38	42	52	62	72	82	92
GEYSER 2 MT											
User-side heat exchanger											
Quantity		n°	1	1	1	1	1	1	1	1	1
Water flow rate (CH) (A35; W7)	(1)	m³/h	4,21	5,07	5,55	6,63	6,71	8,02	9,06	10,31	11,33
Water flow rate (CH) (A35; W18)	(6)	m³/h	5,78	7,03	7,8	9,03	9,32	11,02	12,47	14,28	14,98
Water flow rate (HP) (A7; W35)	(2)	m³/h	4,8	5,61	6,39	7,06	7,77	8,77	10,44	11,92	13,18
Water flow rate (HP) (A7; W45)	(3)	m³/h	4,57	5,38	6,11	6,79	7,39	8,37	10	11,45	12,74
Head loss (CH) (A35; W7)	(1)	kPa	17	16	16	8	15	15	15	14	15
Head loss (CH) (A35; W18)	(6)	kPa	28	27	27	14	25	25	24	23	23
Head loss (HP) (A7; W35)	(2)	kPa	28	27	27	14	25	25	24	23	23
Head loss (HP) (A7; W45)	(3)	kPa	22	22	19	25	21	22	21	22	24
Heat exchangers /HWS											
Evaporator water flow rate (W7; W45)	(7)	m³/h	4,35	5,48	5,89	7,29	6,71	8,28	9,88	11,44	12,69
Condenser water flow rate (W7; W45)	(7)	m³/h	5,54	6,81	7,43	8,98	8,94	10,75	12,72	14,55	16,23
Evaporator head loss (W7; W45)	(7)	kPa	18	19	18	10	15	16	17	17	18
Condenser head loss (W7; W45)	(7)	kPa	25	26	23	31	22	24	26	26	30
Noise levels											
Sound power lev.	(9)	dB(A)	76	76,5	76,5	76,5	77	77	78	79	80
Sound pressure lev.	(4)	dB(A)	44	44,5	44,5	44,5	45	45	46	47	48
Sound power lev. LN vers.	(9)	dB(A)	74	74,5	74,5	74,5	75	75	76	77	78
Sound pressure lev. LN vers.	(4)	dB(A)	42	42,5	42,5	42,5	43	43	44	45	46
Dimensions and weights**											
Length		mm	1305	1305	1305	1305	1403	1403	1403	1403	1403
Depth		mm	737	737	737	737	1203	1203	1203	1203	1203
Height		mm	1585	1585	1585	1585	2390	2390	2390	2390	2390
Operating weight	(5)	kg	358	367	387	398	575	592	602	620	631

(1) Outside air temperature 35°C; evaporator inlet-outlet water temperature 12/7°C. Values compliant with standard EN 14511

(2) Outside air temperature 7°C DB, 6°C WB; condenser inlet-outlet water temperature 30/35 °C Values compliant with standard EN 14511

(3) Outside air temperature 7°C DB, 6°C WB; condenser inlet/outlet water temperature 40/45°C. Values compliant with standard EN 14511

(4) Values obtained from the sound power level (conditions: note 9), related to a distance of 10 m from the unit in free field with directivity factor Q=2. Non-binding values See NOISE LEVELS section.

(5) The weight refers to the unit without any accessory. The introduction of a few accessories such as copper/aluminum coils, hydraulic modules or the recovery exchangers can lead to weight increased that can exceed 10%. For further details refer to the specific drawing of the selected configuration.

(6) Outside air temperature 35°C; evaporator inlet/outlet water temperature 23/18°C Values compliant with standard EN 14511

(7) evaporator inlet/outlet water temperature 12/7°C Total recovery unit inlet/outlet water temperature 40/45 Values compliant with standard EN 14511

(9) Unit operating at rated capacity, with no accessories of any kind - external air temperature 35°C and water input/output temperature from/to heat exchanger on user side equal to 12/7°C. Values taken by measurements made in accordance with standard ISO 3744 and the Eurovent certification programme, where applicable. Binding values See NOISE LEVELS section.

** Basic unit without included accessories

GEYSER 2 HT

			7	9	11	13	17	22	26	32
GEYSER 2 HT										
Cooling (A35°C; W7°C) (EN 14511 values)										
Refrigeration capacity	(1)	kW	6,2	7,9	10,2	12,2	14,6	19,8	22,9	29,8
Total absorbed power	(1)	kW	1,9	2,4	3,2	3,8	4,6	6,2	7,1	9,3
EER energy class (Eurovent)	(1)		A	A	A	A	A	A	A	A
Cooling (A35°C; W18°C) (EN 14511 values)										
Refrigeration capacity	(6)	kW	8,8	10,7	14,1	15,7	19,5	26,7	29,6	40,6
Total absorbed power	(6)	kW	2	2,6	3,4	4	4,9	6,8	7,8	10
EER	(6)		4,41	4,14	4,1	3,9	3,99	3,95	3,8	4,06
EER energy class (Eurovent)	(6)		A	A	A	A	A	A	A	A
Heating (A7°C; W35°C) (EN 14511 values)										
Heating capacity	(2)	kW	6,8	8,6	10,8	13	15,9	20,7	24,7	29,9
Total absorbed power	(2)	kW	1,6	2	2,5	3,1	3,8	5,1	6	7,2
COP	(2)		4,17	4,37	4,27	4,15	4,15	4,1	4,12	4,13
COP energy class (Eurovent)	(2)		A	A	A	A	A	A	A	A
Heating (A7°C; W45°C) (EN 14511 values)										
Heating capacity	(3)	kW	6,5	8,4	10,4	13,1	16	21	24,9	30,2
Total absorbed power	(3)	kW	1,9	2,4	3	3,8	4,7	6,2	7,2	8,8
COP	(3)		3,43	3,54	3,47	3,41	3,41	3,41	3,48	3,42
COP energy class (Eurovent)	(3)		A	A	A	A	A	A	A	A
Total recovery /HWS (W7°C;W45°C) (EN 14511 values)										
Refrigeration capacity	(7)	kW	5,9	7,7	10,5	12,8	15,1	20,2	23,7	30,7
Heating capacity	(7)	kW	7,6	9,8	13,4	15,9	19,1	25,6	30,1	38,4
Total absorbed power	(7)	kW	1,7	2,2	3	3,2	4,1	5,5	6,6	7,9
EER	(7)		3,59	3,59	3,58	4,05	3,82	3,78	3,71	3,96
COP	(7)		4,53	4,54	4,53	5,01	4,78	4,74	4,66	4,92
Compressors										
Compressors/Circuits		n°/n°	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1
Capacity reduction steps		n°	1	1	1	1	1	1	1	1
Refrigerant charge		kg	2,4	2,4	3,6	2,5	3,7	4,8	7	6,1
Fans										
Quantity		n°	1	1	1	1	1	2	2	2
Total air flow rate		m³/h	3800	3800	3500	7600	7600	13000	13000	16000

(1) Outside air temperature 35°C; evaporator inlet-outlet water temperature 12/7°C. Values compliant with standard EN 14511

(2) Outside air temperature 7°C DB, 6°C WB; condenser inlet-outlet water temperature 30/35 °C Values compliant with standard EN 14511

(3) Outside air temperature 7°C DB, 6°C WB; condenser inlet/outlet water temperature 40/45°C. Values compliant with standard EN 14511

(4) Values obtained from the sound power level (conditions: note 9), related to a distance of 10 m from the unit in free field with directivity factor Q=2. Non-binding values

(5) The weight refers to the unit without any accessory. The introduction of a few accessories such as copper/aluminum coils, hydraulic modules or the recovery exchangers can lead to weight increased that can exceed 10%. For further details refer to the specific drawing of the selected configuration.

(6) Outside air temperature 35°C; evaporator inlet/outlet water temperature 23/18°C Values compliant with standard EN 14511

(7) evaporator inlet/outlet water temperature 12/7°C Total recovery unit inlet/outlet water temperature 40/45 Values compliant with standard EN 14511

** Basic unit without included accessories

GEYSER 2 HT

			7	9	11	13	17	22	26	32
GEYSER 2 HT										
User-side heat exchanger										
Quantity		n°	1	1	1	1	1	1	1	1
Water flow rate (CH) (A35; W7)	(1)	m³/h	1,07	1,36	1,75	2,1	2,52	3,42	3,95	5,15
Water flow rate (CH) (A35; W18)	(6)	m³/h	1,52	1,86	2,44	2,72	3,38	4,63	5,14	7,04
Water flow rate (HP) (A7; W35)	(2)	m³/h	1,17	1,48	1,86	2,24	2,74	3,56	4,25	5,15
Water flow rate (HP) (A7; W45)	(3)	m³/h	1,12	1,44	1,79	2,26	2,77	3,63	4,3	5,21
Head loss (CH) (A35; W7)	(1)	kPa	25	22	26	17	24	26	28	26
Head loss (CH) (A35; W18)	(6)	kPa	25	22	26	17	24	26	28	26
Head loss (HP) (A7; W35)	(2)	kPa	22	18	25	16	21	22	27	23
Head loss (HP) (A7; W45)	(3)	kPa	19	16	23	16	20	22	26	22
Heat exchangers /HWS										
Evaporator water flow rate (W7; W45)	(7)	m³/h	1,02	1,32	1,81	2,2	2,61	3,49	4,09	5,29
Condenser water flow rate (W7; W45)	(7)	m³/h	1,31	1,7	2,33	2,76	3,31	4,45	5,23	6,67
Evaporator head loss (W7; W45)	(7)	kPa	13	13	17	13	16	17	20	17
Condenser head loss (W7; W45)	(7)	kPa	20	18	23	18	23	24	29	24
Noise levels										
Sound power lev.	(9)	dB(A)	64	65	65	68	69	71,5	72	76,5
Sound pressure lev.	(4)	dB(A)	33	34	34	37	38	40,5	41	44,5
Sound power lev. LN vers.	(9)	dB(A)	62	63	63	66	67	69,5	70	74,5
Sound pressure lev. LN vers.	(4)	dB(A)	31	32	32	35	36	38,5	39	42,5
Dimensions and weights**										
Length		mm	1105	1105	1105	1105	1105	1105	1105	1305
Depth		mm	737	737	737	737	737	721	721	737
Height		mm	982	982	982	982	982	1385	1385	1585
Operating weight	(5)	kg	108	112	118	124	133	232	251	385

(1) Outside air temperature 35°C; evaporator inlet-outlet water temperature 12/7°C. Values compliant with standard EN 14511

(2) Outside air temperature 7°C DB, 6°C WB; condenser inlet-outlet water temperature 30/35 °C Values compliant with standard EN 14511

(3) Outside air temperature 7°C DB, 6°C WB; condenser inlet/outlet water temperature 40/45°C. Values compliant with standard EN 14511

(4) Values obtained from the sound power level (conditions: note 9), related to a distance of 10 m from the unit in free field with directivity factor Q=2. Non-binding values

(5) The weight refers to the unit without any accessory. The introduction of a few accessories such as copper/aluminum coils, hydraulic modules or the recovery exchangers can lead to weight increased that can exceed 10%. For further details refer to the specific drawing of the selected configuration.

(6) Outside air temperature 35°C; evaporator inlet/outlet water temperature 23/18°C Values compliant with standard EN 14511

(7) evaporator inlet/outlet water temperature 12/7°C Total recovery unit inlet/outlet water temperature 40/45 Values compliant with standard EN 14511

(9) Unit operating at rated capacity, with no accessories of any kind - external air temperature 35°C and water input/output temperature from/to heat exchanger on user side equal to 12/7°C. Values taken by measurements made in accordance with standard ISO 3744 and the Eurovent certification programme, where applicable. Binding values See NOISE LEVELS section.

** Basic unit without included accessories

GEYSER 2 HT

			36	41	50	60	70	80	90
GEYSER 2 HT									
Cooling (A35°C; W7°C) (EN 14511 values)									
Refrigeration capacity	(1)	kW	34	37,5	38,1	43	53,2	61	69,7
Total absorbed power	(1)	kW	10,3	11,7	12,8	15	18,2	20,8	23,8
EER energy class (Eurovent)	(1)		A	A	B	C	B	B	B
Cooling (A35°C; W18°C) (EN 14511 values)									
Refrigeration capacity	(6)	kW	45,5	48,8	49,6	56,7	70,8	80,6	91,4
Total absorbed power	(6)	kW	11,1	13	13,6	16,3	19,2	22,9	27,2
EER	(6)		4,11	3,74	3,65	3,47	3,7	3,53	3,36
EER energy class (Eurovent)	(6)		A	B	B	D	B	C	D
Heating (A7°C; W35°C) (EN 14511 values)									
Heating capacity	(2)	kW	33,6	37,1	40,4	49	55,1	68	74,4
Total absorbed power	(2)	kW	8,3	9,1	9,9	12	13,6	16,5	18,2
COP	(2)		4,05	4,07	4,07	4,08	4,05	4,13	4,09
COP energy class (Eurovent)	(2)		B	A	A	A	A	A	A
Heating (A7°C; W45°C) (EN 14511 values)									
Heating capacity	(3)	kW	34,3	37,9	40,8	49,3	55,6	69,6	76
Total absorbed power	(3)	kW	10,2	11,1	12,1	14,3	16,7	20,4	22,3
COP	(3)		3,36	3,41	3,37	3,45	3,33	3,4	3,41
COP energy class (Eurovent)	(3)		A	A	A	A	A	A	A
Total recovery /HWS (W7°C;W45°C) (EN 14511 values)									
Refrigeration capacity	(7)	kW	36,2	40	37,2	43,4	55,9	64,8	74,6
Heating capacity	(7)	kW	44,6	49,6	49,1	56,9	71,5	81,7	94,3
Total absorbed power	(7)	kW	8,5	9,8	12,1	13,7	15,9	17,2	19,9
EER	(7)		4,38	4,17	3,12	3,23	3,59	3,85	3,82
COP	(7)		5,35	5,13	4,09	4,2	4,56	4,82	4,79
Compressors									
Compressors/Circuits		n°/n°	1 / 1	1 / 1	2/1	2/1	2/1	2/1	2/1
Capacity reduction steps		n°	1	1	2	2	2	2	2
Refrigerant charge		kg	8,5	8,5	13	13	16	17	17
Fans									
Quantity		n°	2	2	1	1	1	1	1
Total air flow rate		m³/h	16000	16000	18000	17000	17000	20000	20000

(1) Outside air temperature 35°C; evaporator inlet-outlet water temperature 12/7°C. Values compliant with standard EN 14511

(2) Outside air temperature 7°C DB, 6°C WB; condenser inlet-outlet water temperature 30/35 °C Values compliant with standard EN 14511

(3) Outside air temperature 7°C DB, 6°C WB; condenser inlet/outlet water temperature 40/45°C. Values compliant with standard EN 14511

(4) Values obtained from the sound power level (conditions: note 9), related to a distance of 10 m from the unit in free field with directivity factor Q=2. Non-binding values

(5) The weight refers to the unit without any accessory. The introduction of a few accessories such as copper/aluminum coils, hydraulic modules or the recovery exchangers can lead to weight increased that can exceed 10%. For further details refer to the specific drawing of the selected configuration.

(6) Outside air temperature 35°C; evaporator inlet/outlet water temperature 23/18°C Values compliant with standard EN 14511

(7) evaporator inlet/outlet water temperature 12/7°C Total recovery unit inlet/outlet water temperature 40/45 Values compliant with standard EN 14511

** Basic unit without included accessories

GEYSER 2 HT

			36	41	50	60	70	80	90
GEYSER 2 HT									
User-side heat exchanger									
Quantity		n°	1	1	1	1	1	1	1
Water flow rate (CH) (A35; W7)	(1)	m³/h	5,87	6,47	6,56	7,42	9,18	10,52	12,02
Water flow rate (CH) (A35; W18)	(6)	m³/h	7,89	8,45	8,59	9,83	12,27	13,96	15,84
Water flow rate (HP) (A7; W35)	(2)	m³/h	5,79	6,39	6,96	8,44	9,5	11,72	12,82
Water flow rate (HP) (A7; W45)	(3)	m³/h	5,93	6,54	7,06	8,53	9,61	12,03	13,15
Head loss (CH) (A35; W7)	(1)	kPa	29	15	21	23	23	25	26
Head loss (CH) (A35; W18)	(6)	kPa	29	15	21	23	23	25	26
Head loss (HP) (A7; W35)	(2)	kPa	22	28	20	23	22	24	26
Head loss (HP) (A7; W45)	(3)	kPa	22	28	19	22	21	24	26
Heat exchangers /HWS									
Evaporator water flow rate (W7; W45)	(7)	m³/h	6,26	6,9	6,41	7,49	9,64	11,17	12,87
Condenser water flow rate (W7; W45)	(7)	m³/h	7,73	8,61	8,52	9,88	12,41	14,18	16,36
Evaporator head loss (W7; W45)	(7)	kPa	21	11	13	16	16	18	19
Condenser head loss (W7; W45)	(7)	kPa	26	34	20	24	25	29	31
Noise levels									
Sound power lev.	(9)	dB(A)	76,5	76,5	77	77	78	79	80
Sound pressure lev.	(4)	dB(A)	44,5	44,5	45	45	46	47	48
Sound power lev. LN vers.	(9)	dB(A)	74,5	74,5	75	75	76	77	78
Sound pressure lev. LN vers.	(4)	dB(A)	42,5	42,5	43	43	44	45	46
Dimensions and weights**									
Length		mm	1305	1305	1403	1403	1403	1403	1403
Depth		mm	737	737	1203	1203	1203	1203	1203
Height		mm	1585	1585	2390	2390	2390	2390	2390
Operating weight	(5)	kg	405	416	575	592	602	620	631

(1) Outside air temperature 35°C; evaporator inlet-outlet water temperature 12/7°C. Values compliant with standard EN 14511

(2) Outside air temperature 7°C DB, 6°C WB; condenser inlet-outlet water temperature 30/35 °C Values compliant with standard EN 14511

(3) Outside air temperature 7°C DB, 6°C WB; condenser inlet/outlet water temperature 40/45°C. Values compliant with standard EN 14511

(4) Values obtained from the sound power level (conditions: note 9), related to a distance of 10 m from the unit in free field with directivity factor Q=2. Non-binding values

(5) The weight refers to the unit without any accessory. The introduction of a few accessories such as copper/aluminum coils, hydraulic modules or the recovery exchangers can lead to weight increased that can exceed 10%. For further details refer to the specific drawing of the selected configuration.

(6) Outside air temperature 35°C; evaporator inlet/outlet water temperature 23/18°C Values compliant with standard EN 14511

(7) evaporator inlet/outlet water temperature 12/7°C Total recovery unit inlet/outlet water temperature 40/45 Values compliant with standard EN 14511

(9) Unit operating at rated capacity, with no accessories of any kind - external air temperature 35°C and water input/output temperature from/to heat exchanger on user side equal to 12/7°C. Values taken by measurements made in accordance with standard ISO 3744 and the Eurovent certification programme, where applicable. Binding values See NOISE LEVELS section.

** Basic unit without included accessories

ECODESIGN

INTRODUCTION

The Ecodesign/ErP Directive (2009/125/EC) lays down new standards for more efficient energy use.

The Directive contains various regulations; as regards chiller products and heat pumps, the regulations of interest are the following:

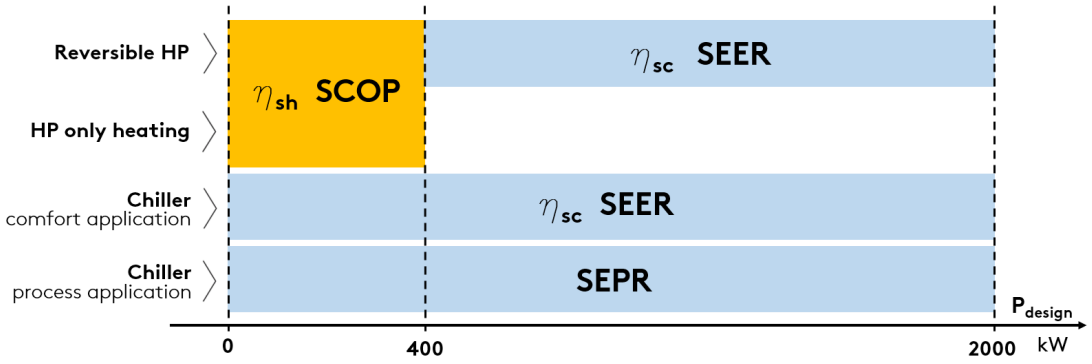
- Regulation 2013/813, for small heat pumps (Pdesign ≤ 400 kW)
- Regulation 2016/2281, for chillers and heat pumps with Pdesign > 400 kW
- Regulation 2013/811, for heat pumps with Pdesign ≤ 70 kW.

The last-mentioned regulation (2013/811) regards the labelling (Ecolabel certification) of small heat pumps.
The other two regulations (2013/813 and 2016/2281) set seasonal efficiency targets that the products must comply with to be sold and installed in the European Union (essential requirement for CE marking).
These efficiency limits are defined through ratios, which are respectively:

- ηsh (SCOP), with reference to regulation 2013/813
- ηsc (SEER) for comfort applications and SEPR for process applications, with reference to regulation 2016/2281.

As regards regulation 2016/2281, with effect from 1st January 2021, the required minimum efficiency limit will be raised (Tier 2) from the current threshold (Tier 1).

The figure below schematically illustrates the correspondence between product and reference energy ratio.



Some notes and clarifications:

For comfort applications, regulation 2016/2281 sets the ηsc (SEER) ratio in two different operating conditions:

- SEER calculated with machine inlet/outlet water temperature of 12/7°C (low temperature application),
- SEER calculated with machine inlet/outlet water temperature of 23/18°C (medium temperature application).

The minimum efficiency requirement is the same, but can be met at condition 12/7°C or at condition 23/18°C, depending on the application envisaged for the machine.

Regulation 2013/813 distinguishes two different types: at low temperature and at medium temperature.
The following refer to the application at low temperature: (low temperature application) all heat pumps whose maximum delivery temperature for heating purposes is lower than 52°C with source at temperature of -7°C and -8°C wet bulb (air-water unit) or inlet 10°C (water-water unit), at the reference design conditions for an average climate.For these, the efficiency ratio is "low temperature application" (outlet water temperature 35°C).
For all the other heat pumps, the efficiency ratio is related to "medium temperature application" (outlet water temperature 55°C).
The ratios must be calculated according to the reference European heating season in average climatic conditions.

The minimum efficiency requirements set by the regulations are indicated below.

REGULATION 2016/2281, comfort application

TYPE OF UNIT		MINIMUM REQUIREMENT			
		Tier 1		Tier 2 (2021)	
SOURCE	**Pdesign**	**ηsc [%]**	**SEER**	**ηsc [%]**	**SEER**
air	< 400kW	149	3,8	161	4,1
air	≥ 400kW	161	4,1	179	4,55
water	< 400kW	196	5,1	200	5,2
water	≥ 400kW and < 1500kW	227	5,875	252	6,5
water	≥ 1500kW	245	6,325	272	7

REGULATION 2016/2281, process application

TYPE OF UNIT		MINIMUM REQUIREMENT	
		Tier 1	Tier 2 (2021)
SOURCE	**Pdesign**	**SEPR**	**SEPR**
air	< 400kW	4,5	5
air	≥ 400kW	5	5,5
water	< 400kW	6,5	7
water	≥ 400kW and < 1500kW	7,5	8
water	≥ 1500kW	8	8,5

REGULATION 2013/813

SOURCE	APPLICATION	MINIMUM REQUIREMENT	
		ηsh [%]	**SCOP**
air	low temperature application	125	3,2
water	low temperature application	125	3,325
air	medium temperature application	110	2,825
water	medium temperature application	110	2,95

The conformity of the product must be checked according to the type of application, whether comfort or process, and at the required outlet water temperature.

The two schematic tables below, respectively for comfort application and for process application, indicate the reference of the required conformity according to the type of product and the set point temperature (reference to regulations 2016/2281 and 2013/813).

Important note: for mixed comfort and process applications, the reference application for conformity is the comfort application.

COMFORT APPLICATION

PRODUCT	OUTLET WATER TEMPERATURE	COMPLIANCE INDEX	REGULATION
Chiller	< 18°C	SEER/ηsc low temperature application	2016/2283
	≥ 18°C	SEER/ηsc medium temperature application	2016/2283
Heat pumps (reversible and only heating) Pdesign≤400kW		SCOP/ηsh	2013/815
Reversible heat pumps Pdesign>400kW	< 18°C	SEER/ηsc low temperature application	2016/2283
	≥ 18°C	SEER/ηsc medium temperature application	2016/2283
Heat pumps only heating Pdesign>400kW		-	-

- = exemption from Ecodesign

PROCESS APPLICATION

PRODUCT	OUTLET WATER TEMPERATURE	COMPLIANCE INDEX	REGULATION
Chiller	≥ +2°C , ≤ 12°C	SEPR	2016/2283
	> 12°C	-	-
	> -8°C , < +2°C	-	-

- = exemption from Ecodesign

Some specifications and notes follow.

Partly completed machinery

The term partly completed machinery refers to all units without a user-side or source-side heat exchanger, and therefore to all LC, LE, LC/HP and LE/HP versions. Since these are "non-complete" machines, conformity with Ecodesign depends on combination with the remote heat exchanger.

All the partly completed machinery is CE marked and accompanied by a declaration of conformity. Installation in European Union countries is therefore allowed; correct selection and installation of the remote heat exchanger must be ensured, in accordance with the above cases.

EC fans:

The only option that positively affects the performance of the unit, by increasing its seasonal energy efficiency ratio, is the VEC accessory.

A unit equipped with EC fans has a higher SEER (ηsc) than the configuration with standard fans.

GEYSER 2 RANGE

Regulation 2013/813 applies specifically to the Geyser 2 range.

The tables below give information on the conformity of the units and the seasonal energy performance ratios with regard to the reference regulation.

ECODESIGN

GEYSER 2 MT

			8	10	12	16	18	20	23	25	29
REGULATION 2013/813											
Pdesign	(4)	kW	6,8	9	11,3	15,1	16,7	19,5	22,5	24,1	27,9
Compliance	(4)		Y	Y	Y	Y	Y	Y	Y	Y	Y
ηsh LT	(4)	%	125,8	126,7	131,1	129,3	125,1	128,6	128,6	129,2	125
SCOP LT	(4)		3,22	3,24	3,35	3,3	3,2	3,29	3,29	3,3	3,2
ηsh MT	(5)	%	-	-	-	-	-	-	-	-	-
SCOP MT	(5)		-	-	-	-	-	-	-	-	-
Ecolabel LT			A+	A+	A+	A+	A+	A+	A+	A+	A+

			34	38	42	52	62	72	82	92
REGULATION 2013/813										
Pdesign	(4)	kW	32,6	37,1	41	45,1	50,9	60,6	69,2	76,5
Compliance	(4)		Y	Y	Y	Y	Y	Y	Y	Y
ηsh LT	(4)	%	129	129,6	125,4	141,2	150,7	152,7	151,8	152,6
SCOP LT	(4)		3,3	3,31	3,2	3,6	3,84	3,89	3,87	3,88
ηsh MT	(5)	%	-	-	-	-	-	-	-	-
SCOP MT	(5)		-	-	-	-	-	-	-	-
Ecolabel LT			A+	A+	A+	A+	A++	A++	A++	A++

Y = unit in compliance with Ecodesign at the indicated condition.

(4) User-side heat exchanger water inlet/outlet temperature 30/35, Average climate profile, with reference to regulation 2013/813 and norm EN 14825.

(5) Geyser 2 MT: exempted from SCOP MT

GEYSER 2 HT

			7	9	11	13	17	22	26	32
REGULATION 2013/813										
Pdesign	(4)	kW	6,8	8,6	10,8	13	15,9	20,7	24,7	29,9
Compliance	(4)		Y	Y	Y	Y	Y	Y	Y	Y
ηsh LT	(4)	%	135,4	137,9	138,3	134,7	136,4	133,6	132,7	133,2
SCOP LT	(4)		3,46	3,52	3,53	3,44	3,48	3,41	3,39	3,4
ηsh MT	(5)	%	110,1	110,3	111,2	111,3	112,6	112,2	112,9	112,2
SCOP MT	(5)		2,82	2,83	2,85	2,85	2,89	2,88	2,89	2,87
Ecolabel MT			A+	A+	A+	A+	A+	A+	A+	A+

			36	41	50	60	70	80	90
REGULATION 2013/813									
Pdesign	(4)	kW	33,6	37,1	40,4	49	55,1	68	74,4
Compliance	(4)		Y	Y	Y	Y	Y	Y	Y
ηsh LT	(4)	%	131,2	131,7	135,8	149,7	141,1	152,7	147,6
SCOP LT	(4)		3,35	3,36	3,47	3,81	3,6	3,89	3,76
ηsh MT	(5)	%	111,2	111	115,9	124,9	117,3	125,1	124,3
SCOP MT	(5)		2,85	2,84	2,97	3,19	3	3,2	3,18
Ecolabel MT			A+	A+	A+	A+	A+	A++	A+

Y = unit in compliance with Ecodesign at the indicated condition.

(4) User-side heat exchanger water inlet/outlet temperature 30/35, Average climate profile, with reference to regulation 2013/813 and norm EN 14825.

(5) Geyser 2 MT: exempted from SCOP MT

ELECTRICAL SPECIFICATIONS

GEYSER 2 MT

			8	10	12	16	18	20	23	25	29
General electrical specifications											
Max. absorbed power (FLI)	(1)	kW	3,1	3,9	4,5	6,3	6,4	7,6	8,9	9,6	11,2
Max. absorbed current (FLA)	(1)	A	17	20	9	12	14	17	19	20	26
Maximum inrush current (MIC)	(3)	A	62	83	49	66	66	76	105	99	116
Power supply		V/ph/Hz	230/1~/50	230/1~/50	400/3N~/50	400/3N~/50	400/3N~/50	400/3N~/50	400/3N~/50	400/3N~/50	400/3N~/50
Power supply for auxiliary circuits		V/ph/Hz	230/1~/50	230/1~/50	230/1~/50	230/1~/50	230/1~/50	230/1~/50	230/1~/50	230/1~/50	230/1~/50
Electrical specifications for fans											
Rated power of standard fan		n° x kW	1 x 0,2	1 x 0,2	1 x 0,2	2 x 0,2	2 x 0,2	2 x 0,2	2 x 0,3	2 x 0,3	2 x 0,6
Rated current of standard fan		n° x A	1 x 0,9	1 x 0,9	1 x 0,9	2 x 0,9	2 x 0,9	2 x 0,9	2 x 1,8	2 x 1,8	2 x 2,5

			34	38	42	52	62	72	82	92
General electrical specifications										
Max. absorbed power (FLI)	(1)	kW	12,9	14,2	15,9	18,6	21,9	25,2	28,5	30,8
Max. absorbed current (FLA)	(1)	A	27	30	36	36	46	48	54	66
Maximum inrush current (MIC)	(3)	A	123	123	145	121	136	144	147	175
Power supply		V/ph/Hz	400/3N~/50	400/3N~/50	400/3N~/50	400/3~/52	400/3~/52	400/3~/52	400/3~/52	400/3~/52
Power supply for auxiliary circuits		V/ph/Hz	230/1~/50	230/1~/50	230/1~/50	230/1~/50	230/1~/50	230/1~/50	230/1~/50	230/1~/50
Electrical specifications for fans										
Rated power of standard fan		n° x kW	2 x 0,6	2 x 0,6	2 x 0,6	1 x 1,5	1 x 1,5	1 x 1,5	1 x 1,5	1 x 1,5
Rated current of standard fan		n° x A	2 x 2,5	2 x 2,5	2 x 2,5	1 x 3,5	1 x 3,5	1 x 3,5	1 x 3,5	1 x 3,5

(1) Data regarding the unit without accessories working in maximum power absorption conditions

(2) Datum related to the unit without accessories working in standard conditions (A35°C; W12/7°C)

(3) Maximum effective RMS value of the current when the last compressor starts (FLA of the entire unit - FLA of the largest compressor + LRA of the largest compressor)

(5) These values are determined for cables with operating temperature of 40°C, EPR insulation and a line with a maximum length of 50m. The line section must be determined by a qualified technician based on the protection devices, the length of the line, the type of cable used and the type of installation.

(6) The correct line protection part must be determined by a qualified technician based on the length of the line, the type of cable used and the type of installation.

GEYSER 2 HT

			7	9	11	13	17	22	26	32
General electrical specifications										
Max. absorbed power (FLI)	(1)	kW	2,9	3,7	4,6	5,8	7,1	9,8	11,7	14,1
Max. absorbed current (FLA)	(1)	A	14	18	8	12	13	20	22	26
Maximum inrush current (MIC)	(3)	A	61	84	52	54	73	105	132	123
Power supply		V/ph/Hz	230/1~/50	230/1~/50	400/3N~/50	400/3N~/50	400/3N~/50	400/3N~/50	400/3N~/50	400/3N~/50
Power supply for auxiliary circuits		V/ph/Hz	230/1~/50	230/1~/50	230/1~/50	230/1~/50	230/1~/50	230/1~/50	230/1~/50	230/1~/50
Electrical specifications for fans										
Rated power of standard fan		n° x kW	1 x 0,2	1 x 0,2	1 x 0,2	1 x 0,6	1 x 0,6	2 x 0,3	2 x 0,3	2 x 0,6
Rated current of standard fan		n° x A	1 x 0,9	1 x 0,9	1 x 0,9	1 x 2,5	1 x 2,5	2 x 1,8	2 x 1,8	2 x 2,5

GEYSER 2 HT

			36	41	50	60	70	80	90
General electrical specifications									
Max. absorbed power (FLI)	(1)	kW	16,5	19,3	20	23,6	27,5	32,2	37,9
Max. absorbed current (FLA)	(1)	A	31	40	36	41	46	56	74
Maximum inrush current (MIC)	(3)	A	145	179	121	150	143	170	213
Power supply		V/ph/Hz	400/3N~/50	400/3N~/50	400/3~/52	400/3~/52	400/3~/52	400/3~/52	400/3~/52
Power supply for auxiliary circuits		V/ph/Hz	230/1~/50	230/1~/50	230/1~/50	230/1~/50	230/1~/50	230/1~/50	230/1~/50
Electrical specifications for fans									
Rated power of standard fan		n° x kW	2 x 0,6	2 x 0,6	1 x 1,5	1 x 1,5	1 x 1,5	1 x 1,5	1 x 1,5
Rated current of standard fan		n° x A	2 x 2,5	2 x 2,5	1 x 3,5	1 x 3,5	1 x 3,5	1 x 3,5	1 x 3,5

(1) Data regarding the unit without accessories working in maximum power absorption conditions

(2) Datum related to the unit without accessories working in standard conditions (A35°C; W12/7°C)

(3) Maximum effective RMS value of the current when the last compressor starts (FLA of the entire unit - FLA of the largest compressor + LRA of the largest compressor)

(5) These values are determined for cables with operating temperature of 40°C, EPR insulation and a line with a maximum length of 50m. The line section must be determined by a qualified technician based on the protection devices, the length of the line, the type of cable used and the type of installation.

(6) The correct line protection part must be determined by a qualified technician based on the length of the line, the type of cable used and the type of installation.

HYDRAULIC MODULES

GEYSER 2 MT

			8	10	12	16	18	20	23	25	29	34	38	42	52	62	72	82	92
Volume of the expansion vessel		l	2	2	2	2	2	2	5	5	5	5	5	5	n.a	n.a	n.a	n.a	n.a
Volume of the buffer tank		l	70	70	70	70	70	70	130	130	130	130	130	130	n.a	n.a	n.a	n.a	n.a
Standard pumps																			
Pump model			P1	P1	P1	P2	P2	P2	P3	P3	P3	P3	P4	P4	P5	P5	P5	P5	P5
Number of pumps		n°	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Available head	(1)	kPa	58	58	44	91	89	74	218	211	180	153	187	169	163	158	155	151	141
Max. power absorption by pump		W	75	75	75	190	190	190	780	780	780	780	1080	1080	1100	1100	1100	1100	1100
Max. current absorption by pump		A	0,6	0,6	0,6	1,3	1,3	1,3	3,4	3,4	3,4	3,4	2,4	2,4	4,2	4,2	4,2	4,2	4,2
Min. flow rate		l/s	0	0	0	0	0	0	0,67	0,67	0,67	0,67	0,55	0,55	2	2	2	2	2
Max. flow rate		l/s	1,17	1,17	1,17	2,20	2,20	2,20	2,17	2,17	2,17	2,17	2,66	2,66	5	5	5	5	5

(1) External air temperature 35°C, user-side heat exchanger water inlet/outlet temperature 12/7°C.

GEYSER 2 HT

			8	10	12	16	18	20	23	25	29	34	38	42	52	62	72
Volume of the expansion vessel		l	2	2	2	2	2	5	5	5	5	5	n.a	n.a	n.a	n.a	n.a
Volume of the buffer tank		l	70	70	70	70	70	130	130	130	130	130	n.a	n.a	n.a	n.a	n.a
Standard pumps																	
Pump model			P1	P1	P1	P2	P2	P3	P3	P3	P4	P4	P5	P5	P5	P5	P5
Number of pumps		n°	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Available head	(1)	kPa	55	54	38	81	76	220	182	164	185	167	170	161	159	151	142
Max. power absorption by pump		W	75	75	75	190	190	780	780	780	1080	1080	1100	1100	1100	1100	1100
Max. current absorption by pump		A	0,6	0,6	0,6	1,3	1,3	3,4	3,4	3,4	2,4	2,4	4,2	4,2	4,2	4,2	4,2
Min. flow rate		l/s	0	0	0	0	0	0,67	0,67	0,67	0,55	0,55	2	2	2	2	2
Max. flow rate		l/s	1,17	1,17	1,17	2,2	2,2	2,17	2,17	2,17	2,66	2,66	5	5	5	5	5

(1) External air temperature 35°C, user-side heat exchanger water inlet/outlet temperature 12/7°C.

PUMP DATA

Model	Rated power	Rated current	Qmin	Qmax
	kW	A	m³/h	m³/h
P1	0,1	1	0	4,2
P2	0,2	1,5	0	7,9
P3	0,6	2,9	2,4	7,8
P4	0,6	1,6	2	9,6
P5	1,1	2,7	7,2	18

USER-SIDE EXCHANGER FLOW RATE FIELDS

The units are sized and optimized for the following nominal conditions: external air 35°C, inlet-outlet of the user-side exchanger 12/7°C.

The units can work at design conditions different from nominal conditions, provided that:

- the design condition falls within the operating limits specified below
- the flow rate at design conditions (that is, of the specific application) must always come within the allowed flow rate ranges specified below. If the design conditions require a water flow rate that does not come within the allowed operating range, you must contact our sales department that will identify the most suitable solution for the specific application.

GEYSER 2 MT

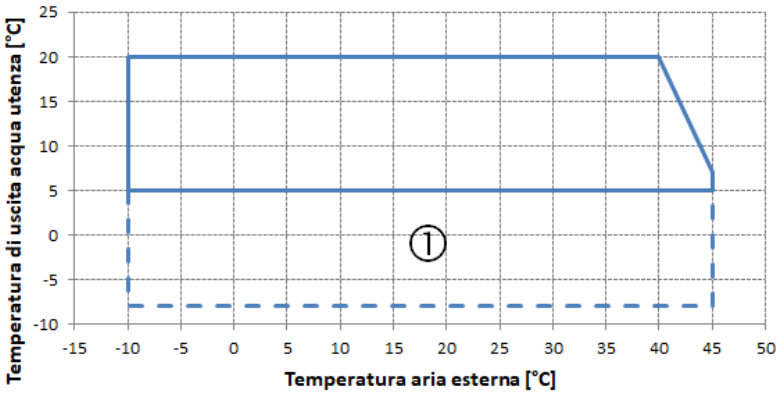
	Qmin	Qmax
	m³/h	m³/h
8	0,5	1,5
10	0,5	1,5
12	1	3
16	1	3
18	1	3
20	1,5	4,5
23	1,5	4,5
25	2	6
29	2	6
34	2,5	7,5
38	3	9
42	3,5	10,5
52	3,5	10,5
62	4	12
72	4,5	13,5
82	5	15
92	5,5	16,5

GEYSER 2 HT

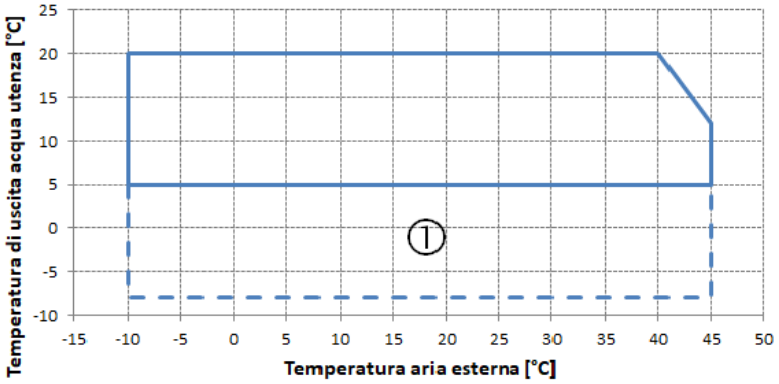
	Qmin	Qmax
	m³/h	m³/h
8	0,5	1,5
10	0,5	1,5
12	1	3
16	1	3
18	1,5	4,5
20	1,5	4,5
23	2	6
25	2,5	7,5
29	3	9
34	3	9
38	3,5	10,5
42	3,5	10,5
52	4,5	13,5
62	5,5	16,5
72	6	18

OPERATING LIMITS

COOLING /MT



COOLING /HT



Ta: external air temperature

LWTu: water outlet temperature from the user-side heat exchanger

1: For LWTu below +5°C, it is compulsory to use suitable percentages of antifreeze additives (glycols) to prevent ice formation in the exchanger.

2: Limit for models 7, 9 and 11

3: Limit for models 50 through 90

For LWTu below +5°C, it is compulsory to use suitable percentages of antifreeze additives (glycols) to prevent ice formation in the exchanger.

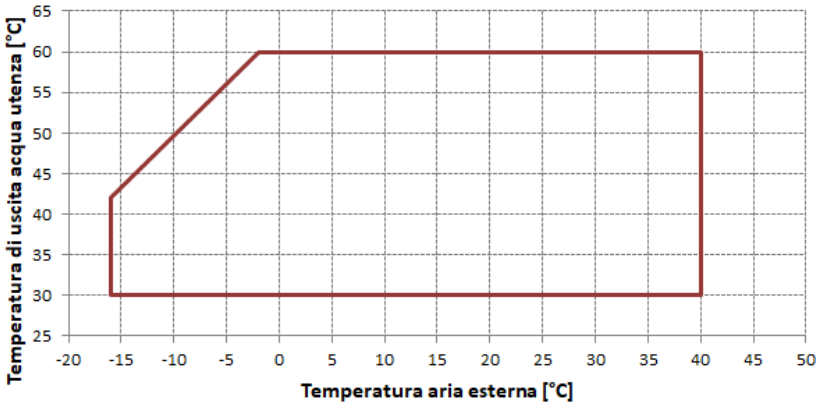
The inlet and outlet temperatures of the user-side exchanger must be given on ordering to allow correct setting of the alarm parameters and verification of the sizing of the expansion valve.

The cooling set point can then be changed by the customer in an interval that, compared to the set point given on ordering, ranges from -1K up to the maximum temperature allowed by the above-stated operating limits.

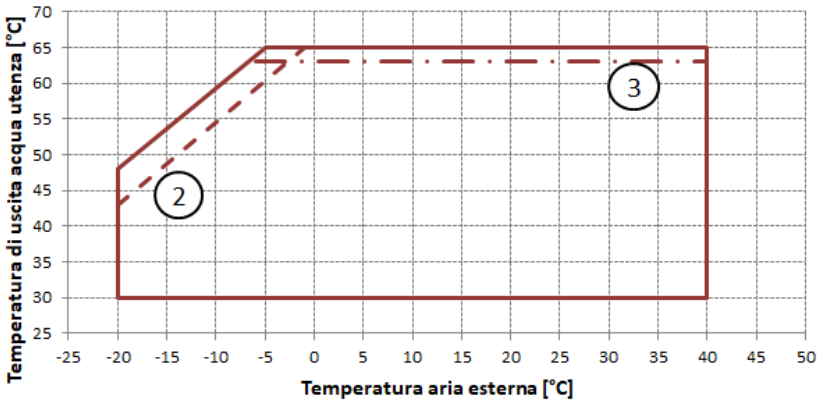
The unit will be optimized to work at the set point temperatures given on ordering. For different set points, the cooling capacity provided and the level of efficiency of the machine could decrease and move away from these conditions.

OPERATING LIMITS

HEATING /MT



HEATING /HT



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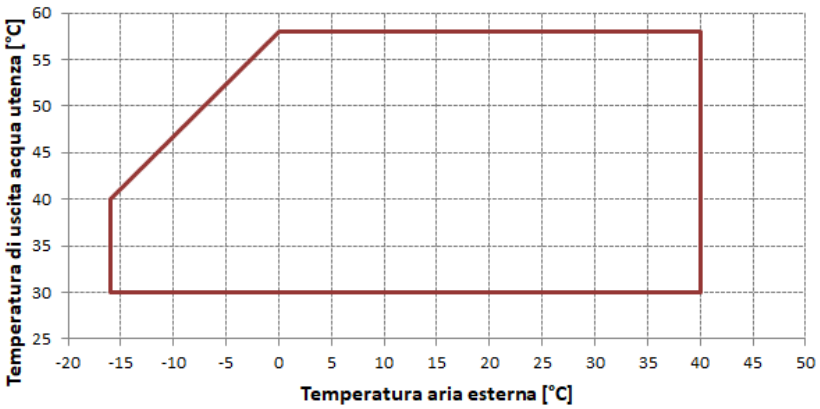
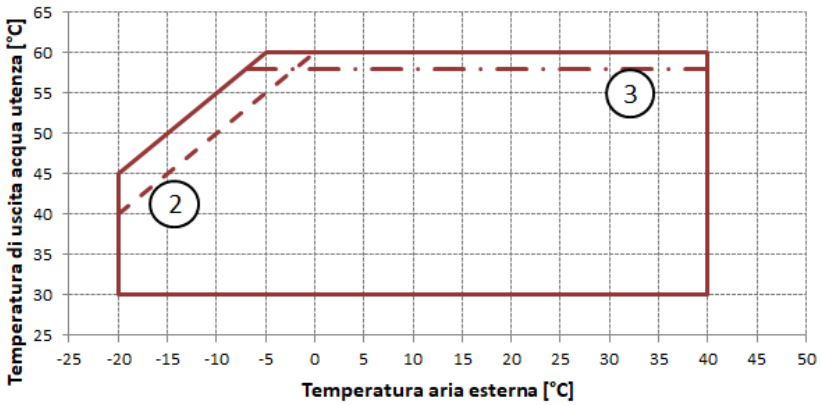
OPERATING LIMITS

HEAT RECOVERY /MT



HEAT RECOVERY /HT



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The unit will be optimized to work at the set point temperatures given on ordering. For different set points, the cooling capacity provided and the level of efficiency of the machine could decrease and move away from these conditions.

NOISE LEVELS

GEYSER 2 MT

	Octave bands [dB]																Total [dB(A)]	
	63 Hz		125 Hz		250 Hz		500 Hz		1000 Hz		2000 Hz		4000 Hz		8000 Hz			
	Lw	Lp	Lw	Lp	Lw	Lp	Lw	Lp	Lw	Lp	Lw	Lp	Lw	Lp	Lw	Lp	Lw tot	Lp tot
8	68	37	68	37	67	36	63	32	57	26	53	22	46	15	39	8	**64**	**33**
10	68,5	37,5	68,5	37,5	67,5	36,5	64,5	33,5	57,5	26,5	54,5	23,5	48,5	17,5	40,5	9,5	**65,5**	**34,5**
12	73	42	70	39	71	40	65	34	61	30	57	26	50	19	43	12	**67**	**36**
16	73	42	73	42	71	40	68	37	63	32	57	26	52	21	42	11	**69**	**38**
18	74,5	43,5	73,5	42,5	73,5	42,5	68,5	37,5	62,5	31,5	58,5	27,5	53,5	22,5	43,5	12,5	**70,5**	**39,5**
20	76	45	75	44	75	44	69	38	64	33	60	29	53	22	46	15	**71**	**40**
23	78	47	76	45	77	46	71	40	67	36	62	31	54	23	48	17	**73**	**42**
25	79,5	48,5	77,5	46,5	77,5	46,5	73,5	42,5	65,5	34,5	62,5	31,5	57,5	26,5	48,5	17,5	**74,5**	**43,5**
29	81	49	79	47	80	48	74	42	69	37	65	33	58	26	51	19	**76**	**44**
34	81,5	49,5	80,5	48,5	78,5	46,5	75,5	43,5	68,5	36,5	64,5	32,5	58,5	26,5	51,5	19,5	**76,5**	**44,5**
38	82,5	49,5	80,5	48,5	79,5	47,5	76,5	44,5	68,5	36,5	64,5	32,5	58,5	26,5	51,5	19,5	**76,5**	**44,5**
42	82,5	50,5	80,5	48,5	78,5	46,5	75,5	43,5	69,5	37,5	65,5	33,5	59,5	27,5	52,5	20,5	**76,5**	**44,5**
52	70	35	69	37	72	40	73	41	72	40	70	38	67	35	62	31	**77**	**45**
62	70	38	69	37	72	40	73	41	72	40	70	38	67	35	62	31	**77**	**45**
72	71	39	71	39	72	41	74	42	72	41	71	39	68	37	63	32	**78**	**46**
82	72	40	70	39	74	42	75	43	74	42	72	40	69	37	54	23	**79**	**47**
92	74	42	71	40	75	43	76	44	75	43	73	41	70	38	63	31	**80**	**48**

The acoustic data are related to standard conditions (source on a reflective surface in free field) in referable and reproducible operating conditions. The environment and the installation conditions, as well as the operating modes, can alter the sound emissions. All data with the exception of Lw_tot are provided for illustrative purposes only and can not be used for forecasting purposes or for the verification of binding limits.

Reference conditions: external air temperature 35°C; water input/output temperature from/to heat exchanger and user 12-7°C; unit operating at rated capacity, without any accessory

Lw: Values taken by measurements made in accordance with standard ISO 3744 and the Eurovent certification programme, where applicable Lw_tot is the only binding value.

Lp: Binding values starting from noise power levels referred to a distance of 10 m from the unit; source installed on a reflective surface and in ideal free field conditions with directivity factor Q=2. No Lp value is binding.

Noise data refer to the standard conditions illustrated above, in reference and reproducible operating conditions.All data, excluding Lw_tot, are provided for the sake of exemplification and must not therefore be used for forecasting purposes or for the verification of mandatory limits. With special reference to noise emissions, the Manufacturer takes liability for their conformity, limited to the declared Lw_tot value. Any and all other Manufacturer's liability for the impact of such emissions in relation to the location of the machine and other conditions related to machine installation is excluded. Any assessment concerning these conditions falls within the area of competence of the plant designer and/or the fitter.

GEYSER 2 MT /LN

	Octave bands [dB]																Total [dB(A)]	
	63 Hz		125 Hz		250 Hz		500 Hz		1000 Hz		2000 Hz		4000 Hz		8000 Hz			
	Lw	Lp	Lw	Lp	Lw	Lp	Lw	Lp	Lw	Lp	Lw	Lp	Lw	Lp	Lw	Lp	Lw tot	Lp tot
8	66	35	66	35	65	34	61	30	55	24	51	20	44	13	37	6	**62**	**31**
10	66,5	35,5	66,5	35,5	65,5	34,5	62,5	31,5	55,5	24,5	52,5	21,5	46,5	15,5	38,5	7,5	**63,5**	**32,5**
12	71	40	68	37	69	38	63	32	59	28	55	24	48	17	41	10	**65**	**34**
16	71	40	71	40	69	38	66	35	61	30	55	24	50	19	40	9	**67**	**36**
18	72,5	41,5	71,5	40,5	71,5	40,5	66,5	35,5	60,5	29,5	56,5	25,5	51,5	20,5	41,5	10,5	**68,5**	**37,5**
20	74	43	73	42	73	42	67	36	62	31	58	27	51	20	44	13	**69**	**38**
23	76	45	74	43	75	44	69	38	65	34	60	29	52	21	46	15	**71**	**40**
25	77,5	46,5	75,5	44,5	75,5	44,5	71,5	40,5	63,5	32,5	60,5	29,5	55,5	24,5	46,5	15,5	**72,5**	**41,5**
29	79	47	77	45	78	46	72	40	67	35	63	31	56	24	49	17	**74**	**42**
34	79,5	47,5	78,5	46,5	76,5	44,5	73,5	41,5	66,5	34,5	62,5	30,5	56,5	24,5	49,5	17,5	**74,5**	**42,5**
38	80,5	47,5	78,5	46,5	77,5	45,5	74,5	42,5	66,5	34,5	62,5	30,5	56,5	24,5	49,5	17,5	**74,5**	**42,5**
42	80,5	48,5	78,5	46,5	76,5	44,5	73,5	41,5	67,5	35,5	63,5	31,5	57,5	25,5	50,5	18,5	**74,5**	**42,5**
52	68	33	67	35	70	38	71	39	70	38	68	36	65	33	60	29	**75**	**43**
62	68	36	67	35	70	38	71	39	70	38	68	36	65	33	60	29	**75**	**43**
72	69	37	69	37	70	39	72	40	70	39	69	37	66	35	61	30	**76**	**44**
82	70	38	68	37	72	40	73	41	72	40	70	38	67	35	52	21	**77**	**45**
92	72	40	69	38	73	41	74	42	73	41	71	39	68	36	61	29	**78**	**46**

The acoustic data are related to standard conditions (source on a reflective surface in free field) in referable and reproducible operating conditions. The environment and the installation conditions, as well as the operating modes, can alter the sound emissions. All data with the exception of Lw_tot are provided for illustrative purposes only and can not be used for forecasting purposes or for the verification of binding limits.

Reference conditions: external air temperature 35°C; water input/output temperature from/to heat exchanger and user 12-7°C; unit operating at rated capacity, without any accessory

Lw: Values taken by measurements made in accordance with standard ISO 3744 and the Eurovent certification programme, where applicable Lw_tot is the only binding value.

Lp: Binding values starting from noise power levels referred to a distance of 10 m from the unit; source installed on a reflective surface and in ideal free field conditions with directivity factor Q=2. No Lp value is binding.

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GEYSER 2 HT

	Octave bands [dB]																Total [dB(A)]	
	63 Hz		125 Hz		250 Hz		500 Hz		1000 Hz		2000 Hz		4000 Hz		8000 Hz			
	Lw	Lp	Lw	Lp	Lw	Lp	Lw	Lp	Lw	Lp	Lw	Lp	Lw	Lp	Lw	Lp	Lw tot	Lp tot
7	68	37	68	37	67	36	63	32	57	26	53	22	46	15	39	8	**64**	**33**
9	68,5	37,5	68,5	37,5	67,5	36,5	64,5	33,5	57,5	26,5	54,5	23,5	48,5	17,5	40,5	9,5	**65**	**34**
11	73	42	70	39	71	40	65	34	61	30	57	26	50	19	43	12	**65**	**34**
13	73	42	73	42	71	40	68	37	63	32	57	26	52	21	42	11	**68**	**37**
17	74,5	43,5	73,5	42,5	73,5	42,5	68,5	37,5	62,5	31,5	58,5	27,5	53,5	22,5	43,5	12,5	**69**	**38**
22	76	45	75	44	75	44	69	38	64	33	60	29	53	22	46	15	**71,5**	**40,5**
26	78	47	76	45	77	46	71	40	67	36	62	31	54	23	48	17	**72**	**41**
32	79,5	48,5	77,5	46,5	77,5	46,5	73,5	42,5	65,5	34,5	62,5	31,5	57,5	26,5	48,5	17,5	**76,5**	**44,5**
36	81	49	79	47	80	48	74	42	69	37	65	33	58	26	51	19	**76,5**	**44,5**
41	81,5	49,5	80,5	48,5	78,5	46,5	75,5	43,5	68,5	36,5	64,5	32,5	58,5	26,5	51,5	19,5	**76,5**	**44,5**
50	82,5	49,5	80,5	48,5	79,5	47,5	76,5	44,5	68,5	36,5	64,5	32,5	58,5	26,5	51,5	19,5	**77**	**45**
60	82,5	50,5	80,5	48,5	78,5	46,5	75,5	43,5	69,5	37,5	65,5	33,5	59,5	27,5	52,5	20,5	**77**	**45**
70	70	35	69	37	72	40	73	41	72	40	70	38	67	35	62	31	**78**	**46**
80	70	38	69	37	72	40	73	41	72	40	70	38	67	35	62	31	**79**	**47**
90	71	39	71	39	72	41	74	42	72	41	71	39	68	37	63	32	**80**	**48**

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Lp: Binding values starting from noise power levels referred to a distance of 10 m from the unit; source installed on a reflective surface and in ideal free field conditions with directivity factor Q=2. No Lp value is binding.

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GEYSER 2 HT /LN

	Octave bands [dB]																Total [dB(A)]	
	63 Hz		125 Hz		250 Hz		500 Hz		1000 Hz		2000 Hz		4000 Hz		8000 Hz			
	Lw	Lp	Lw	Lp	Lw	Lp	Lw	Lp	Lw	Lp	Lw	Lp	Lw	Lp	Lw	Lp	Lw tot	Lp tot
7	66	35	66	35	65	34	61	30	55	24	51	20	44	13	37	6	**62**	**31**
9	66,5	35,5	66,5	35,5	65,5	34,5	62,5	31,5	55,5	24,5	52,5	21,5	46,5	15,5	38,5	7,5	**63**	**32**
11	71	40	68	37	69	38	63	32	59	28	55	24	48	17	41	10	**63**	**32**
13	71	40	71	40	69	38	66	35	61	30	55	24	50	19	40	9	**66**	**35**
17	72,5	41,5	71,5	40,5	71,5	40,5	66,5	35,5	60,5	29,5	56,5	25,5	51,5	20,5	41,5	10,5	**67**	**36**
22	74	43	73	42	73	42	67	36	62	31	58	27	51	20	44	13	**69,5**	**38,5**
26	76	45	74	43	75	44	69	38	65	34	60	29	52	21	46	15	**70**	**39**
32	77,5	46,5	75,5	44,5	75,5	44,5	71,5	40,5	63,5	32,5	60,5	29,5	55,5	24,5	46,5	15,5	**74,5**	**42,5**
36	79	47	77	45	78	46	72	40	67	35	63	31	56	24	49	17	**74,5**	**42,5**
41	79,5	47,5	78,5	46,5	76,5	44,5	73,5	41,5	66,5	34,5	62,5	30,5	56,5	24,5	49,5	17,5	**74,5**	**42,5**
50	80,5	47,5	78,5	46,5	77,5	45,5	74,5	42,5	66,5	34,5	62,5	30,5	56,5	24,5	49,5	17,5	**75**	**43**
60	80,5	48,5	78,5	46,5	76,5	44,5	73,5	41,5	67,5	35,5	63,5	31,5	57,5	25,5	50,5	18,5	**75**	**43**
70	68	33	67	35	70	38	71	39	70	38	68	36	65	33	60	29	**76**	**44**
80	68	36	67	35	70	38	71	39	70	38	68	36	65	33	60	29	**77**	**45**
90	69	37	69	37	70	39	72	40	70	39	69	37	66	35	61	30	**78**	**46**

The acoustic data are related to standard conditions (source on a reflective surface in free field) in referable and reproducible operating conditions. The environment and the installation conditions, as well as the operating modes, can alter the sound emissions. All data with the exception of Lw_tot are provided for illustrative purposes only and can not be used for forecasting purposes or for the verification of binding limits.

Reference conditions: external air temperature 35°C; water input/output temperature from/to heat exchanger and user 12-7°C; unit operating at rated capacity, without any accessory

Lw: Values taken by measurements made in accordance with standard ISO 3744 and the Eurovent certification programme, where applicable Lw_tot is the only binding value.

Lp: Binding values starting from noise power levels referred to a distance of 10 m from the unit; source installed on a reflective surface and in ideal free field conditions with directivity factor Q=2. No Lp value is binding.

Noise data refer to the standard conditions illustrated above, in reference and reproducible operating conditions.All data, excluding Lw_tot, are provided for the sake of exemplification and must not therefore be used for forecasting purposes or for the verification of mandatory limits. With special reference to noise emissions, the Manufacturer takes liability for their conformity, limited to the declared Lw_tot value. Any and all other Manufacturer's liability for the impact of such emissions in relation to the location of the machine and other conditions related to machine installation is excluded. Any assessment concerning these conditions falls within the area of competence of the plant designer and/or the fitter.

INSTALLATION ADVICE

The units described in this document are, by nature, strongly affected by the characteristics of the system, the working conditions and the installation site.

Remember that the unit must be installed by a qualified and skilled technician, and in compliance with the national legislation in force in the destination country.

The installation must be done in such a way that it will be possible to carry out all routine and non-routine maintenance operations.

Before starting any work, you must carefully read the "Installation, operation and maintenance manual" of the machine and do the necessary safety checks to prevent any malfunctioning or hazards.

We give some advice below that will allow you to increase the efficiency and reliability of the unit and therefore of the system into which it is inserted.

Water characteristics

To preserve the life of the exchangers, the water is required to comply with some quality parameters and it is therefore necessary to make sure its values fall within the ranges indicated in the following table:

Total hardness	2,0 ÷ 6,0 °f
Langelier index	- 0,4 ÷ 0,4
pH	7,5 ÷ 8,5
Electrical conductivity	10÷500 µS/cm
Organic elements	-
Hydrogen carbonate (HCO_3^-)	70 ÷ 300 ppm
Sulphates (SO_4^{2-})	< 50 ppm
Hydrogen carbonate / Sulphates (HCO_3^-/SO_4^{2-})	> 1
Chlorides (Cl^-)	< 50 ppm
Nitrates (NO_3^-)	< 50 ppm
Hydrogen sulphide (H_2S)	< 0,05 ppm
Ammonia (NH_3)	< 0,05 ppm
Sulphites (SO_3), free chlorine (Cl_2)	< 1 ppm
Carbon dioxide (CO_2)	< 5 ppm
Metal cations	< 0,2 ppm
Manganese ions (Mn^{++})	< 0,2 ppm
Iron ions (Fe^{2+} , Fe^{3+})	< 0,2 ppm
Iron + Manganese	< 0,4 ppm
Phosphates (PO_4^{3-})	< 2 ppm
Oxygen	< 0,1 ppm

Installation of water filters on all the hydraulic circuits is obligatory.

The supply of the most suitable filters for the unit can be requested as accessory. In this case, the filters are supplied loose and must be installed by the customer following the instructions given in the installation, operation and maintenance manual.

Glycol mixtures

With temperatures below 5°C, it is mandatory to work with water and anti-freeze mixtures, and also change the safety devices (anti-freeze, etc.), which must be carried out by qualified authorised personnel or by the manufacturer.

Liquid outlet temperature or minimum ambient temperature	°C	0	-5	-10	-15	-20	-25	-30	-35	-40
Freezing point	°C	-5	-10	-15	-20	-25	-30	-35	-40	-45
Ethylene glycol	%	6	22	30	36	41	46	50	53	56
Propylene glycol	%	15	25	33	39	44	48	51	54	57

The quantity of antifreeze should be considered as % on weight

Minimum water content in the system

For correct operation of the unit, it is necessary to ensure a buffering on the system such as to comply with the minimum operating time considering the greater between the minimum OFF time and the minimum ON time. In short, these contribute to limiting the number of times the compressors are switched on per hour and to preventing undesired deviations from the set point of the delivered water temperature.

$$V_{min} = \frac{P_{tot} \cdot 1.000}{N} \cdot \frac{300}{\Delta T \cdot \rho \cdot c_p} + P_{tot} \cdot 0{,}25$$

where
V_{min} is the minimum water content of the system [l]
P_{tot} is the total cooling capacity of the machine [kW]
N: number of capacity reduction steps
ΔT: differential allowed on the water temperature. Unless otherwise specified, this value is considered to be 2.5K
ρ: density of the heat-carrying fluid. Unless otherwise specified, the density of water is considered
c_p: specific heat of the heat-carrying fluid. Unless otherwise specified, the specific heat of water is considered
Considering the use of water and grouping together some terms, the formula can be re-written as follows:

$$V_{min} = \frac{P_{tot}}{N} \cdot 17{,}2 + P_{tot} \cdot 0{,}25$$

N is equal to the number of compressors installed in the unit.

Installation site

To determine the best installation site for the unit and its orientation, you should pay attention to the following points:

- compliance with the clearance spaces indicated in the official dimensional drawing of the unit must be guaranteed so as to ensure accessibility for routine and non-routine maintenance operations
- you should consider the origin of the hydraulic pipes and their diameters because these affect the radiuses of curvature and therefore the spaces needed for installing them
- you should consider the position of the cable inlet on the electrical control panel of the unit as regards the origin of the power supply
- if the installation includes several units side by side, you should consider the position and dimensions of the manifolds of the user-side exchangers and of any recovery exchangers
- if the installation includes several units side by side, you should consider that the minimum distance between units is 3 metres
- you should avoid all obstructions that can limit air circulation to the source-side exchanger or that can cause recirculation between air supply and intake
- you should consider the orientation of the unit to limit, as far as possible, exposure of the source-side exchanger to solar radiation
- if the installation area is particularly windy, the orientation and positioning of the unit must be such as to avoid air recirculation on the coils. If necessary, we advise making windbreak barriers in order to prevent malfunctioning.

Once the best position for the unit has been identified, you must check that the support slab has the following characteristics:

- its dimensions must be proportionate to those of the unit: if possible, longer and wider than the unit by at least 30 cm and 15/20cm higher than the surrounding surface
- it must be able to bear at least 4 times the operating weight of the unit
- it must allow level installation of the unit: although the unit is installed on a horizontal base, make slopes in the support surface to convey rain water or defrost water to drains, wells or in any case to places where it cannot generate an accident hazard due to ice formation. All heat pump version units are equipped with discharge manifolds for the condensed water; these can be manifolded to facilitate condensate discharge.

The units are designed and built to reduce to a minimum the level of vibration transmitted to the ground, but it is in any case advisable to use rubber or spring anti-vibration mounts, which are available as accessory and should be requested when ordering.

The anti-vibration mounts must be fixed on before positioning the unit on the ground.

In the event of installation on roofs or intermediate floors, the pipes must be isolated from the walls and ceilings.

It is advisable to avoid installation in cramped places, to prevent reverberations, reflections, resonances and acoustic interactions with elements outside the unit.

It is essential that any work done to soundproof the unit does not affect its correct installation or correct operation and, in particular, does not reduce the air flow rate to the source-side exchanger.

Installations that require the use of treated coils

If the unit has to be installed in an environment with a particularly aggressive atmosphere, coils with special treatments are available as options.

- pre-painted aluminium coils
- coils with anti-corrosion treatment

A description of the individual accessories is available in the “Description of accessories” section.

The type of coil treatment should be chosen with regard to the environment in which the unit is to be installed, through observation of other structures and machinery with exposed metal surfaces present in the destination environment.

The cross observation criterion is the most valid method of selection currently available without having to carry out preliminary tests or measurements with instruments. The identified reference environments are:

- coastal/marine
- industrial
- urban with a high housing density
- rural

Please note that in cases where different conditions co-exist, even for short periods, the choice must be suitable for preserving the exchanger in the harsher environmental conditions and not in conditions between the worst and best situation.

Particular attention must be given in cases where an environment that is not particularly aggressive becomes aggressive as a consequence of a concomitant cause, for example, the presence of a flue outlet or an extraction fan.

We strongly suggest choosing one of the treatment options if at least one of the points listed below is verified:

- there are obvious signs of corrosion of the exposed metal surfaces in the installation area
- the prevailing winds come from the sea towards the unit
- the environment is industrial with a significant concentration of pollutants
- the environment is urban with a high population density
- the environment is rural with the presence of organic discharges and effluents

In particular, for installations near the coast, the following instructions apply:

for installations between 1 and 20 km from the coast of reversible units or units with Cu/Al coils, we strongly recommend using the accessory "Coil treated with anti-corrosion paints"

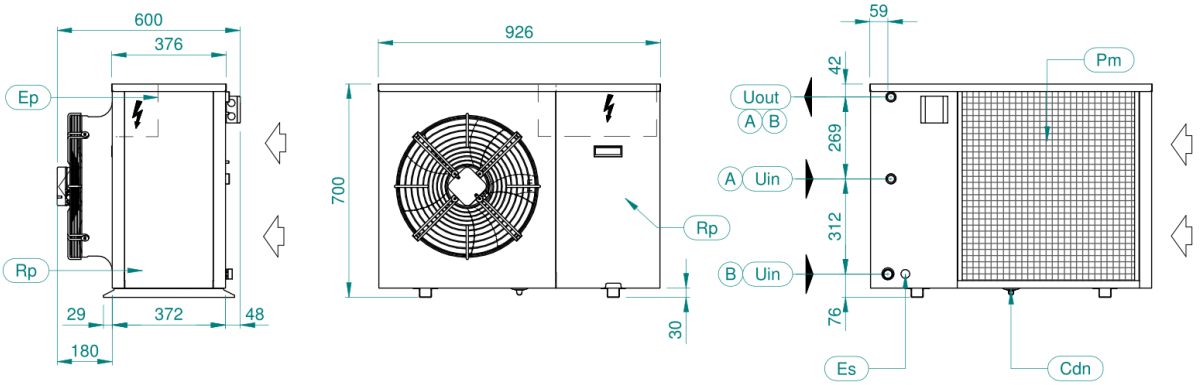
for distances within a kilometre of the coast, we strongly recommend using the accessory "Coil treated with anti-corrosion paints" for all units.

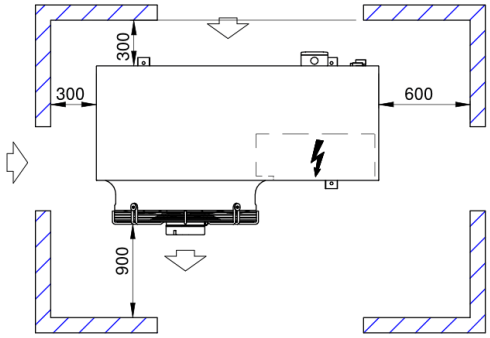
To protect the exchangers from corrosion and ensure optimal operation of the unit, we advise following the recommendations given in the user, installation and maintenance manual for cleaning the coils.

DIMENSIONAL DIAGRAMS

GEYSER 2 MT 8-12 /ST

SD00315A



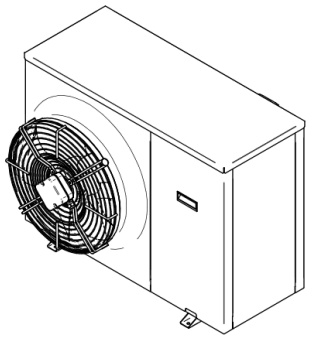


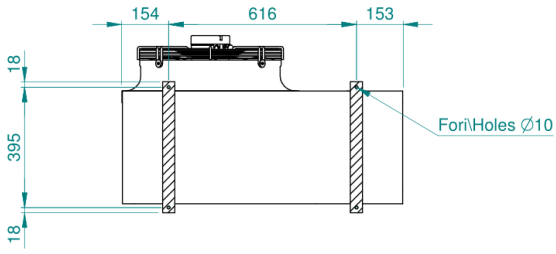
SPAZI DI INSTALLAZIONE / CLEARANCES

CONNESSIONI IDRAULICHE / HYDRAULIC CONNECTION

A ACQUA UTILIZZO SENZA MODULO IDRAULICO
USER WATER WITHOUT HYDRAULIC MODULE

B ACQUA UTILIZZO CON MODULO IDRAULICO 1P
USER WATER WITH HYDRAULIC MODULE 1P





IMPRONTA A TERRA / FOOTPRINT

Ep	QUADRO ELETTRICO ELECTRICAL PANEL	Cdh	SCARICO CONDENSA CONDENSATE DRAIN	ø 18
Es	INGRESSO ALIMENTAZIONE ELETTRICA ELECTRICAL SUPPLY INLET	Uin	INGRESSO ACQUA UTILIZZO USER WATER INLET	1" BSPM
Rp	PANNELLO ASPORTABILE REMOVABLE PANEL	Uout	USCITA ACQUA UTILIZZO USER WATER OUTLET	1" BSPM
Pm	GRIGLIE DI PROTEZIONE PROTECTIVE METAL MESH		FLUSSO ARIA AIR FLOW	

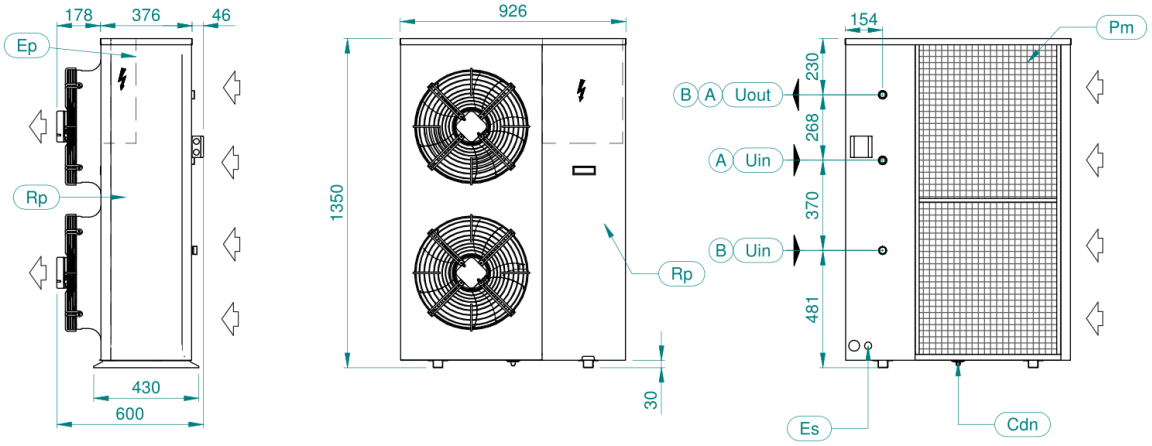
DIMENSIONI - DIMENSIONS		
LUNGHEZZA WIDTH	PROFONDITA' DEPTH	ALTEZZA HEIGHT
926	600	700

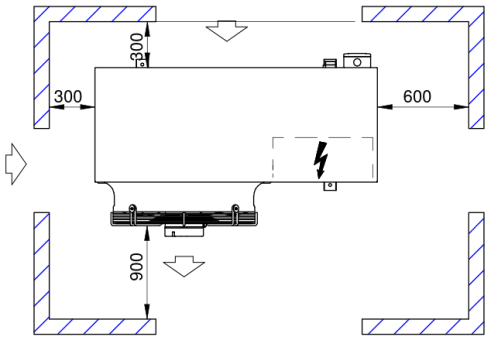
MODELLO MODEL	PESO WEIGHT (kg)	PESO IN FUNZIONE OPERATING WEIGHT (kg)
8	88	88
10	93	93
12	102	102
8 1P	96	98
10 1P	101	102
12 1P	110	111

Note: These drawings are not contractually binding. For the installation design, refer to the specific dimensional drawing available on request.

GEYSER 2 MT 16-20 /ST

SD00317A



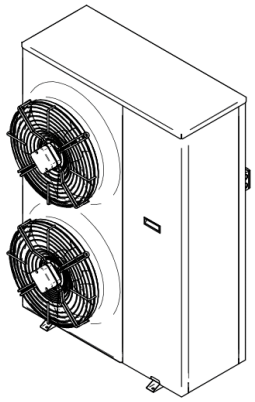


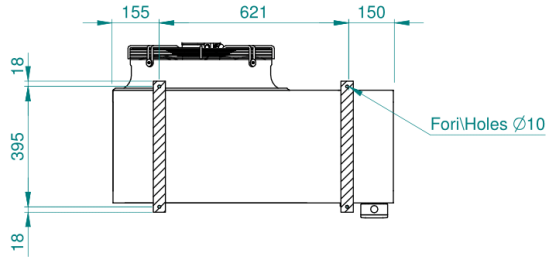
SPAZI DI INSTALLAZIONE / CLEARANCES

CONNESSIONI IDRAULICHE / HYDRAULIC CONNECTION

A ACQUA UTILIZZO SENZA MODULO IDRAULICO
USER WATER WITHOUT HYDRAULIC MODULE

B ACQUA UTILIZZO CON MODULO IDRAULICO 1P
USER WATER WITH HYDRAULIC MODULE 1P





IMPRONTA A TERRA / FOOTPRINT

Ep	QUADRO ELETTRICO ELECTRICAL PANEL		Cdh	SCARICO CONDENSA CONDENSATE DRAIN	ø 18
Es	INGRESSO ALIMENTAZIONE ELETTRICA ELECTRICAL SUPPLY INLET		Uin	INGRESSO ACQUA UTILIZZO USER WATER INLET	1" BSPM
Rp	PANNELLO ASPORTABILE REMOVABLE PANEL		Uout	USCITA ACQUA UTILIZZO USER WATER OUTLET	1" BSPM
Pm	GRIGLIE DI PROTEZIONE PROTECTIVE METAL MESH			FLUSSO ARIA AIR FLOW	

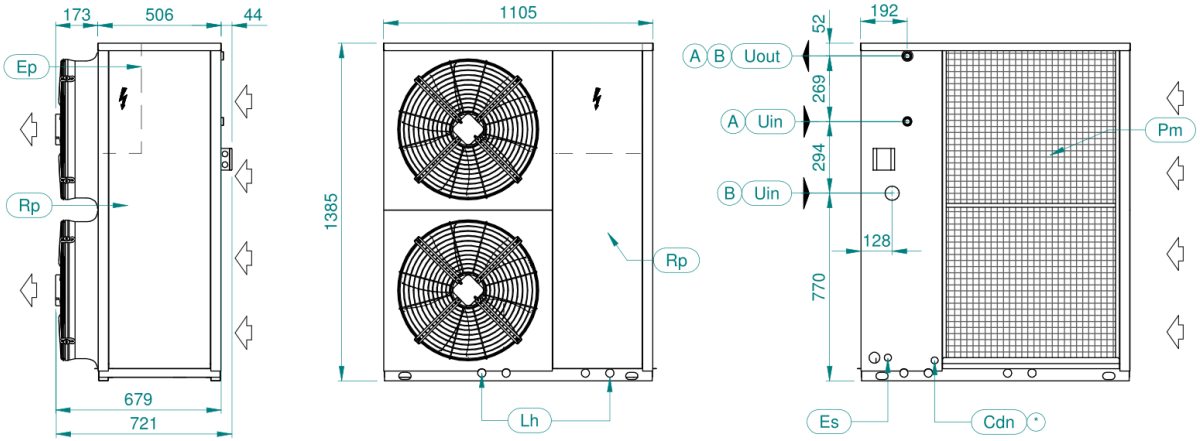
DIMENSIONI - DIMENSIONS		
LUNGHEZZA WIDTH	PROFONDITA' DEPTH	ALTEZZA HEIGHT
926	600	1350

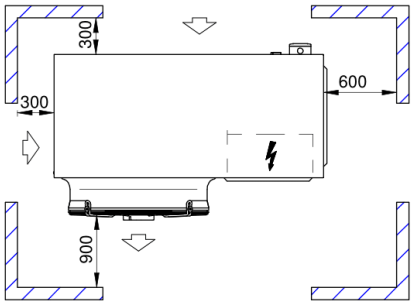
MODELLO MODEL	PESO WEIGHT (kg)	PESO IN FUNZIONE OPERATING WEIGHT (kg)
16	134	135
18	150	151
20	165	166
16 1P	146	147
18 1P	162	163
20 1P	177	178

Note: These drawings are not contractually binding. For the installation design, refer to the specific dimensional drawing available on request.

GEYSER 2 MT 23-25 /ST

SD00319A



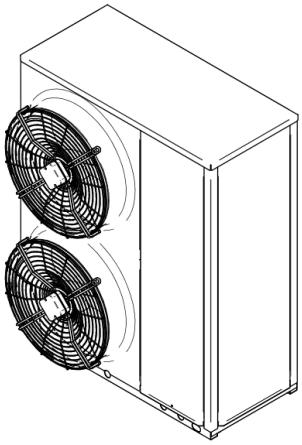


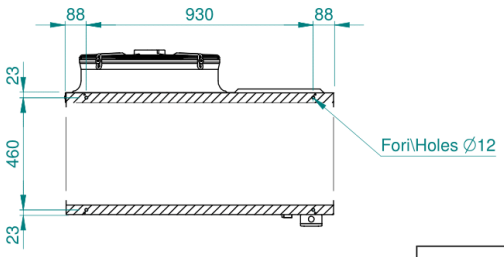
SPAZI DI INSTALLAZIONE / CLEARANCES

CONNESSIONI IDRAULICHE / HYDRAULIC CONNECTION

(A) ACQUA UTILIZZO SENZA MODULO IDRAULICO
USER WATER WITHOUT HYDRAULIC MODULE

(B) ACQUA UTILIZZO CON MODULO IDRAULICO 1P
USER WATER WITH HYDRAULIC MODULE 1P





IMPRONTA A TERRA / FOOTPRINT

Uin		Uout
(A) 1" BSPM	(B) 1 1\4" BSPM	(A) (B) 1" BSPM

Ep	QUADRO ELETTRICO / ELECTRICAL PANEL	
Es	INGRESSO ALIMENTAZIONE ELETTRICA / ELECTRICAL SUPPLY INLET	
Lh	FORI SOLLEVAMENTO / LIFTING HOLES	Ø34
Rp	PANNELLO ASPORTABILE / REMOVABLE PANEL	
Pm	GRIGLIE DI PROTEZIONE / PROTECTIVE METAL MESH	

Cdh	SCARICO CONDENSA / CONDENSATE DRAIN	ø 18
Uin	INGRESSO ACQUA UTILIZZO / USER WATER INLET	
Uout	USCITA ACQUA UTILIZZO / USER WATER OUTLET	
	FLUSSO ARIA / AIR FLOW	

(*) OPZIONALE \ OPTIONAL

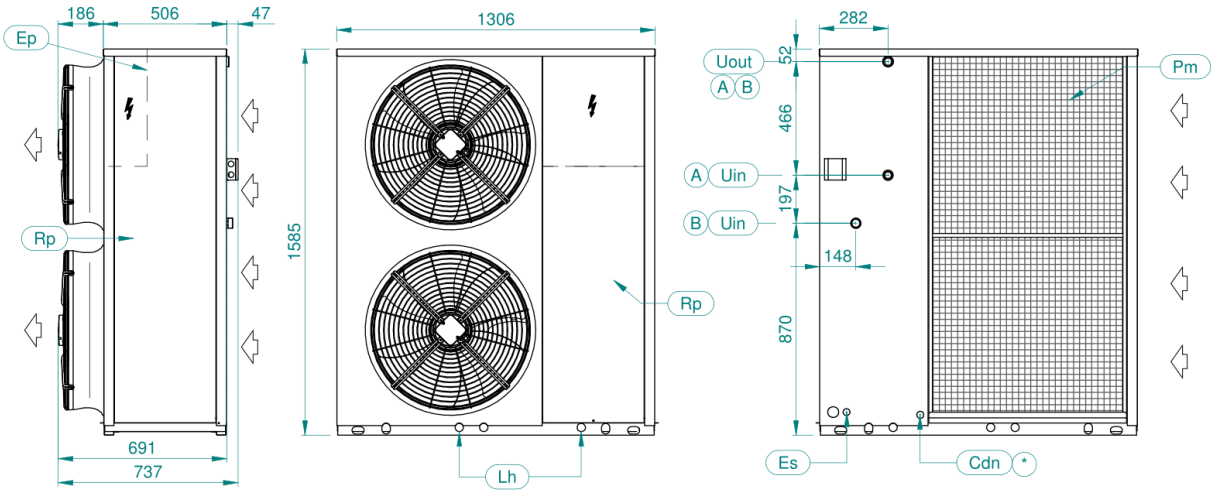
DIMENSIONI - DIMENSIONS		
LUNGHEZZA WIDTH	PROFONDITA' DEPTH	ALTEZZA HEIGHT
1105	721	1385

MODELLO MODEL	PESO WEIGHT (kg)	PESO IN FUNZIONE OPERATING WEIGHT (kg)
23	210	212
25	231	233
23 1P	223	225
25 1P	244	246

Note: These drawings are not contractually binding. For the installation design, refer to the specific dimensional drawing available on request.

GEYSER 2 MT 29-42 /ST

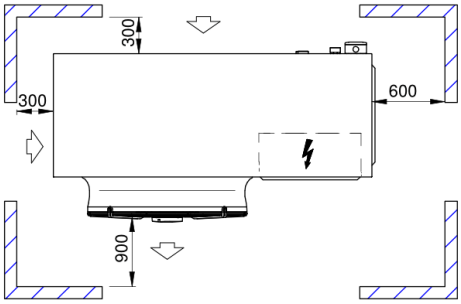
SD00321A



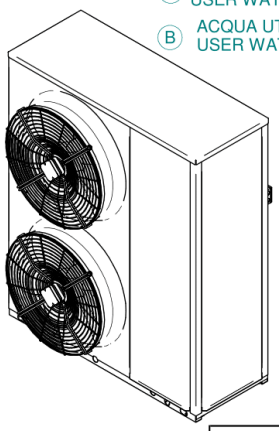
CONNESSIONI IDRAULICHE / HYDRAULIC CONNECTION

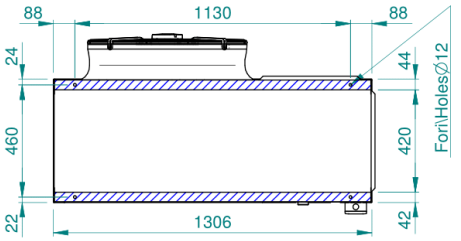
(A) ACQUA UTILIZZO SENZA MODULO IDRAULICO
USER WATER WITHOUT HYDRAULIC MODULE

(B) ACQUA UTILIZZO CON MODULO IDRAULICO 1P
USER WATER WITH HYDRAULIC MODULE 1P



SPAZI DI INSTALLAZIONE / CLEARANCES





IMPRONTA A TERRA \ FOOTPRINT

DIMENSIONI - DIMENSIONS		
LUNGHEZZA WIDTH	PROFONDITA' DEPTH	ALTEZZA HEIGHT
1306	737	1585

MODELLO MODEL	PESO WEIGHT (kg)	PESO IN FUNZIONE OPERATING WEIGHT (kg)
29	356	358
34	365	367
38	385	387
42	395	398
29 1P	371	373
34 1P	380	382
38 1P	400	402
42 1P	410	413

Ep	QUADRO ELETTRICO ELECTRICAL PANEL	
Es	INGRESSO ALIMENTAZIONE ELETTRICA ELECTRICAL SUPPLY INLET	
Lh	FORI SOLLEVAMENTO LIFTING HOLES	Ø34
Rp	PANNELLO ASPORTABILE REMOVABLE PANEL	
Pm	GRIGLIE DI PROTEZIONE PROTECTIVE METAL MESH	

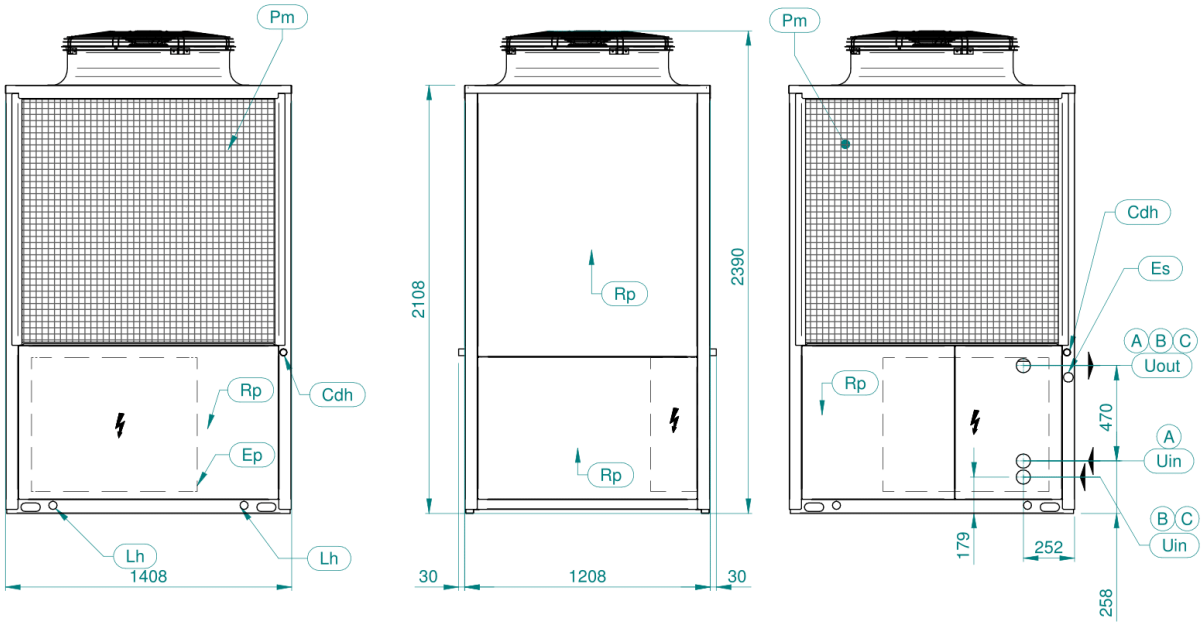
Cdh	SCARICO CONDENSA CONDENSATE DRAIN	ø 18
Uin	INGRESSO ACQUA UTILIZZO USER WATER INLET	1" 1/4 BSPM
Uout	USCITA ACQUA UTILIZZO USER WATER OUTLET	1" 1/4 BSPM
	FLUSSO ARIA AIR FLOW	

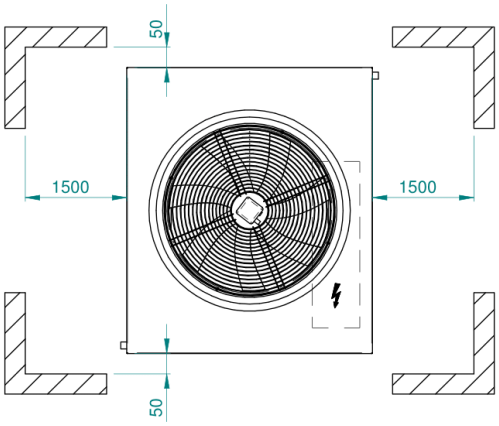
(*) OPZIONALE \ OPTIONAL

Note: These drawings are not contractually binding. For the installation design, refer to the specific dimensional drawing available on request.

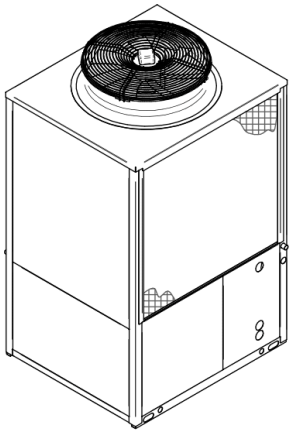
GEYSER 2 MT 52-92 /ST /1P /2P

SD00483A





SPAZI DI INSTALLAZIONE / CLEARANCES



DIMENSIONI / DIMENSIONS		
LUNGHEZZA WIDTH	PROFONDITA' DEPTH	ALTEZZA HEIGHT
1408	1208	2390

CONNESSIONI IDRAULICHE / HYDRAULIC CONNECTIONS		
A	MODELLO STANDARD	STANDARD MODEL
B	MODELLO 1P (1 pompa)	1P MODEL (1 pump)
C	MODELLO 2P (2 pompe)	2P MODEL (2 pumps)

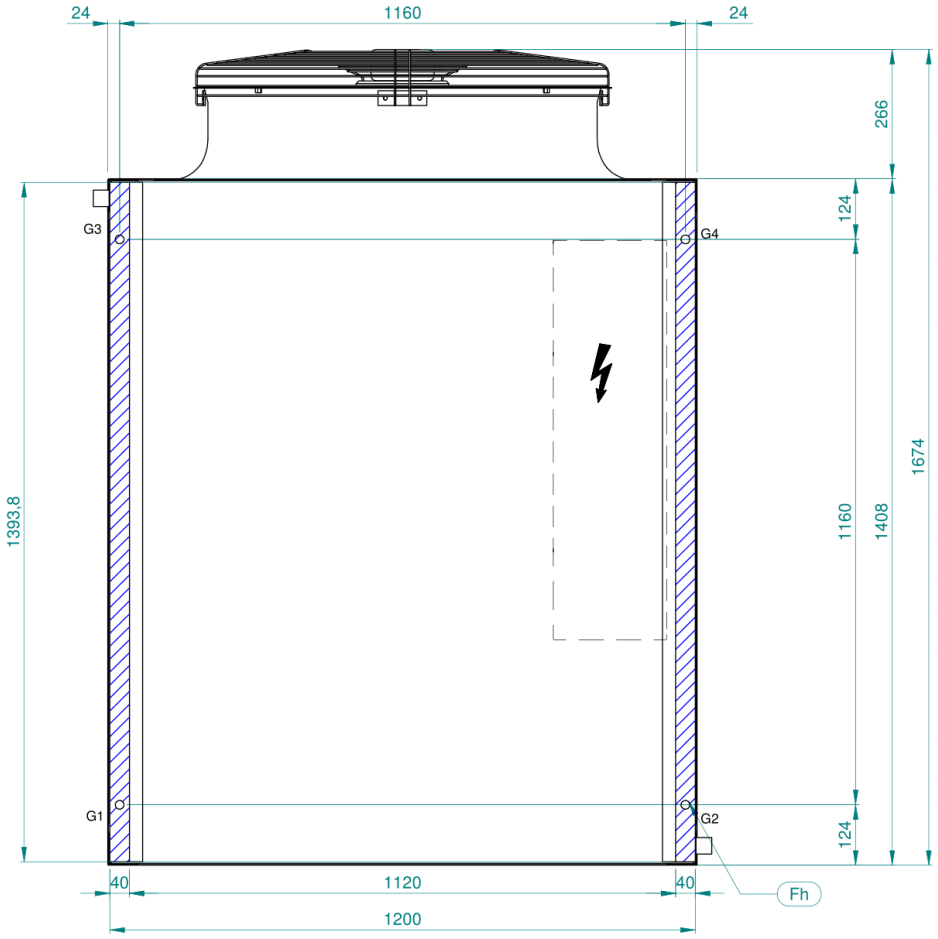
Ep	QUADRO ELETTRICO ELECTRICAL PANEL
Es	INGRESSO ALIMENTAZIONE ELETTRICA ELECTRICAL SUPPLY INLET
Lh	FORI DI SOLLEVAMENTO LIFTING HOLES
Pm	GRIGLIE DI PROTEZIONE PROTECTIVE METAL MESH
*	OPZIONALE OPTIONAL

Rp	PANNELLO ASPORTABILE REMOVABLE PANEL	
Cdh	SCARICO CONDENSA CONDENSATE DRAIN	ø35
Uin	INGRESSO ACQUA UTILIZZO USER WATER INLET	1" 1/2 BSPM
Uout	USCITA ACQUA UTILIZZO USER WATER OUTLET	1" 1/2 BSPM

Note: These drawings are not contractually binding. For the installation design, refer to the specific dimensional drawing available on request.

GEYSER 2 MT 52-92 /EAO /1P /2P

SD00487A



IMPRONTA A TERRA \ FOOTPRINT

Fh	FORI DI FISSAGGIO FIXING HOLES	Ø18
G..	PUNTI DI APPOGGIO ANTIVIBRANTI VIBRATION DAMPER FOOT HOLDS	

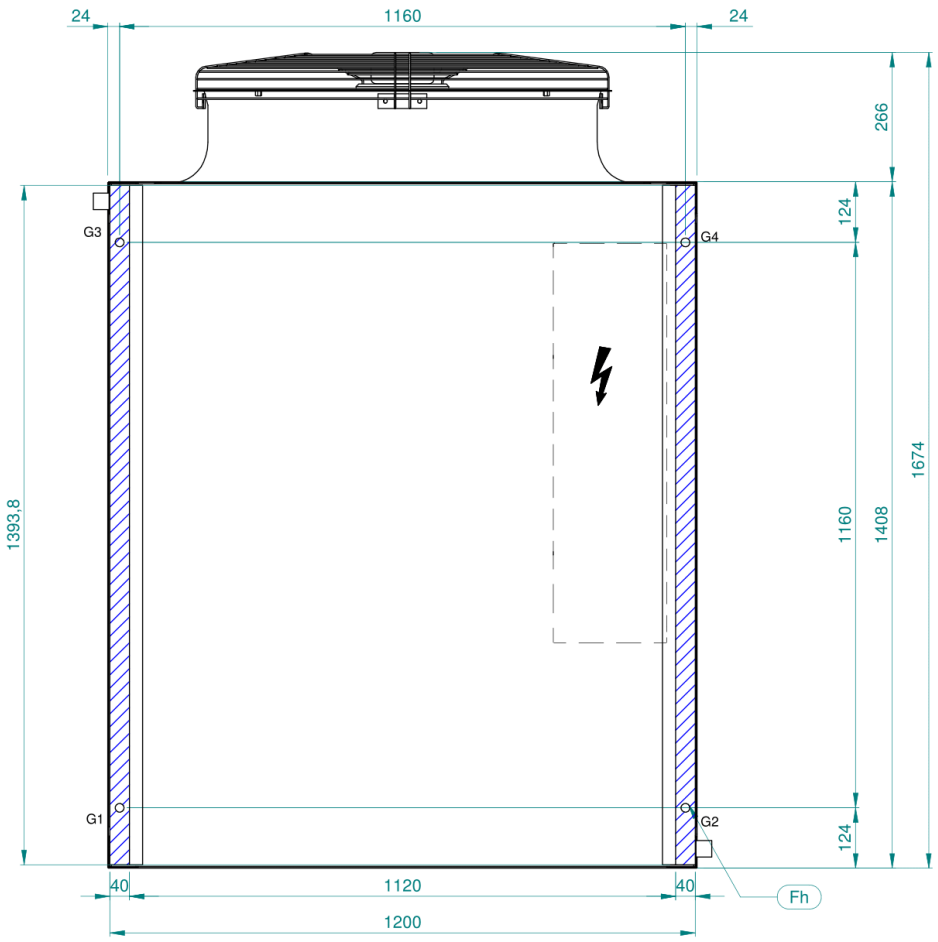
	MODELLO MODEL	PESO WEIGHT (kg)	PESO IN FUNZIONE OPERATING WEIGHT (kg)
	50	587	590
	60	604	607
	70	614	617
	80	632	635
	90	643	646
Δ PESO Δ WEIGHT	MOD. 1P	16	18
Δ PESO Δ WEIGHT	MOD. 2P	32	34

	G1 (kg)	G2 (kg)	G3 (kg)	G4 (kg)
50	159	164	155	112
60	164	169	160	115
70	166	171	162	117
80	171	176	167	121
90	174	179	170	123
50 1P	161	166	162	119
60 1P	166	171	167	122
70 1P	168	173	169	124
80 1P	173	178	174	128
90 1P	176	181	177	130
50 2P	167	172	170	127
60 2P	172	177	175	130
70 2P	174	179	177	132
80 2P	179	184	182	136
90 2P	182	187	185	138

Note: These drawings are not contractually binding. For the installation design, refer to the specific dimensional drawing available on request.

GEYSER 2 MT 52-92 /EAO /1P /2P

SD00487A



IMPRONTA A TERRA \ FOOTPRINT

Fh	FORI DI FISSAGGIO FIXING HOLES	Ø18
G..	PUNTI DI APPOGGIO ANTIVIBRANTI VIBRATION DAMPER FOOT HOLDS	

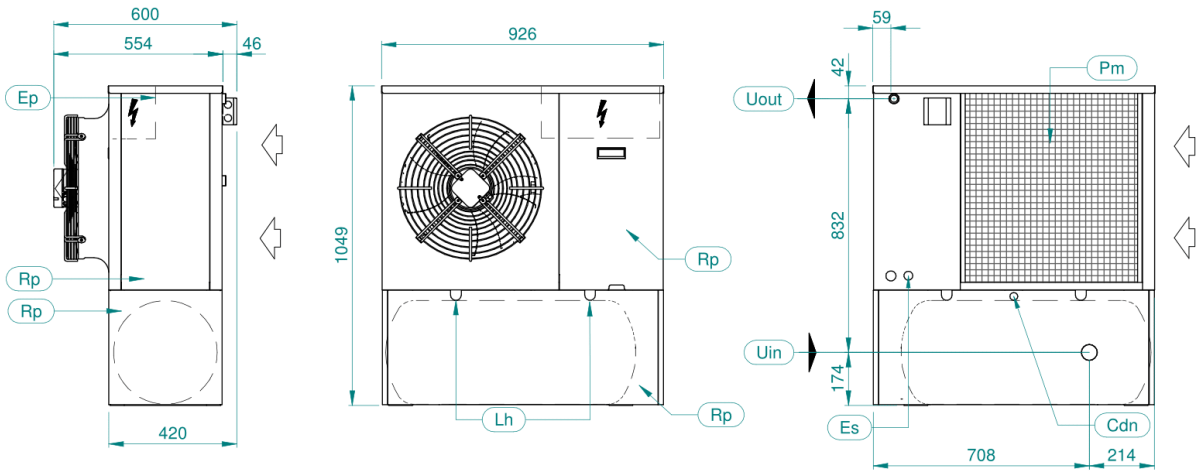
	MODELLO MODEL	PESO WEIGHT (kg)	PESO IN FUNZIONE OPERATING WEIGHT (kg)
	50	587	590
	60	604	607
	70	614	617
	80	632	635
	90	643	646
Δ PESO Δ WEIGHT	MOD. 1P	16	18
Δ PESO Δ WEIGHT	MOD. 2P	32	34

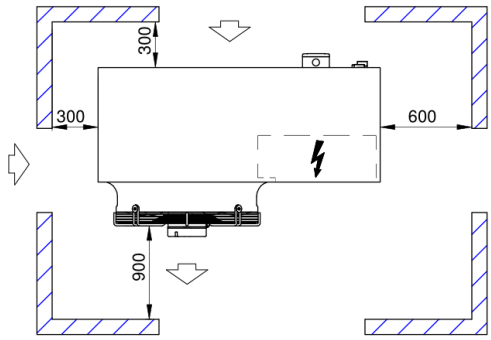
	G1 (kg)	G2 (kg)	G3 (kg)	G4 (kg)
50	159	164	155	112
60	164	169	160	115
70	166	171	162	117
80	171	176	167	121
90	174	179	170	123
50 1P	161	166	162	119
60 1P	166	171	167	122
70 1P	168	173	169	124
80 1P	173	178	174	128
90 1P	176	181	177	130
50 2P	167	172	170	127
60 2P	172	177	175	130
70 2P	174	179	177	132
80 2P	179	184	182	136
90 2P	182	187	185	138

Note: These drawings are not contractually binding. For the installation design, refer to the specific dimensional drawing available on request.

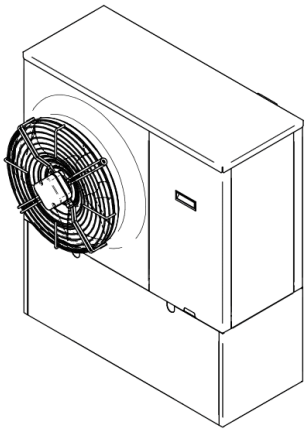
GEYSER 2 MT 8-12 /1PS

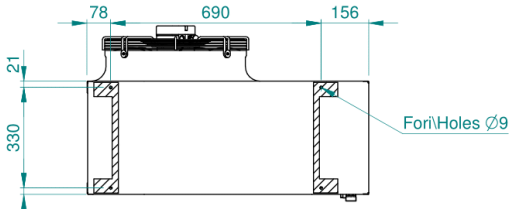
SD00316A





SPAZI DI INSTALLAZIONE / CLEARANCES





IMPRONTA A TERRA / FOOTPRINT

Ep	QUADRO ELETTRICO / ELECTRICAL PANEL		Cdh	SCARICO CONDENSA / CONDENSATE DRAIN	ø 18
Es	INGRESSO ALIMENTAZIONE ELETTRICA / ELECTRICAL SUPPLY INLET		Uin	INGRESSO ACQUA UTILIZZO / USER WATER INLET	1" BSPM
Lh	FORI SOLLEVAMENTO / LIFTING HOLES	Ø35	Uout	USCITA ACQUA UTILIZZO / USER WATER OUTLET	1" BSPM
Rp	PANNELLO ASPORTABILE / REMOVABLE PANEL			FLUSSO ARIA / AIR FLOW	
Pm	GRIGLIE DI PROTEZIONE / PROTECTIVE METAL MESH				

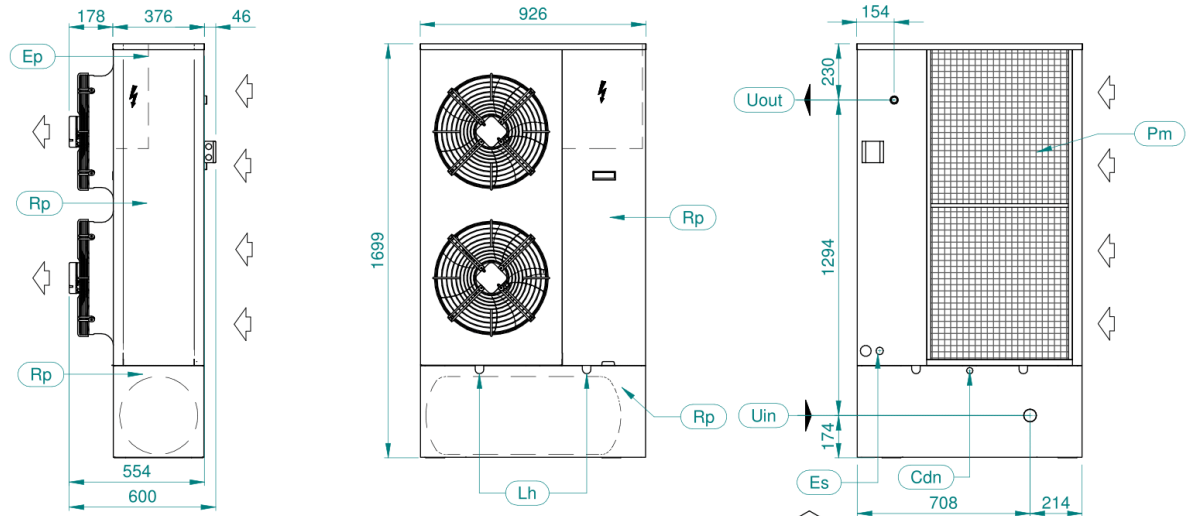
DIMENSIONI - DIMENSIONS		
LUNGHEZZA / WIDTH	PROFONDITA' / DEPTH	ALTEZZA / HEIGHT
926	600	1049

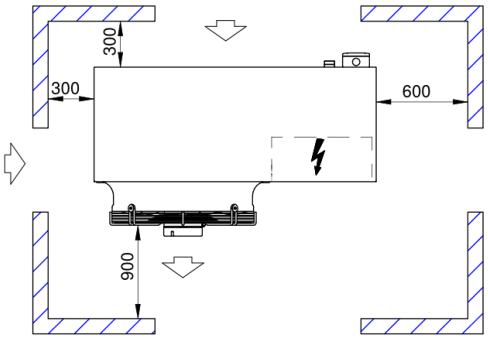
MODELLO / MODEL	PESO / WEIGHT (kg)	PESO IN FUNZIONE / OPERATING
8	142	215
10	147	221
12	156	231

Note: These drawings are not contractually binding. For the installation design, refer to the specific dimensional drawing available on request.

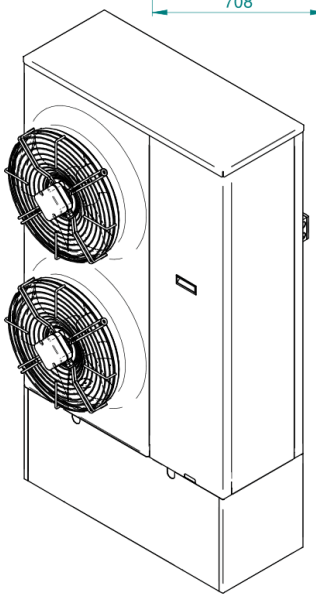
GEYSER 2 MT 16-20 /1PS

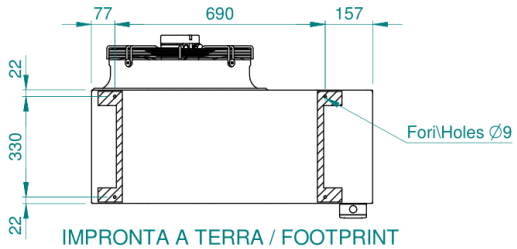
SD00318A





SPAZI DI INSTALLAZIONE / CLEARANCES





IMPRONTA A TERRA / FOOTPRINT

Ep	QUADRO ELETTRICO ELECTRICAL PANEL	
Es	INGRESSO ALIMENTAZIONE ELETTRICA ELECTRICAL SUPPLY INLET	
Lh	FORI SOLLEVAMENTO LIFTING HOLES	Ø28
Rp	PANNELLO ASPORTABILE REMOVABLE PANEL	
Pm	GRIGLIE DI PROTEZIONE PROTECTIVE METAL MESH	

Cdh	SCARICO CONDENSA CONDENSATE DRAIN	ø 18
Uin	INGRESSO ACQUA UTILIZZO USER WATER INLET	1" BSPM
Uout	USCITA ACQUA UTILIZZO USER WATER OUTLET	1" BSPM
	FLUSSO ARIA AIR FLOW	

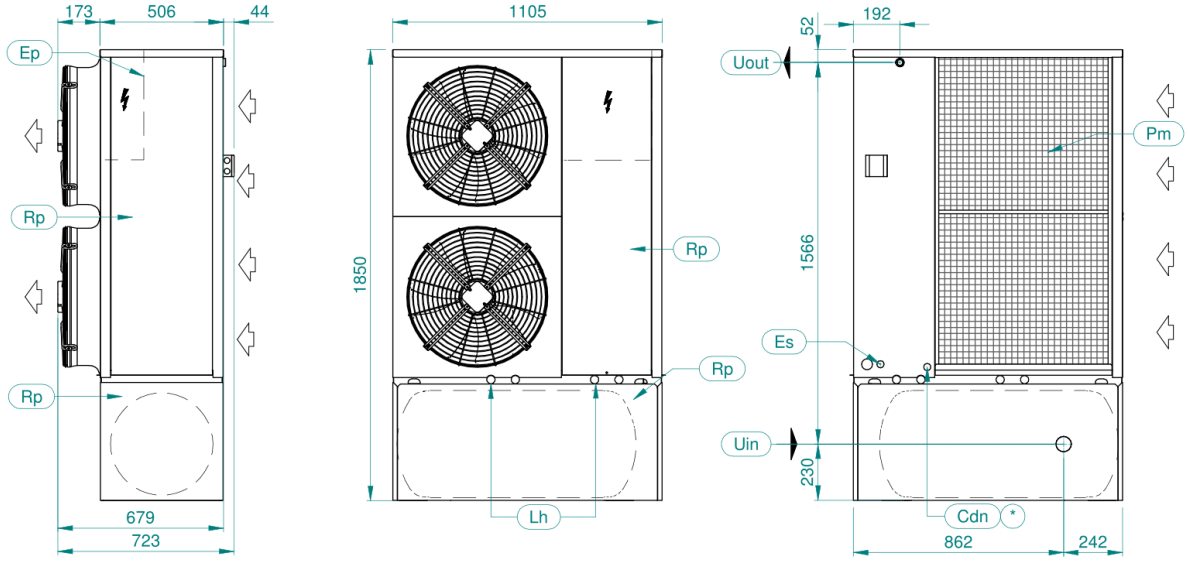
DIMENSIONI - DIMENSIONS		
LUNGHEZZA WIDTH	PROFONDITA' DEPTH	ALTEZZA HEIGHT
926	600	1699

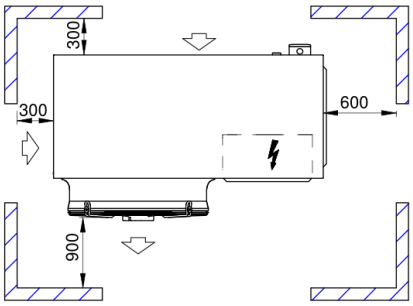
MODELLO MODEL	PESO WEIGHT (kg)	PESO IN FUNZIONE OPERATING WEIGHT (kg)
16	191	261
18	207	277
20	222	292

Note: These drawings are not contractually binding. For the installation design, refer to the specific dimensional drawing available on request.

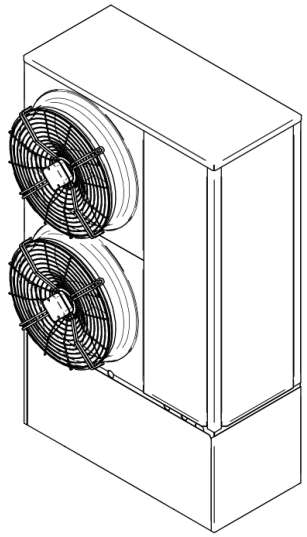
GEYSER 2 MT 23-25 /1PS

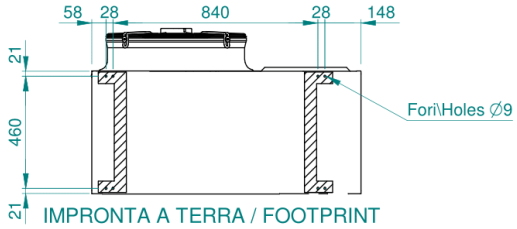
SD00320A





SPAZI DI INSTALLAZIONE / CLEARANCES





IMPRONTA A TERRA / FOOTPRINT

Ep	QUADRO ELETTRICO / ELECTRICAL PANEL	
Es	INGRESSO ALIMENTAZIONE ELETTRICA / ELECTRICAL SUPPLY INLET	
Lh	FORI SOLLEVAMENTO / LIFTING HOLES	Ø34
Rp	PANNELLO ASPORTABILE / REMOVABLE PANEL	
Pm	GRIGLIE DI PROTEZIONE / PROTECTIVE METAL MESH	

Cdh	SCARICO CONDENSA / CONDENSATE DRAIN	ø 22
Uin	INGRESSO ACQUA UTILIZZO / USER WATER INLET	1" 1/4 BSPM
Uout	USCITA ACQUA UTILIZZO / USER WATER OUTLET	1" BSPM
	FLUSSO ARIA / AIR FLOW	

(*) OPZIONALE \ OPTIONAL

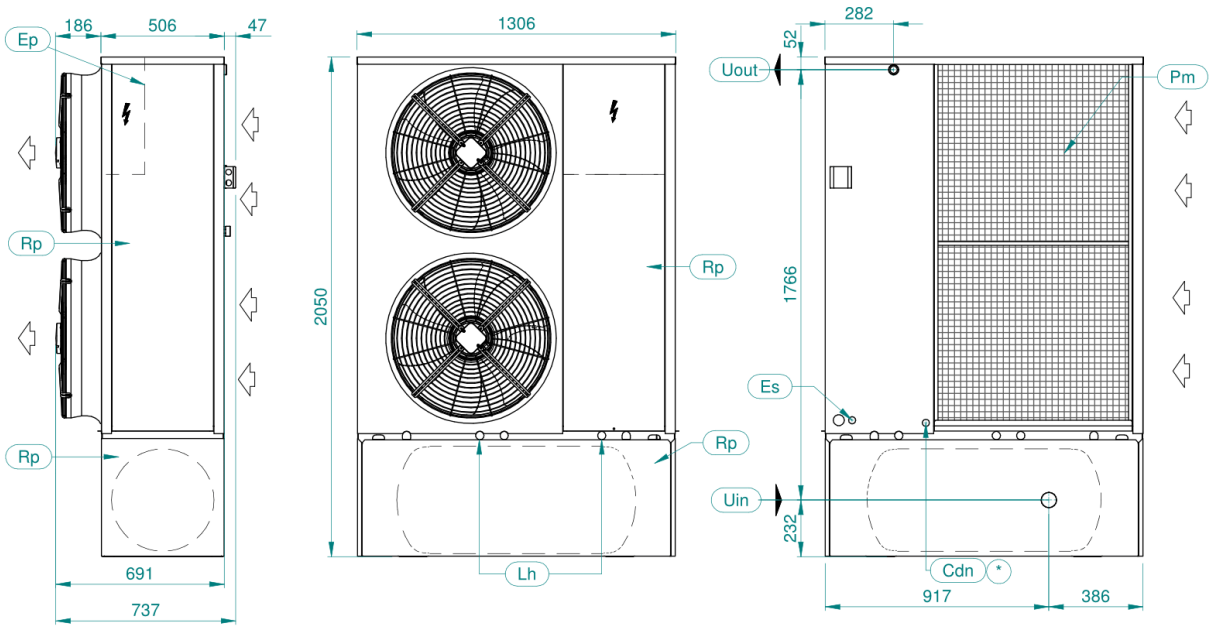
DIMENSIONI - DIMENSIONS		
LUNGHEZZA WIDTH	PROFONDITA' DEPTH	ALTEZZA HEIGHT
1105	723	1850

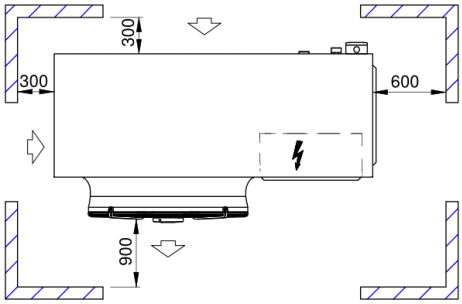
MODELLO MODEL	PESO WEIGHT (kg)	PESO IN FUNZIONE OPERATING WEIGHT (kg)
23	288	418
25	309	439

Note: These drawings are not contractually binding. For the installation design, refer to the specific dimensional drawing available on request.

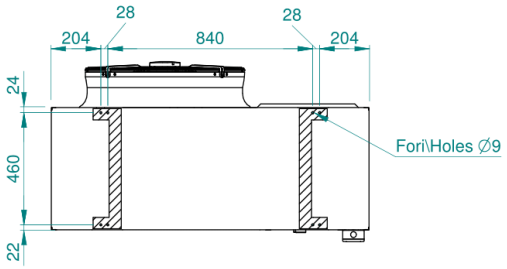
GEYSER 2 MT 29-42 /1PS

SD00322A





SPAZI DI INSTALLAZIONE / CLEARANCES



IMPRONTA A TERRA / FOOTPRINT

Ep	QUADRO ELETTRICO ELECTRICAL PANEL	
Es	INGRESSO ALIMENTAZIONE ELETTRICA ELECTRICAL SUPPLY INLET	
Lh	FORI SOLLEVAMENTO LIFTING HOLES	Ø34
Rp	PANNELLO ASPORTABILE REMOVABLE PANEL	
Pm	GRIGLIE DI PROTEZIONE PROTECTIVE METAL MESH	

Cdh	SCARICO CONDENSA CONDENSATE DRAIN	ø 22
Uin	INGRESSO ACQUA UTILIZZO USER WATER INLET	1" 1/4 BSPM
Uout	USCITA ACQUA UTILIZZO USER WATER OUTLET	1" 1/4 BSPM
	FLUSSO ARIA AIR FLOW	

(*) OPZIONALE \ OPTIONAL

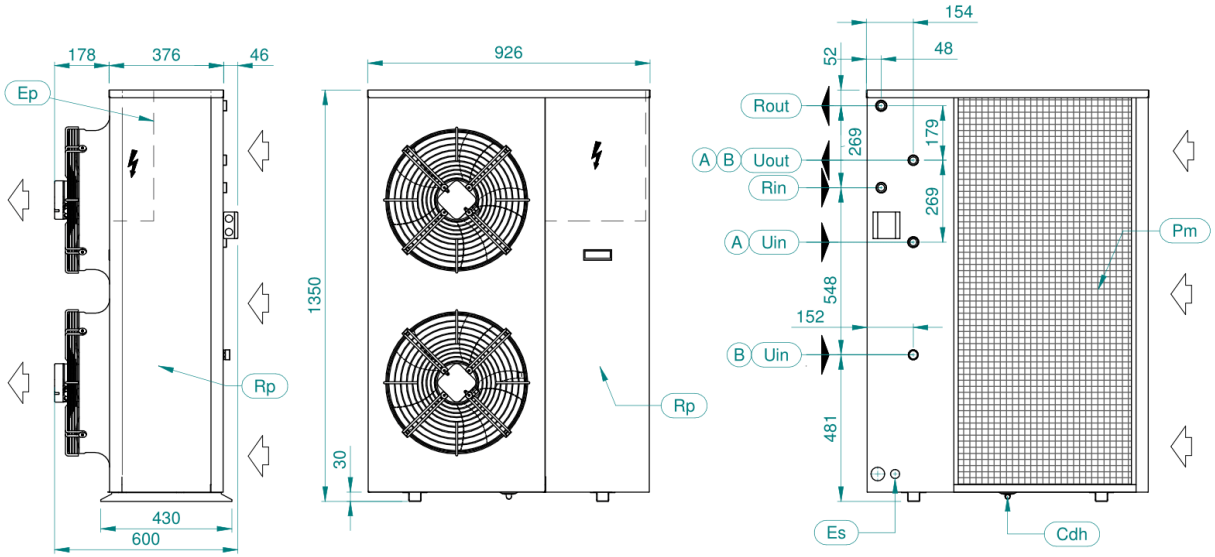
DIMENSIONI - DIMENSIONS		
LUNGHEZZA WIDTH	PROFONDITA' DEPTH	ALTEZZA HEIGHT
1306	737	2050

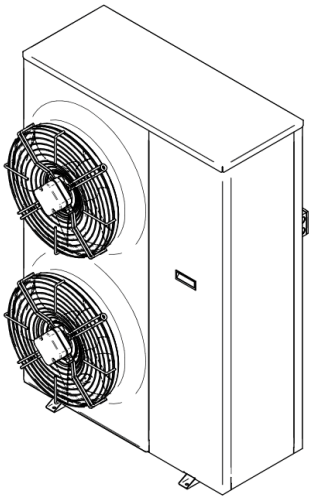
MODELLO MODEL	PESO WEIGHT (kg)	PESO IN FUNZIONE OPERATING WEIGHT (kg)
29	436	566
34	445	575
38	465	595
42	475	605

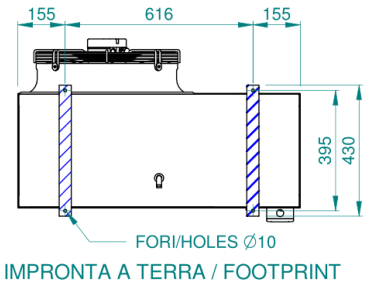
Note: These drawings are not contractually binding. For the installation design, refer to the specific dimensional drawing available on request.

GEYSER 2 MT 8-20 /HWS

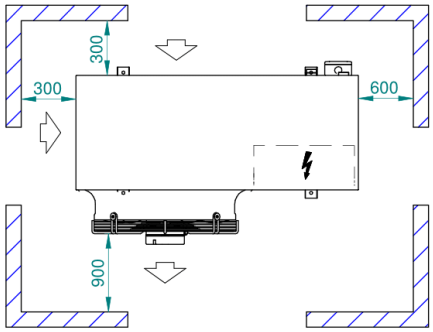
SD00323A







IMPRONTA A TERRA / FOOTPRINT



SPAZI DI INSTALLAZIONE / CLEARANCES

CONNESSIONI IDRAULICHE / HYDRAULIC CONNECTION

(A) ACQUA UTILIZZO SENZA MODULO IDRAULICO
USER WATER WITHOUT HYDRAULIC MODULE

(B) ACQUA UTILIZZO CON MODULO IDRAULICO 1P
USER WATER WITH HYDRAULIC MODULE 1P

Ep	QUADRO ELETTRICO / ELECTRICAL PANEL	
Es	INGRESSO ALIMENTAZIONE ELETTRICA / ELECTRICAL SUPPLY INLET	
Lh	FORI SOLLEVAMENTO / LIFTING HOLES	Ø28
Rp	PANNELLO ASPORTABILE / REMOVABLE PANEL	
Pm	GRIGLIE DI PROTEZIONE / PROTECTIVE METAL MESH	
Cdh	SCARICO CONDENSA / CONDENSATE DRAIN	ø 18

Uin	INGRESSO ACQUA UTILIZZO / USER WATER INLET	1" BSPM
Uout	USCITA ACQUA UTILIZZO / USER WATER OUTLET	1" BSPM
Rin	INGRESSO ACQUA SANITARIO / RECOVERY WATER INLET	1" BSPM
Rout	USCITA ACQUA SANITARIO / RECOVERY WATER OUTLET	1" BSPM
⇦	FLUSSO ARIA / AIR FLOW	

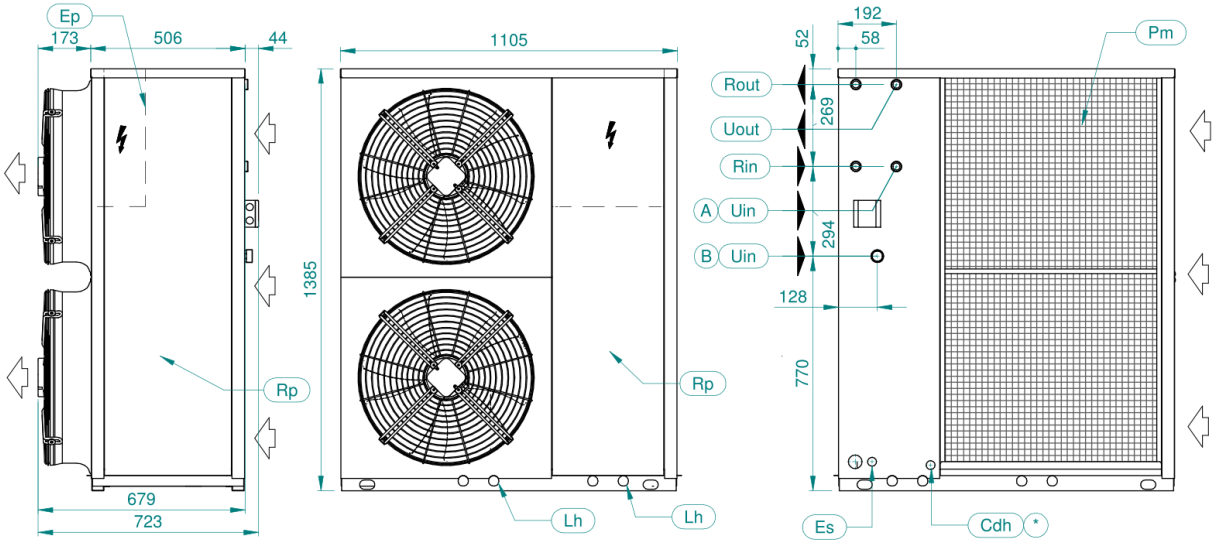
DIMENSIONI - DIMENSIONS		
LUNGHEZZA WIDTH	PROFONDITA' DEPTH	ALTEZZA HEIGHT
926	600	1350

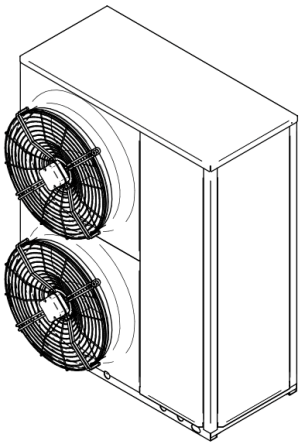
MODELLO MODEL	PESO WEIGHT (kg)	PESO IN FUNZIONE OPERATING WEIGHT (kg)
8	129	130
10	133	134
12	137	138
16	141	142
18	158	159
20	174	175
8 1P	137	138
10 1P	141	142
12 1P	145	146
16 1P	153	154
18 1P	170	171
20 1P	186	187

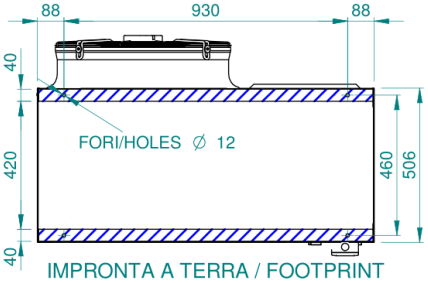
Note: These drawings are not contractually binding. For the installation design, refer to the specific dimensional drawing available on request.

GEYSER 2 MT 23-25 /HWS

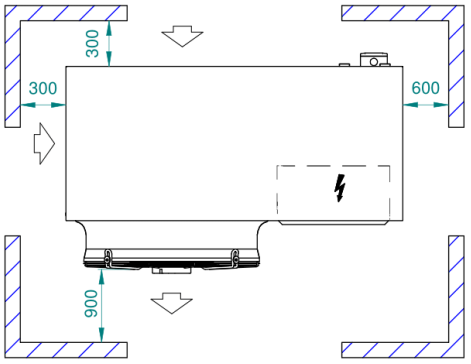
SD00325A







IMPRONTA A TERRA / FOOTPRINT



SPAZI DI INSTALLAZIONE / CLEARANCES

Uin		Uout
A	B	A B
1" BSPM	1 1\4" BSPM	1" BSPM

DIMENSIONI - DIMENSIONS		
LUNGHEZZA WIDTH	PROFONDITA' DEPTH	ALTEZZA HEIGHT
1105	723	1385

CONNESSIONI IDRAULICHE / HYDRAULIC CONNECTION

(A) ACQUA UTILIZZO SENZA MODULO IDRAULICO
USER WATER WITHOUT HYDRAULIC MODULE

(B) ACQUA UTILIZZO CON MODULO IDRAULICO 1P
USER WATER WITH HYDRAULIC MODULE 1P

MODELLO MODEL	PESO WEIGHT (kg)	PESO IN FUNZIONE OPERATING WEIGHT (kg)
23	220	222
25	242	244
23 1P	233	235
25 1P	255	257

Ep	QUADRO ELETTRICO / ELECTRICAL PANEL	
Es	INGRESSO ALIMENTAZIONE ELETTRICA / ELECTRICAL SUPPLY INLET	
Lh	FORI SOLLEVAMENTO / LIFTING HOLES	Ø34
Rp	PANNELLO ASPORTABILE / REMOVABLE PANEL	
Pm	GRIGLIE DI PROTEZIONE / PROTECTIVE METAL MESH	
Cdh	SCARICO CONDENSA / CONDENSATE DRAIN	ø 20

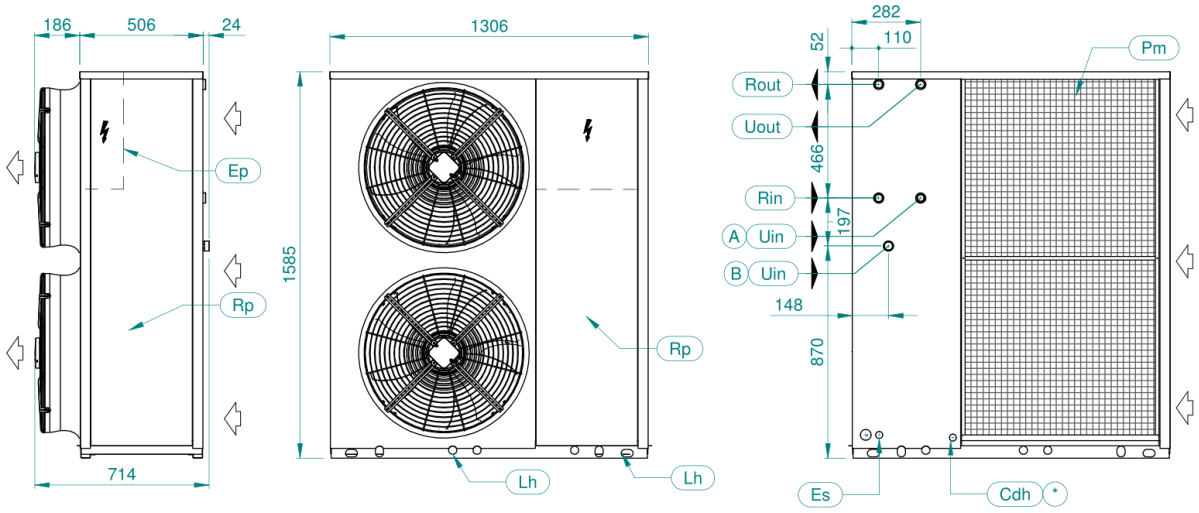
Uin	INGRESSO ACQUA UTILIZZO / USER WATER INLET	
Uout	USCITA ACQUA UTILIZZO / USER WATER OUTLET	
Rin	INGRESSO ACQUA RECUPERO / RECOVERY WATER INLET	1" BSPM
Rout	USCITA ACQUA RECUPERO / RECOVERY WATER OUTLET	1" BSPM
	FLUSSO ARIA / AIR FLOW	

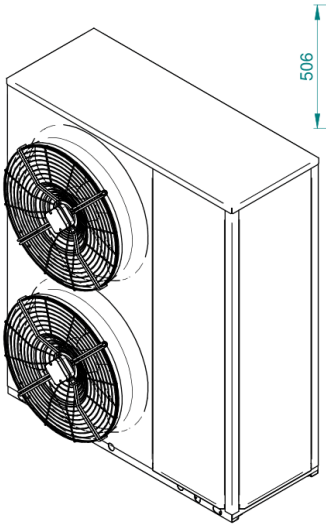
(*) OPZIONALE / OPTIONAL

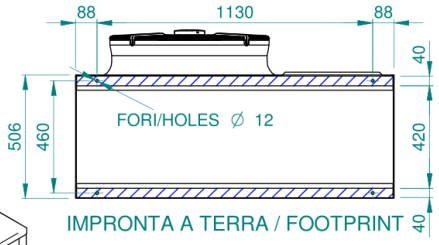
Note: These drawings are not contractually binding. For the installation design, refer to the specific dimensional drawing available on request.

GEYSER 2 MT 29-42 /HWS

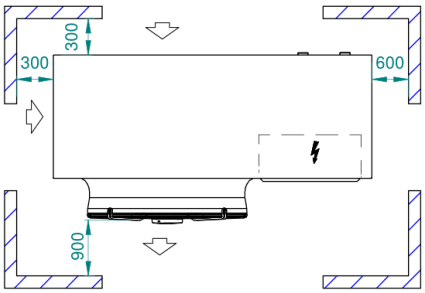
SD00327A







IMPRONTA A TERRA / FOOTPRINT



SPAZI DI INSTALLAZIONE / CLEARANCES

MODELLO MODEL	PESO WEIGHT (kg)	PESO IN FUNZIONE OPERATING WEIGHT (kg)
29	368	370
34	378	380
38	399	401
42	410	413
29 1P	383	385
34 1P	393	395
38 1P	414	416
42 1P	425	428

DIMENSIONI - DIMENSIONS		
LUNGHEZZA WIDTH	PROFONDITA' DEPTH	ALTEZZA HEIGHT
1306	714	1585

CONNESSIONI IDRAULICHE / HYDRAULIC CONNECTION

(A) ACQUA UTILIZZO SENZA MODULO IDRAULICO
USER WATER WITHOUT HYDRAULIC MODULE

(B) ACQUA UTILIZZO CON MODULO IDRAULICO 1P
USER WATER WITH HYDRAULIC MODULE 1P

Ep	QUADRO ELETTRICO / ELECTRICAL PANEL	
Es	INGRESSO ALIMENTAZIONE ELETTRICA / ELECTRICAL SUPPLY INLET	
Lh	FORI SOLLEVAMENTO / LIFTING HOLES	Ø34
Rp	PANNELLO ASPORTABILE / REMOVABLE PANEL	
Pm	GRIGLIE DI PROTEZIONE / PROTECTIVE METAL MESH	
Cdh	SCARICO CONDENSA / CONDENSATE DRAIN	ø 20

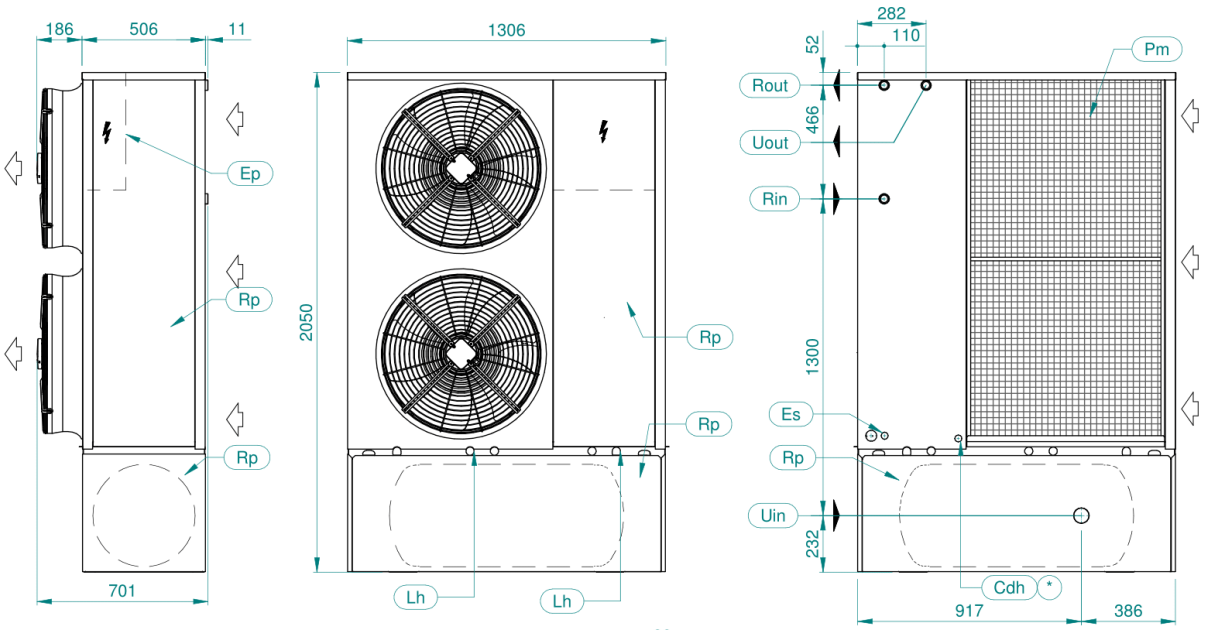
Uin	INGRESSO ACQUA UTILIZZO / USER WATER INLET	1" 1/4 BSPM
Uout	USCITA ACQUA UTILIZZO / USER WATER OUTLET	1" 1/4 BSPM
Rin	INGRESSO ACQUA RECUPERO / RECOVERY WATER INLET	1" 1/4 BSPM
Rout	USCITA ACQUA RECUPERO / RECOVERY WATER OUTLET	1" 1/4 BSPM
	FLUSSO ARIA / AIR FLOW	

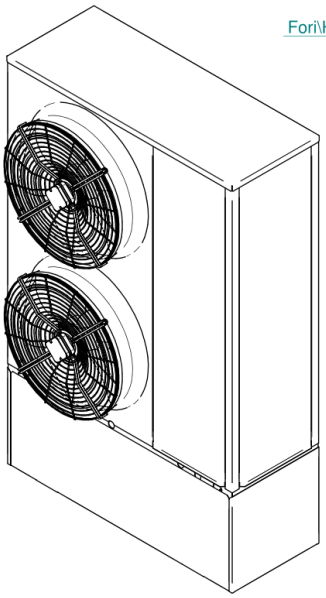
(*) OPZIONALE / OPTIONAL

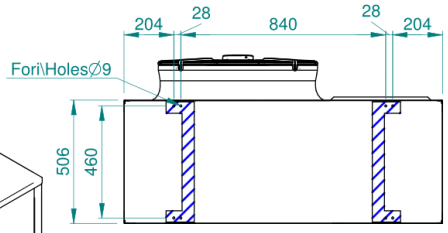
Note: These drawings are not contractually binding. For the installation design, refer to the specific dimensional drawing available on request.

GEYSER 2 MT 52-92 /HWS /1P /2P

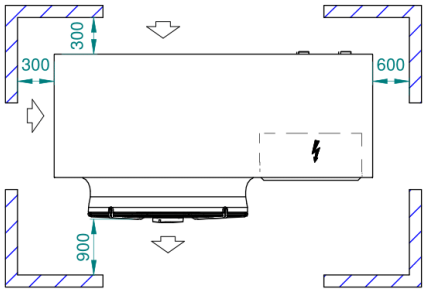
SD00484A







IMPRONTA A TERRA / FOOTPRINT



SPAZI DI INSTALLAZIONE / CLEARANCES

MODELLO MODEL	PESO WEIGHT (kg)	PESO IN FUNZIONE OPERATING WEIGHT (kg)
29	448	578
34	458	588
38	479	609
42	490	620

DIMENSIONI - DIMENSIONS		
LUNGHEZZA WIDTH	PROFONDITA' DEPTH	ALTEZZA HEIGHT
1306	701	2050

Ep	QUADRO ELETTRICO / ELECTRICAL PANEL	
Es	INGRESSO ALIMENTAZIONE ELETTRICA / ELECTRICAL SUPPLY INLET	
Lh	FORI SOLLEVAMENTO / LIFTING HOLES	Ø34
Rp	PANNELLO ASPORTABILE / REMOVABLE PANEL	
Pm	GRIGLIE DI PROTEZIONE / PROTECTIVE METAL MESH	
Cdh	SCARICO CONDENSA / CONDENSATE DRAIN	ø 22

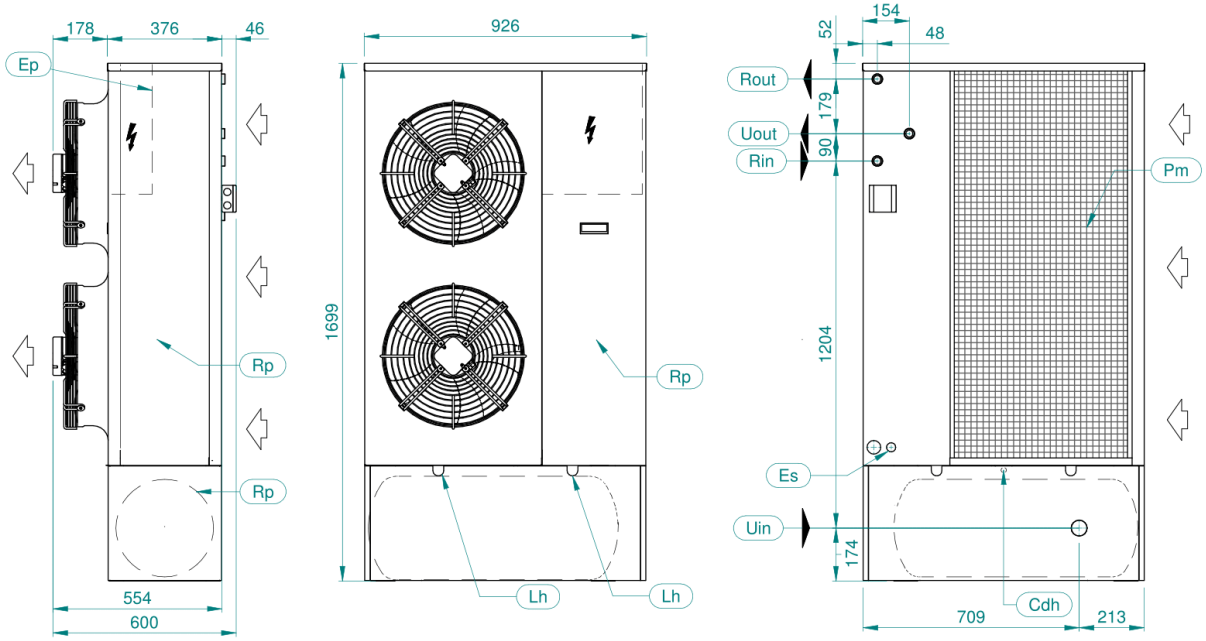
Uin	INGRESSO ACQUA UTILIZZO / USER WATER INLET	1" 1/4 BSPM
Uout	USCITA ACQUA UTILIZZO / USER WATER OUTLET	1" 1/4 BSPM
Rin	INGRESSO ACQUA RECUPERO / RECOVERY WATER INLET	1" 1/4 BSPM
Rout	USCITA ACQUA RECUPERO / RECOVERY WATER OUTLET	1" 1/4 BSPM
	FLUSSO ARIA / AIR FLOW	

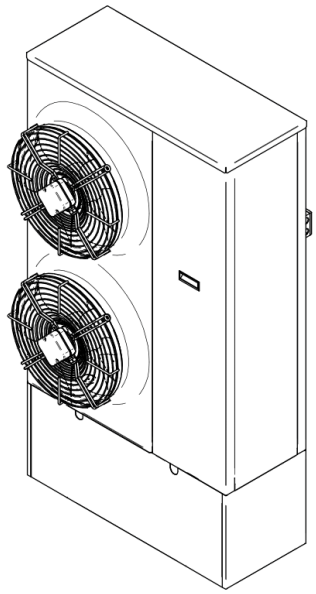
(*) OPZIONALE / OPTIONAL

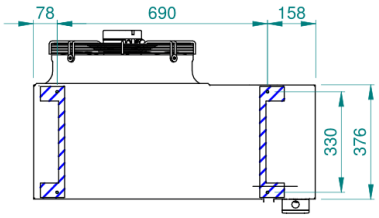
Note: These drawings are not contractually binding. For the installation design, refer to the specific dimensional drawing available on request.

GEYSER 2 MT 8-20 /HWS /1PS

SD00324A

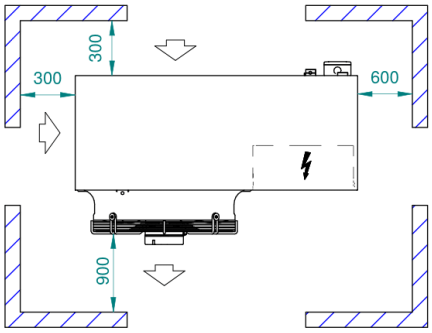






IMPRONTA A TERRA / FOOTPRINT

MODELLO MODEL	PESO WEIGHT (kg)	PESO IN FUNZIONE OPERATING WEIGHT (kg)
8	182	252
10	186	256
12	190	260
16	198	268
18	215	285
20	231	301



SPAZI DI INSTALLAZIONE / CLEARANCES

DIMENSIONI - DIMENSIONS		
LUNGHEZZA WIDTH	PROFONDITA' DEPTH	ALTEZZA HEIGHT
926	600	1699

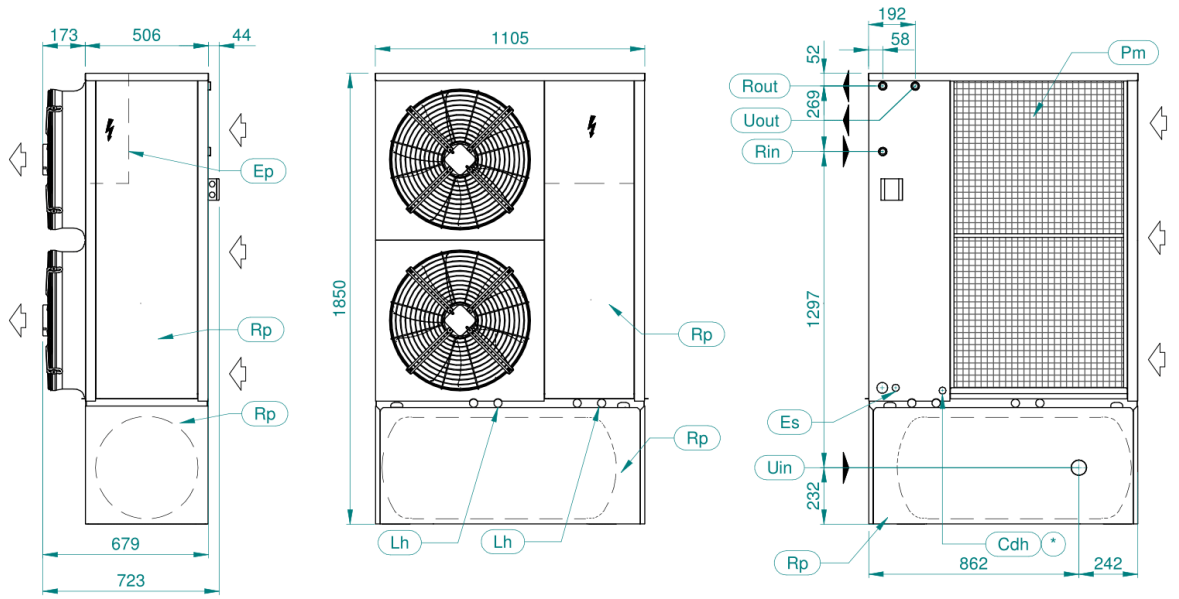
Ep	QUADRO ELETTRICO / ELECTRICAL PANEL	
Es	INGRESSO ALIMENTAZIONE ELETTRICA / ELECTRICAL SUPPLY INLET	
Lh	FORI SOLLEVAMENTO / LIFTING HOLES	Ø28
Rp	PANNELLO ASPORTABILE / REMOVABLE PANEL	
Pm	GRIGLIE DI PROTEZIONE / PROTECTIVE METAL MESH	
Cdh	SCARICO CONDENSA / CONDENSATE DRAIN	ø 18

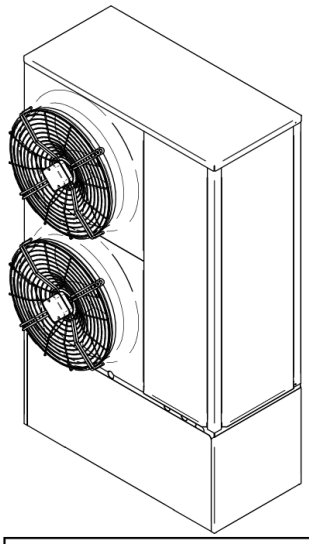
Uin	INGRESSO ACQUA UTILIZZO / USER WATER INLET	1" BSPM
Uout	USCITA ACQUA UTILIZZO / USER WATER OUTLET	1" BSPM
Rin	INGRESSO ACQUA RECUPERO / RECOVERY WATER INLET	1" BSPM
Rout	USCITA ACQUA RECUPERO / RECOVERY WATER OUTLET	1" BSPM
	FLUSSO ARIA / AIR FLOW	

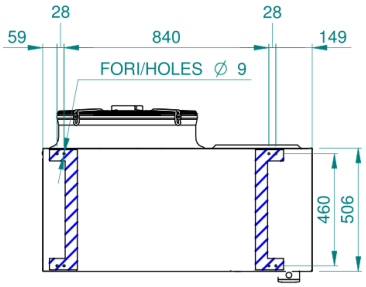
Note: These drawings are not contractually binding. For the installation design, refer to the specific dimensional drawing available on request.

GEYSER 2 MT 23-25 /HWS /1PS

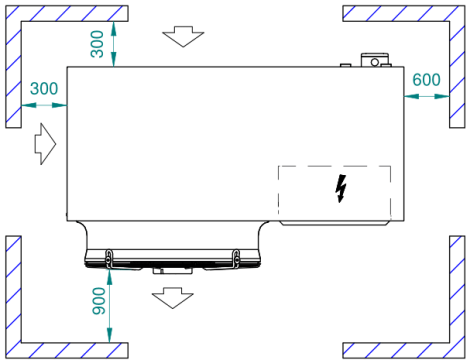
SD00326A







IMPRONTA A TERRA / FOOTPRINT



SPAZI DI INSTALLAZIONE / CLEARANCES
1:20

DIMENSIONI - DIMENSIONS		
LUNGHEZZA WIDTH	PROFONDITA' DEPTH	ALTEZZA HEIGHT
1105	723	1850

MODELLO MODEL	PESO WEIGHT (kg)	PESO IN FUNZIONE OPERATING WEIGHT (kg)
23	298	328
25	320	450

Ep	QUADRO ELETTRICO ELECTRICAL PANEL	
Es	INGRESSO ALIMENTAZIONE ELETTRICA ELECTRICAL SUPPLY INLET	
Lh	FORI SOLLEVAMENTO LIFTING HOLES	Ø34
Rp	PANNELLO ASPORTABILE REMOVABLE PANEL	
Pm	GRIGLIE DI PROTEZIONE PROTECTIVE METAL MESH	
Cdh	SCARICO CONDENSA CONDENSATE DRAIN	ø 22

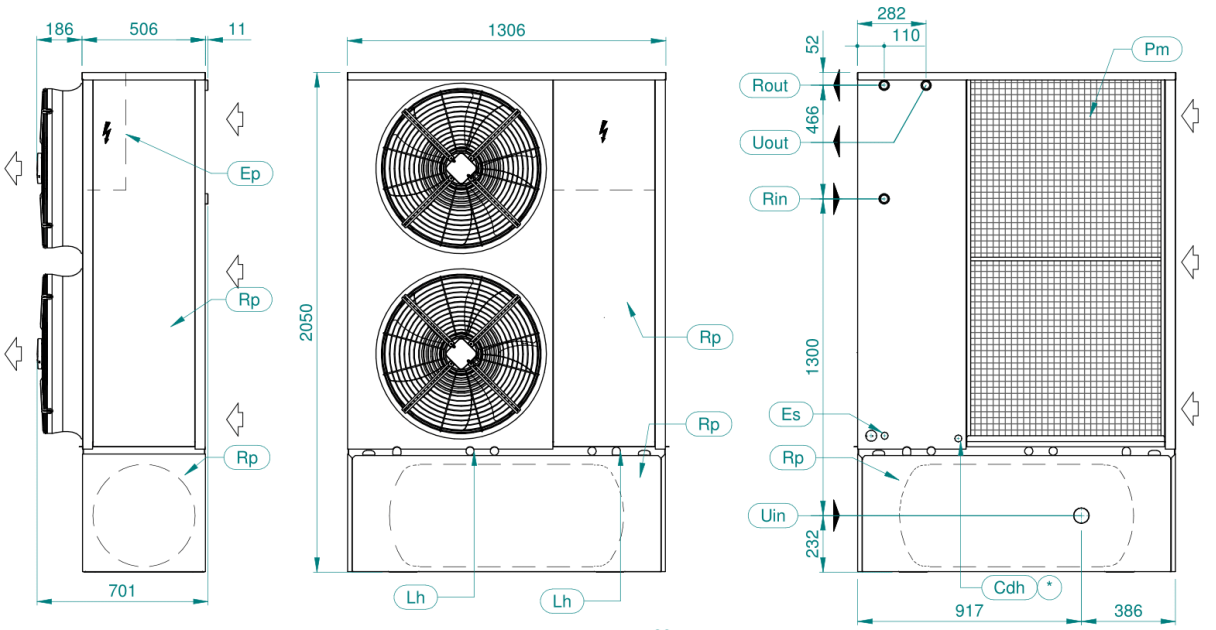
Uin	INGRESSO ACQUA UTILIZZO USER WATER INLET	1" 1/4 BSPM
Uout	USCITA ACQUA UTILIZZO USER WATER OUTLET	1" BSPM
Rin	INGRESSO ACQUA RECUPERO RECOVERY WATER INLET	1" BSPM
Rout	USCITA ACQUA RECUPERO RECOVERY WATER OUTLET	1" BSPM
	FLUSSO ARIA AIR FLOW	

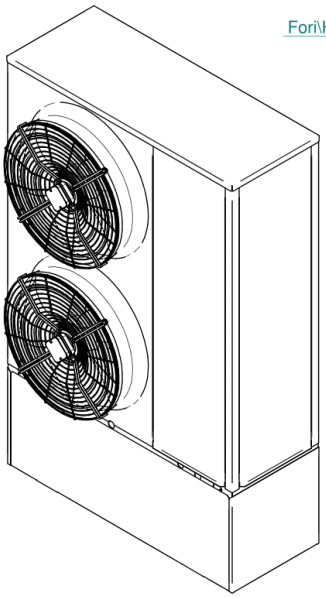
(*) OPZIONALE / OPTIONAL

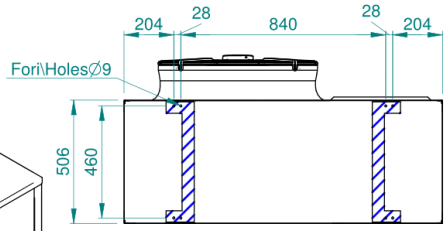
Note: These drawings are not contractually binding. For the installation design, refer to the specific dimensional drawing available on request.

GEYSER 2 MT 29-42 /HWS /1PS

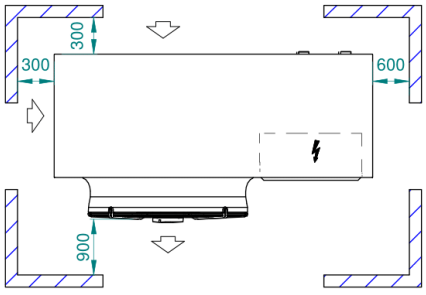
SD00328A







IMPRONTA A TERRA / FOOTPRINT



SPAZI DI INSTALLAZIONE / CLEARANCES

MODELLO MODEL	PESO WEIGHT (kg)	PESO IN FUNZIONE OPERATING WEIGHT (kg)
29	448	578
34	458	588
38	479	609
42	490	620

DIMENSIONI - DIMENSIONS		
LUNGHEZZA WIDTH	PROFONDITA' DEPTH	ALTEZZA HEIGHT
1306	701	2050

Ep	QUADRO ELETTRICO / ELECTRICAL PANEL	
Es	INGRESSO ALIMENTAZIONE ELETTRICA / ELECTRICAL SUPPLY INLET	
Lh	FORI SOLLEVAMENTO / LIFTING HOLES	Ø34
Rp	PANNELLO ASPORTABILE / REMOVABLE PANEL	
Pm	GRIGLIE DI PROTEZIONE / PROTECTIVE METAL MESH	
Cdh	SCARICO CONDENSA / CONDENSATE DRAIN	ø 22

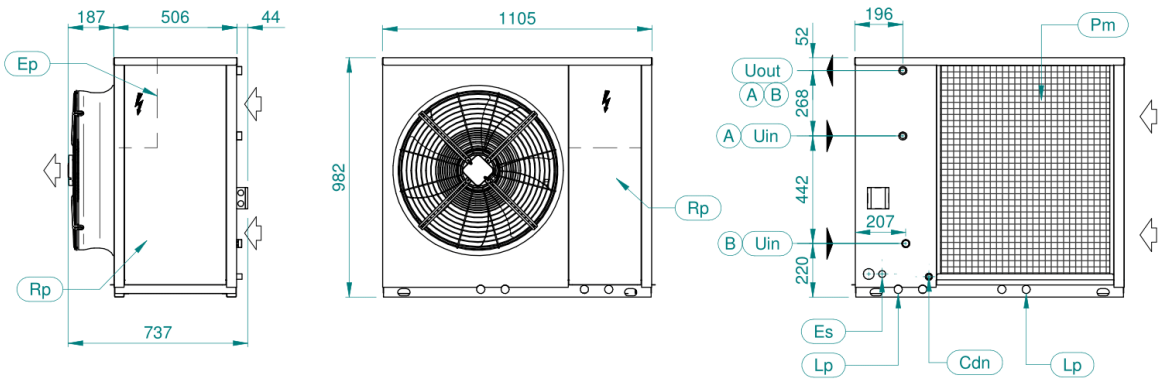
Uin	INGRESSO ACQUA UTILIZZO / USER WATER INLET	1" 1/4 BSPM
Uout	USCITA ACQUA UTILIZZO / USER WATER OUTLET	1" 1/4 BSPM
Rin	INGRESSO ACQUA RECUPERO / RECOVERY WATER INLET	1" 1/4 BSPM
Rout	USCITA ACQUA RECUPERO / RECOVERY WATER OUTLET	1" 1/4 BSPM
	FLUSSO ARIA / AIR FLOW	

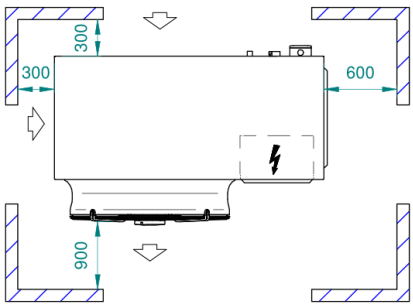
(*) OPZIONALE / OPTIONAL

Note: These drawings are not contractually binding. For the installation design, refer to the specific dimensional drawing available on request.

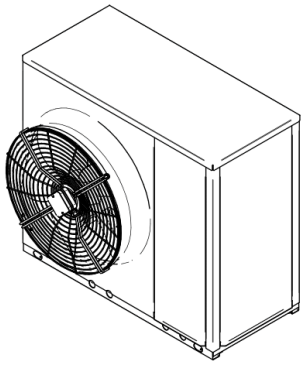
GEYSER 2 HT 7-17 /ST

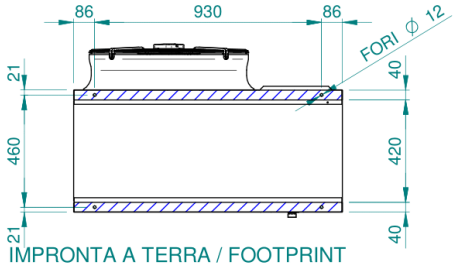
SD00329A





SPAZI DI INSTALLAZIONE / CLEARANCES





IMPRONTA A TERRA / FOOTPRINT

DIMENSIONI - DIMENSIONS		
LUNGHEZZA WIDTH	PROFONDITA' DEPTH	ALTEZZA HEIGHT
1105	737	982

MODELLO MODEL	PESO WEIGHT (kg)	PESO IN FUNZIONE OPERATING WEIGHT (kg)
7	107	108
9	111	112
11	117	118
13	123	124
17	132	133
7 1P	116	117
9 1P	120	121
11 1P	126	127
13 1P	132	133
17 1P	141	142

CONNESSIONI IDRAULICHE / HYDRAULIC CONNECTION

(A) ACQUA UTILIZZO SENZA MODULO IDRAULICO
USER WATER WITHOUT HYDRAULIC MODULE

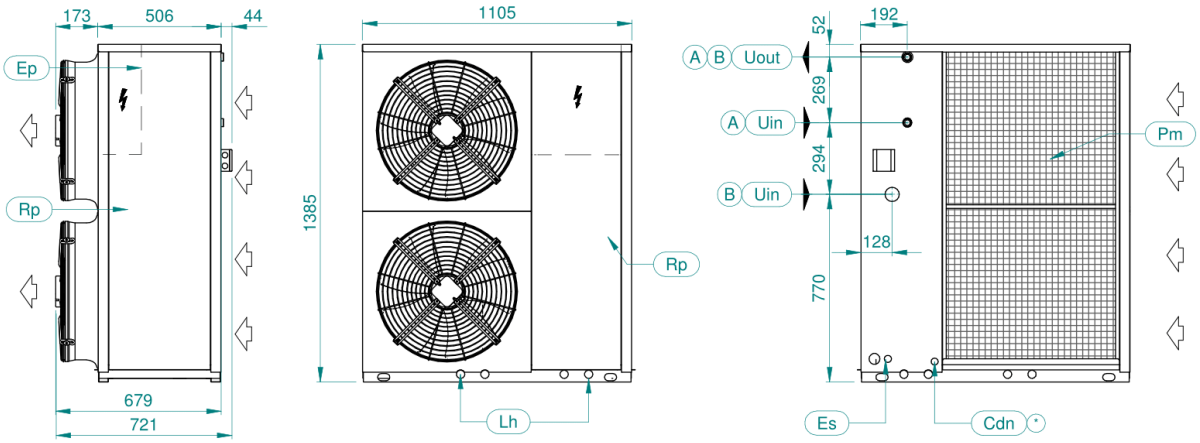
(B) ACQUA UTILIZZO CON MODULO IDRAULICO 1P
USER WATER WITH HYDRAULIC MODULE 1P

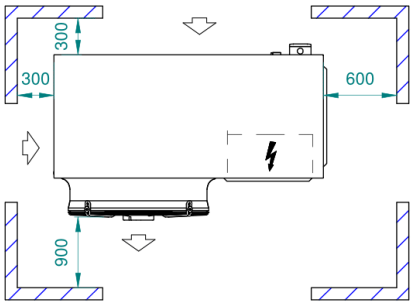
Ep	QUADRO ELETTRICO / ELECTRICAL PANEL		Cdh	SCARICO CONDENSA / CONDENSATE DRAIN	ø 22
Es	INGRESSO ALIMENTAZIONE ELETTRICA / ELECTRICAL SUPPLY INLET		Uin	INGRESSO ACQUA UTILIZZO / USER WATER INLET	1" BSPM
Rp	PANNELLO ASPORTABILE / REMOVABLE PANEL		Uout	USCITA ACQUA UTILIZZO / USER WATER OUTLET	1" BSPM
Pm	GRIGLIE DI PROTEZIONE / PROTECTIVE METAL MESH			FLUSSO ARIA / AIR FLOW	
Lp	PUNTO DI SOLLEVAMENTO / LIFTING POINT				

Note: These drawings are not contractually binding. For the installation design, refer to the specific dimensional drawing available on request.

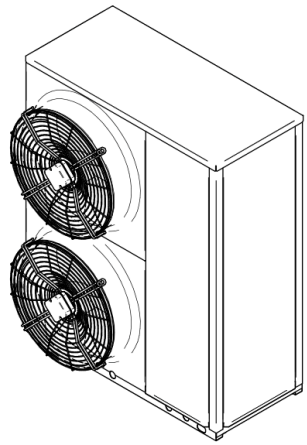
GEYSER 2 HT 22-26 /ST

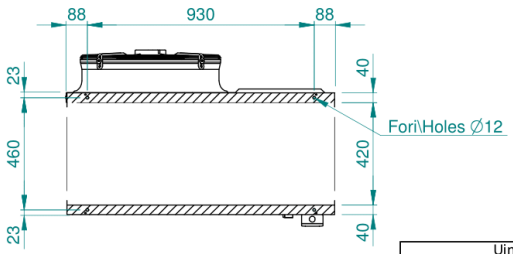
SD00331A





SPAZI DI INSTALLAZIONE / CLEARANCES





IMPRONTA A TERRA / FOOTPRINT

Uin		Uout
A 1" BSPM	B 1 1\4" BSPM	A B 1" BSPM

CONNESSIONI IDRAULICHE / HYDRAULIC CONNECTION

A ACQUA UTILIZZO SENZA MODULO IDRAULICO
USER WATER WITHOUT HYDRAULIC MODULE

B ACQUA UTILIZZO CON MODULO IDRAULICO 1P
USER WATER WITH HYDRAULIC MODULE 1P

Ep	QUADRO ELETTRICO / ELECTRICAL PANEL	
Es	INGRESSO ALIMENTAZIONE ELETTRICA / ELECTRICAL SUPPLY INLET	
Lh	FORI SOLLEVAMENTO / LIFTING HOLES	Ø34
Rp	PANNELLO ASPORTABILE / REMOVABLE PANEL	
Pm	GRIGLIE DI PROTEZIONE / PROTECTIVE METAL MESH	

Cdh	SCARICO CONDENSA / CONDENSATE DRAIN	ø 18
Uin	INGRESSO ACQUA UTILIZZO / USER WATER INLET	
Uout	USCITA ACQUA UTILIZZO / USER WATER OUTLET	
	FLUSSO ARIA / AIR FLOW	

* OPZIONALE \ OPTIONAL

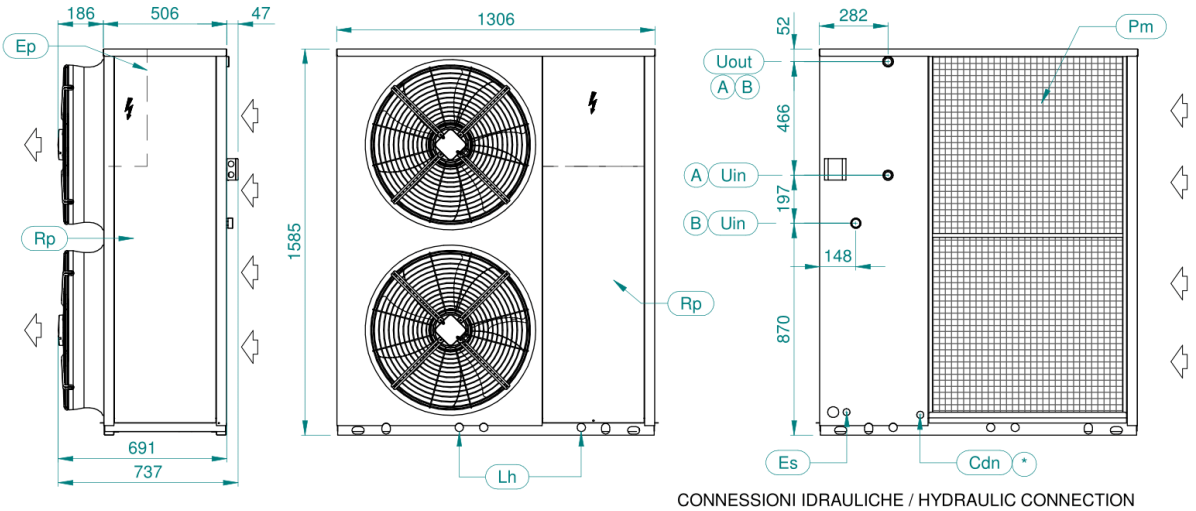
DIMENSIONI - DIMENSIONS		
LUNGHEZZA WIDTH	PROFONDITA' DEPTH	ALTEZZA HEIGHT
1105	721	1385

MODELLO MODEL	PESO WEIGHT (kg)	PESO IN FUNZIONE OPERATING WEIGHT (kg)
22	230	231
26	249	250
22 1P	242	243
26 1P	261	262

Note: These drawings are not contractually binding. For the installation design, refer to the specific dimensional drawing available on request.

GEYSER 2 HT 32-41 /ST

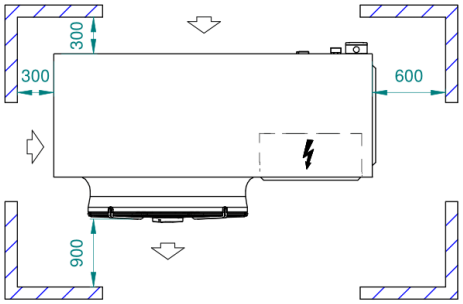
SD00333A



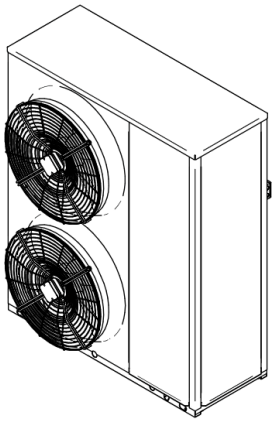
CONNESSIONI IDRAULICHE / HYDRAULIC CONNECTION

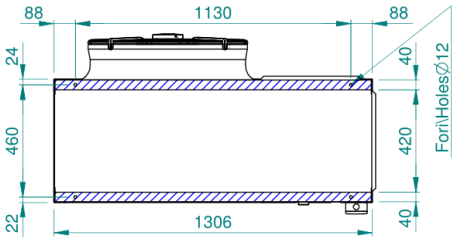
A ACQUA UTILIZZO SENZA MODULO IDRAULICO
USER WATER WITHOUT HYDRAULIC MODULE

B ACQUA UTILIZZO CON MODULO IDRAULICO 1P
USER WATER WITH HYDRAULIC MODULE 1P



SPAZI DI INSTALLAZIONE / CLEARANCES





IMPRONTA A TERRA \ FOOTPRINT

DIMENSIONI - DIMENSIONS		
LUNGHEZZA WIDTH	PROFONDITA' DEPTH	ALTEZZA HEIGHT
1306	737	1585

Ep	QUADRO ELETTRICO / ELECTRICAL PANEL	
Es	INGRESSO ALIMENTAZIONE ELETTRICA / ELECTRICAL SUPPLY INLET	
Lh	FORI SOLLEVAMENTO / LIFTING HOLES	Ø34
Rp	PANNELLO ASPORTABILE / REMOVABLE PANEL	
Pm	GRIGLIE DI PROTEZIONE / PROTECTIVE METAL MESH	

Cdh	SCARICO CONDENSA / CONDENSATE DRAIN	ø 18
Uin	INGRESSO ACQUA UTILIZZO / USER WATER INLET	1" 1/4 BSPM
Uout	USCITA ACQUA UTILIZZO / USER WATER OUTLET	1" 1/4 BSPM
	FLUSSO ARIA / AIR FLOW	

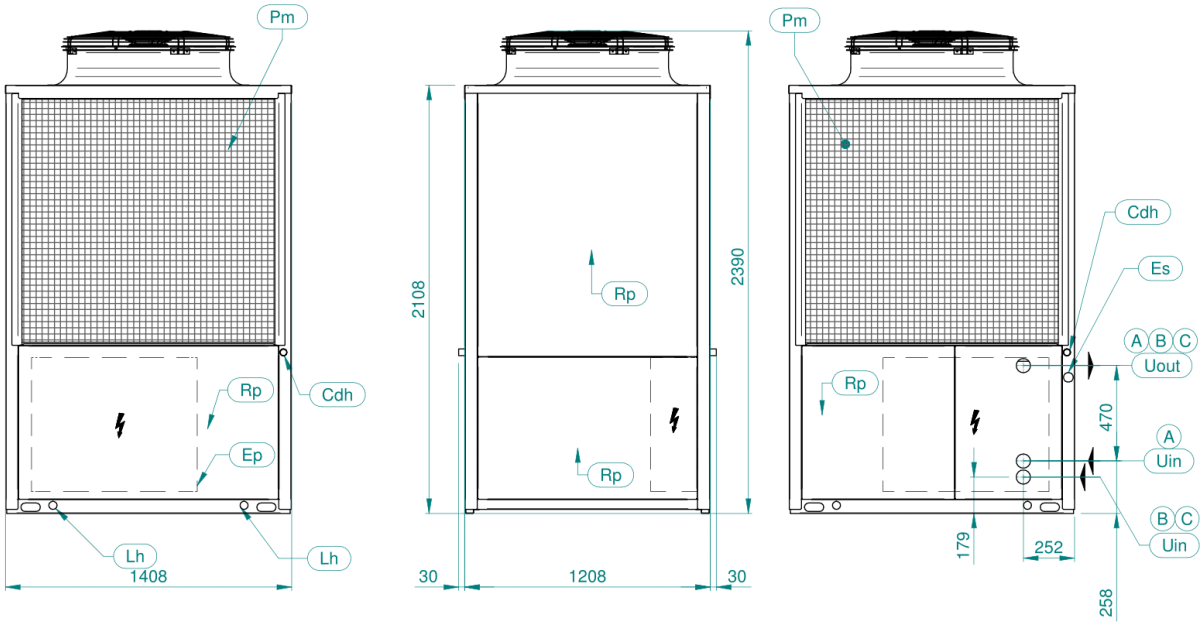
(*) OPZIONALE \ OPTIONAL

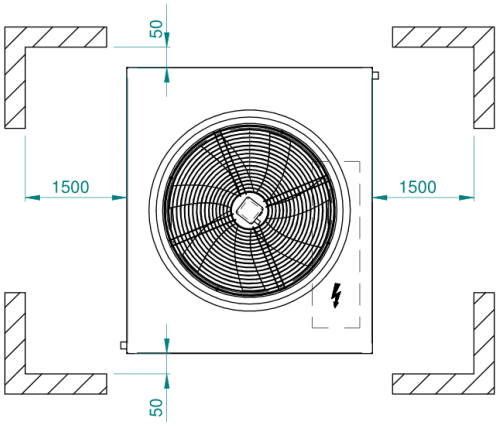
MODELLO MODEL	PESO WEIGHT (kg)	PESO IN FUNZIONE OPERATING WEIGHT (kg)
32	383	385
36	402	405
41	413	416
32 1P	398	400
36 1P	417	420
41 1P	428	431

Note: These drawings are not contractually binding. For the installation design, refer to the specific dimensional drawing available on request.

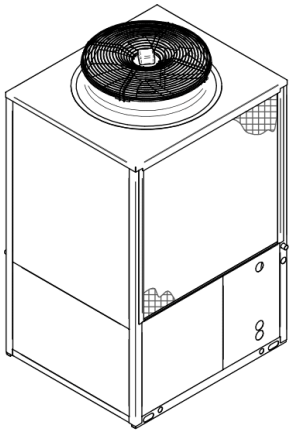
GEYSER 2 HT 50-90 /ST /1P /2P

SD00485A





SPAZI DI INSTALLAZIONE / CLEARANCES



DIMENSIONI / DIMENSIONS		
LUNGHEZZA WIDTH	PROFONDITA' DEPTH	ALTEZZA HEIGHT
1408	1208	2390

CONNESSIONI IDRAULICHE / HYDRAULIC CONNECTIONS		
A	MODELLO STANDARD	STANDARD MODEL
B	MODELLO 1P (1 pompa)	1P MODEL (1 pump)
C	MODELLO 2P (2 pompe)	2P MODEL (2 pumps)

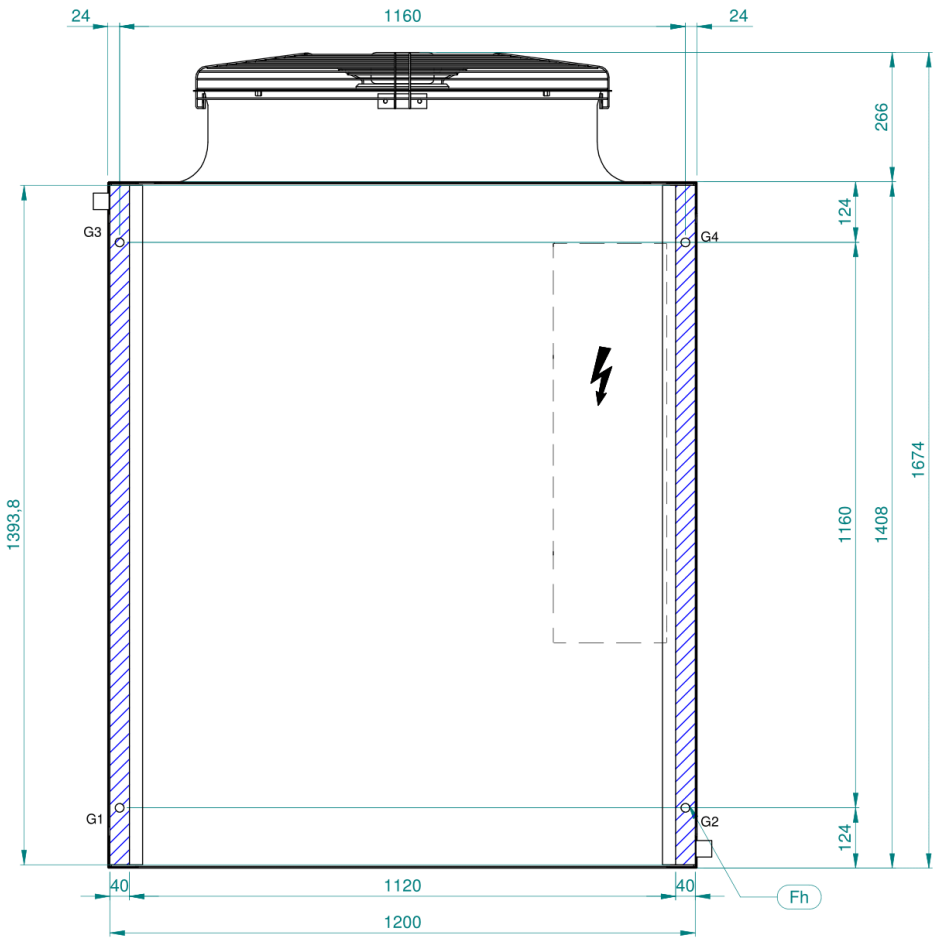
Ep	QUADRO ELETTRICO ELECTRICAL PANEL
Es	INGRESSO ALIMENTAZIONE ELETTRICA ELECTRICAL SUPPLY INLET
Lh	FORI DI SOLLEVAMENTO LIFTING HOLES
Pm	GRIGLIE DI PROTEZIONE PROTECTIVE METAL MESH
*	OPZIONALE OPTIONAL

Rp	PANNELLO ASPORTABILE REMOVABLE PANEL	
Cdh	SCARICO CONDENSA CONDENSATE DRAIN	ø35
Uin	INGRESSO ACQUA UTILIZZO USER WATER INLET	1" 1/2 BSPM
Uout	USCITA ACQUA UTILIZZO USER WATER OUTLET	1" 1/2 BSPM

Note: These drawings are not contractually binding. For the installation design, refer to the specific dimensional drawing available on request.

GEYSER 2 HT 50-90 /EAO /1P /2P

SD00488A



IMPRONTA A TERRA \ FOOTPRINT

Fh	FORI DI FISSAGGIO FIXING HOLES	Ø18
G..	PUNTI DI APPOGGIO ANTIVIBRANTI VIBRATION DAMPER FOOT HOLDS	

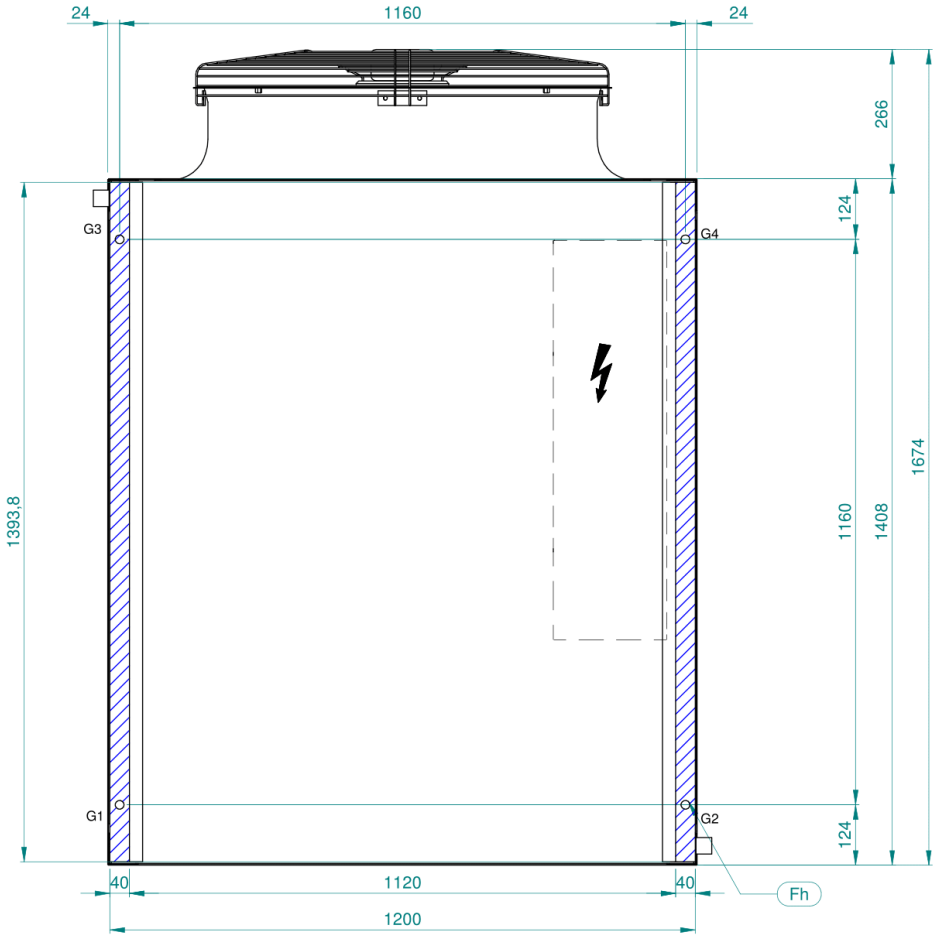
	MODELLO MODEL	PESO WEIGHT (kg)	PESO IN FUNZIONE OPERATING WEIGHT (kg)
	50	587	590
	60	604	607
	70	614	617
	80	632	635
	90	643	646
Δ PESO Δ WEIGHT	MOD. 1P	16	18
Δ PESO Δ WEIGHT	MOD. 2P	32	34

	G1 (kg)	G2 (kg)	G3 (kg)	G4 (kg)
50	159	164	155	112
60	164	169	160	115
70	166	171	162	117
80	171	176	167	121
90	174	179	170	123
50 1P	161	166	162	119
60 1P	166	171	167	122
70 1P	168	173	169	124
80 1P	173	178	174	128
90 1P	176	181	177	130
50 2P	167	172	170	127
60 2P	172	177	175	130
70 2P	174	179	177	132
80 2P	179	184	182	136
90 2P	182	187	185	138

Note: These drawings are not contractually binding. For the installation design, refer to the specific dimensional drawing available on request.

GEYSER 2 HT 50-90 /EAO /1P /2P

SD00488A



IMPRONTA A TERRA \ FOOTPRINT

Fh	FORI DI FISSAGGIO FIXING HOLES	Ø18
G..	PUNTI DI APPOGGIO ANTIVIBRANTI VIBRATION DAMPER FOOT HOLDS	

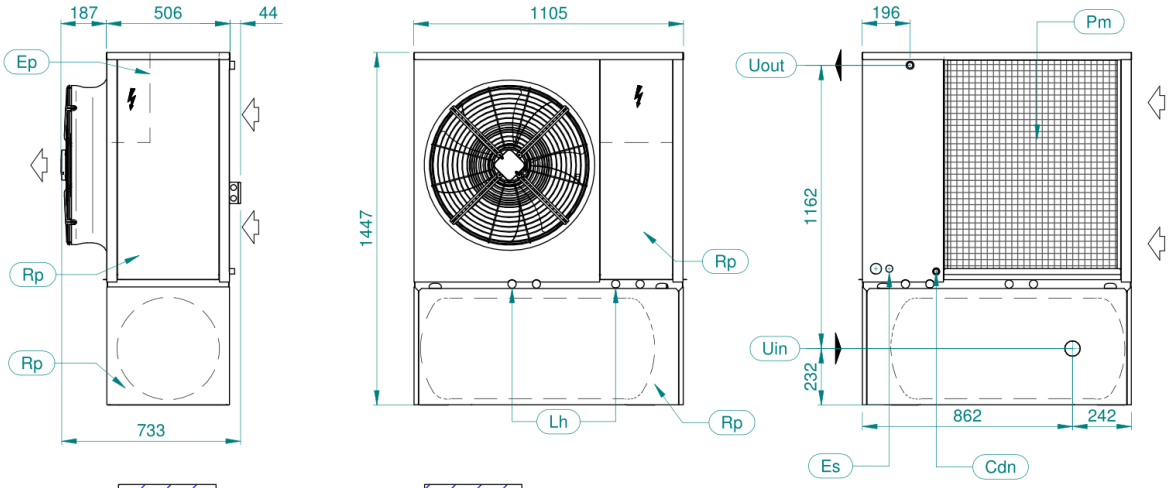
	MODELLO MODEL	PESO WEIGHT (kg)	PESO IN FUNZIONE OPERATING WEIGHT (kg)
	50	587	590
	60	604	607
	70	614	617
	80	632	635
	90	643	646
Δ PESO Δ WEIGHT	MOD. 1P	16	18
Δ PESO Δ WEIGHT	MOD. 2P	32	34

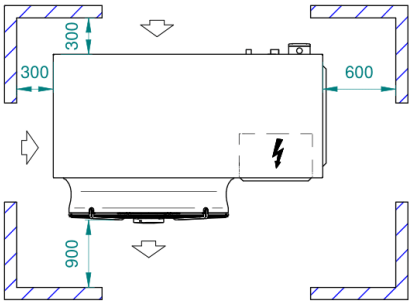
	G1 (kg)	G2 (kg)	G3 (kg)	G4 (kg)
50	159	164	155	112
60	164	169	160	115
70	166	171	162	117
80	171	176	167	121
90	174	179	170	123
50 1P	161	166	162	119
60 1P	166	171	167	122
70 1P	168	173	169	124
80 1P	173	178	174	128
90 1P	176	181	177	130
50 2P	167	172	170	127
60 2P	172	177	175	130
70 2P	174	179	177	132
80 2P	179	184	182	136
90 2P	182	187	185	138

Note: These drawings are not contractually binding. For the installation design, refer to the specific dimensional drawing available on request.

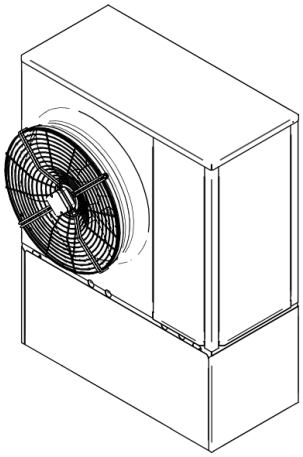
GEYSER 2 HT 7-17 /1PS

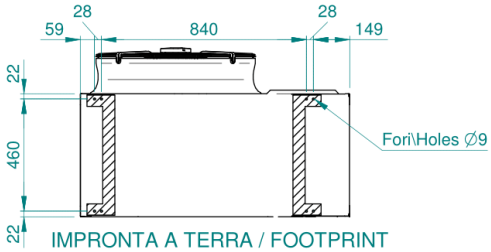
SD00330A





SPAZI DI INSTALLAZIONE / CLEARANCES





IMPRONTA A TERRA / FOOTPRINT

Ep	QUADRO ELETTRICO ELECTRICAL PANEL	
Es	INGRESSO ALIMENTAZIONE ELETTRICA ELECTRICAL SUPPLY INLET	
Lh	FORI SOLLEVAMENTO LIFTING HOLES	Ø35
Rp	PANNELLO ASPORTABILE REMOVABLE PANEL	
Pm	GRIGLIE DI PROTEZIONE PROTECTIVE METAL MESH	

Cdh	SCARICO CONDENSA CONDENSATE DRAIN	ø 22
Uin	INGRESSO ACQUA UTILIZZO USER WATER INLET	1" 1/4 BSPM
Uout	USCITA ACQUA UTILIZZO USER WATER OUTLET	1" BSPM
⇦	FLUSSO ARIA AIR FLOW	

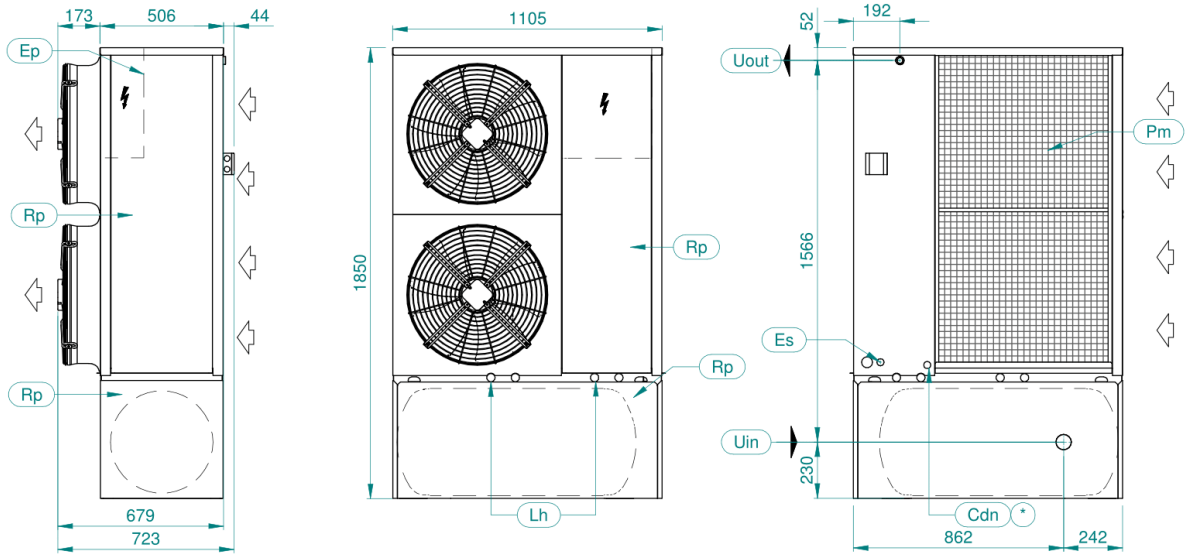
DIMENSIONI - DIMENSIONS		
LUNGHEZZA WIDTH	PROFONDITA' DEPTH	ALTEZZA HEIGHT
1105	733	1447

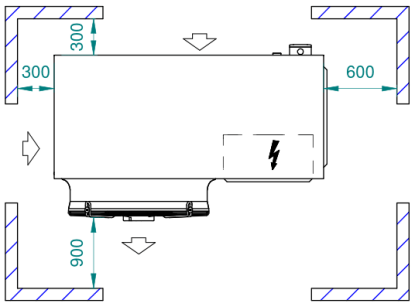
MODELLO MODEL	PESO WEIGHT (kg)	PESO IN FUNZIONE OPERATING WEIGHT (kg)
7	181	311
9	185	315
11	191	321
13	197	327
17	206	336

Note: These drawings are not contractually binding. For the installation design, refer to the specific dimensional drawing available on request.

GEYSER 2 HT 22-26 /1PS

SD00332A





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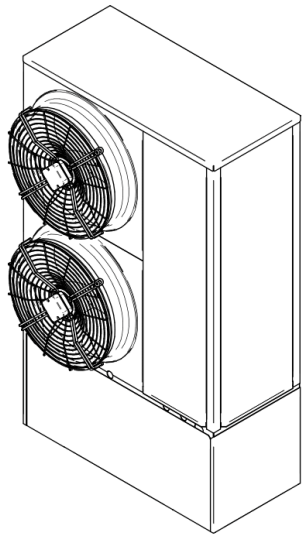
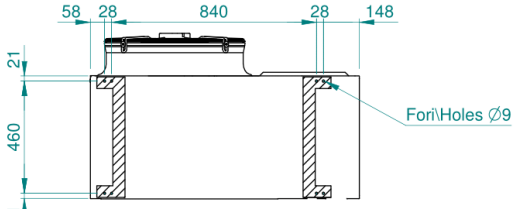




IMPRONTA A TERRA / FOOTPRINT

Ep	QUADRO ELETTRICO ELECTRICAL PANEL	
Es	INGRESSO ALIMENTAZIONE ELETTRICA ELECTRICAL SUPPLY INLET	
Lh	FORI SOLLEVAMENTO LIFTING HOLES	Ø34
Rp	PANNELLO ASPORTABILE REMOVABLE PANEL	
Pm	GRIGLIE DI PROTEZIONE PROTECTIVE METAL MESH	

Cdh	SCARICO CONDENSA CONDENSATE DRAIN	ø 22
Uin	INGRESSO ACQUA UTILIZZO USER WATER INLET	1" 1/4 BSPM
Uout	USCITA ACQUA UTILIZZO USER WATER OUTLET	1" BSPM
	FLUSSO ARIA AIR FLOW	

(*) OPZIONALE \ OPTIONAL

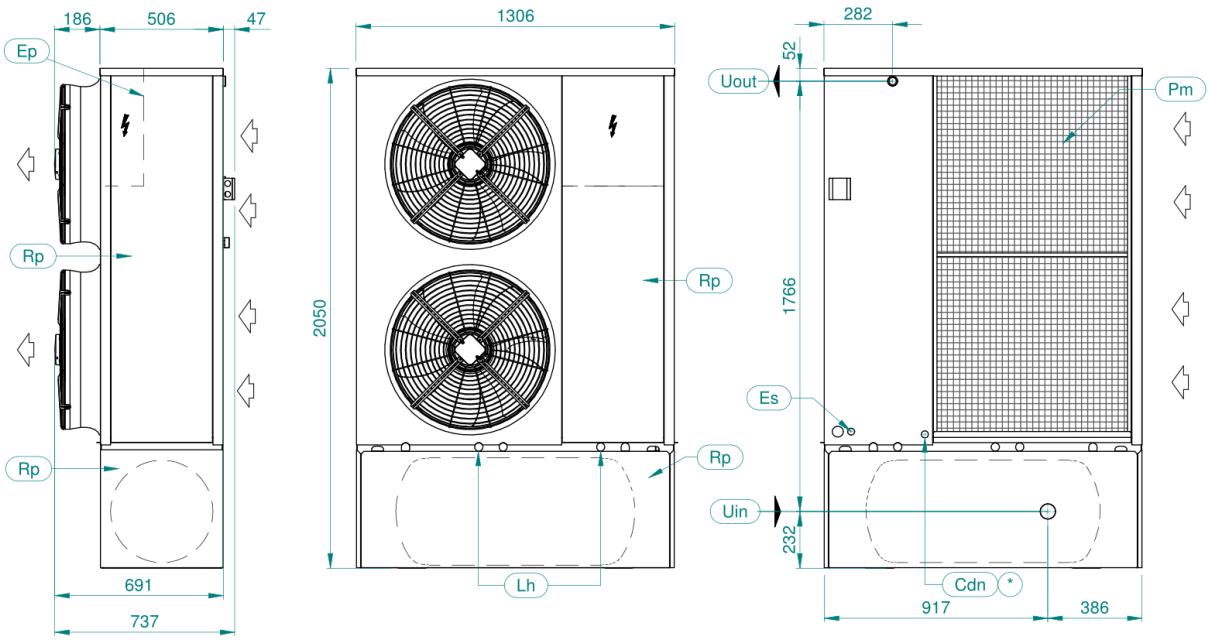
DIMENSIONI - DIMENSIONS		
LUNGHEZZA WIDTH	PROFONDITA' DEPTH	ALTEZZA HEIGHT
1105	723	1850

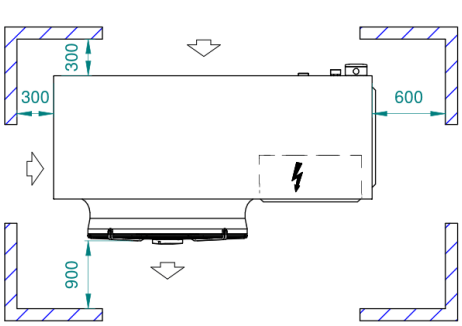
MODELLO MODEL	PESO WEIGHT (kg)	PESO IN FUNZIONE OPERATING WEIGHT (kg)
22	307	436
26	326	455

Note: These drawings are not contractually binding. For the installation design, refer to the specific dimensional drawing available on request.

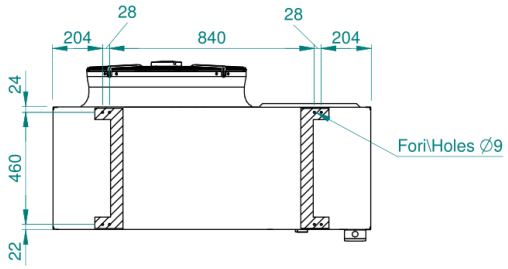
GEYSER 2 HT 32-41 /1PS

SD00334A





SPAZI DI INSTALLAZIONE / CLEARANCES



IMPRONTA A TERRA / FOOTPRINT

Ep	QUADRO ELETTRICO ELECTRICAL PANEL	
Es	INGRESSO ALIMENTAZIONE ELETTRICA ELECTRICAL SUPPLY INLET	
Lh	FORI SOLLEVAMENTO LIFTING HOLES	Ø34
Rp	PANNELLO ASPORTABILE REMOVABLE PANEL	
Pm	GRIGLIE DI PROTEZIONE PROTECTIVE METAL MESH	

Cdh	SCARICO CONDENSA CONDENSATE DRAIN	ø 22
Uin	INGRESSO ACQUA UTILIZZO USER WATER INLET	1" 1/4 BSPM
Uout	USCITA ACQUA UTILIZZO USER WATER OUTLET	1" 1/4 BSPM
	FLUSSO ARIA AIR FLOW	

(*) OPZIONALE \ OPTIONAL

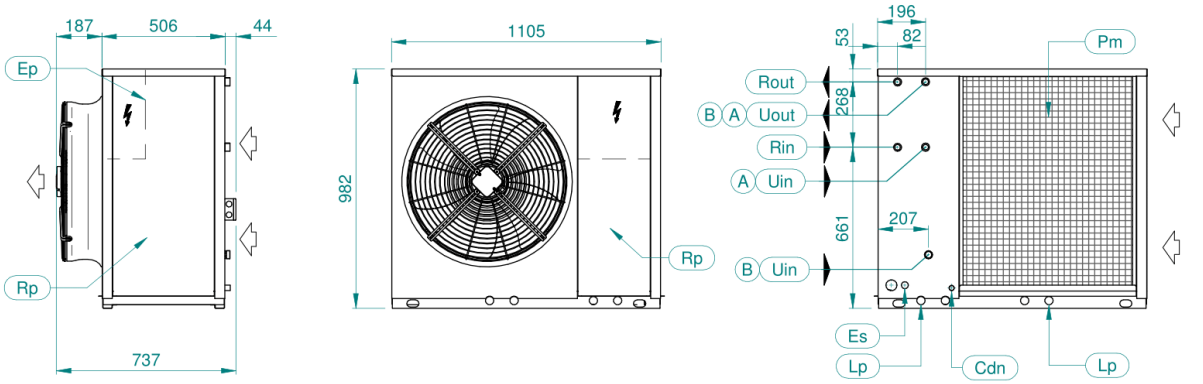
DIMENSIONI - DIMENSIONS		
LUNGHEZZA WIDTH	PROFONDITA' DEPTH	ALTEZZA HEIGHT
1306	737	2050

MODELLO MODEL	PESO WEIGHT (kg)	PESO IN FUNZIONE OPERATING WEIGHT (kg)
32	463	593
36	482	612
41	493	623

Note: These drawings are not contractually binding. For the installation design, refer to the specific dimensional drawing available on request.

GEYSER 2 HT 7-17 /HWS

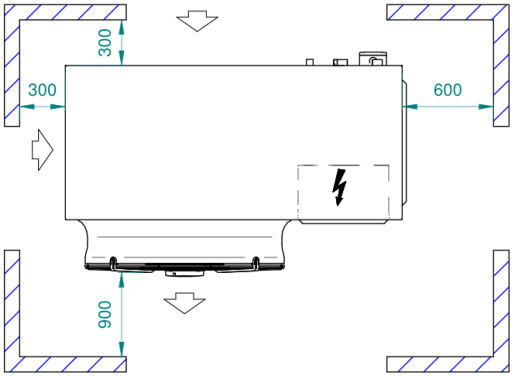
SD00335A



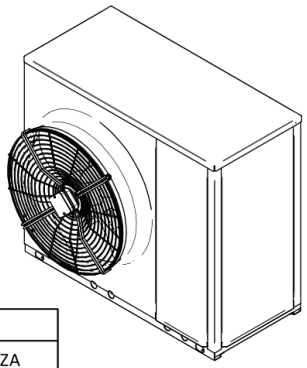
CONNESSIONI IDRAULICHE / HYDRAULIC CONNECTION

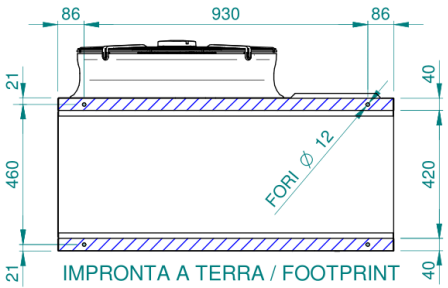
A ACQUA UTILIZZO SENZA MODULO IDRAULICO
USER WATER WITHOUT HYDRAULIC MODULE

B ACQUA UTILIZZO CON MODULO IDRAULICO 1P
USER WATER WITH HYDRAULIC MODULE 1P



SPAZI DI INSTALLAZIONE / CLEARANCES





IMPRONTA A TERRA / FOOTPRINT

DIMENSIONI - DIMENSIONS		
LUNGHEZZA WIDTH	PROFONDITA' DEPTH	ALTEZZA HEIGHT
1105	737	982

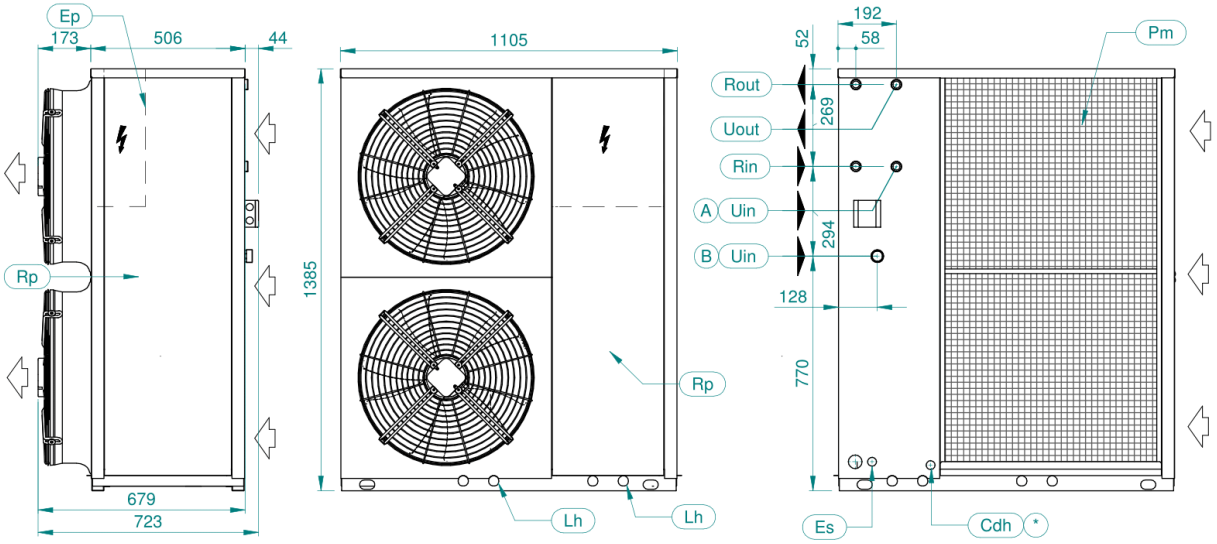
Ep	QUADRO ELETTRICO / ELECTRICAL PANEL		Cdh	SCARICO CONDENSA / CONDENSATE DRAIN	ø 22
Es	INGRESSO ALIMENTAZIONE ELETTRICA / ELECTRICAL SUPPLY INLET		Uin	INGRESSO ACQUA UTILIZZO / USER WATER INLET	1" BSPM
Rp	PANNELLO ASPORTABILE / REMOVABLE PANEL		Uout	USCITA ACQUA UTILIZZO / USER WATER OUTLET	1" BSPM
Pm	GRIGLIE DI PROTEZIONE / PROTECTIVE METAL MESH		Rin	INGRESSO ACQUA RECUPERO / RECOVERY WATER INLET	1" BSPM
Lp	PUNTO DI SOLLEVAMENTO / LIFTING POINT		Rout	USCITA ACQUA RECUPERO / RECOVERY WATER OUTLET	1" BSPM
	FLUSSO ARIA / AIR FLOW				

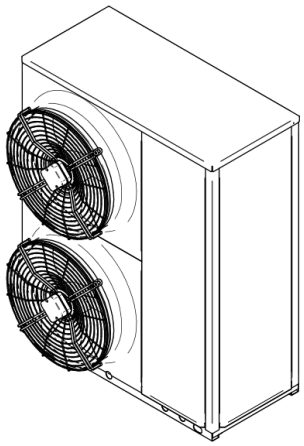
MODELLO MODEL	PESO WEIGHT (kg)	PESO IN FUNZIONE OPERATING WEIGHT (kg)
7	111	112
9	116	117
11	123	124
13	130	131
17	141	142
7 1P	120	121
9 1P	125	126
11 1P	132	133
13 1P	139	140
17 1P	150	151

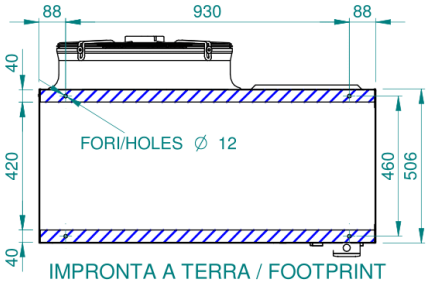
Note: These drawings are not contractually binding. For the installation design, refer to the specific dimensional drawing available on request.

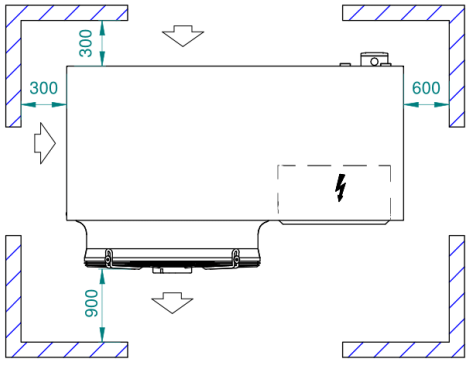
GEYSER 2 HT 22-26 /HWS

SD00337A









Uin		Uout
A	B	A B
1" BSPM	1 1\4" BSPM	1" BSPM

DIMENSIONI - DIMENSIONS		
LUNGHEZZA WIDTH	PROFONDITA' DEPTH	ALTEZZA HEIGHT
1105	723	1385

CONNESSIONI IDRAULICHE / HYDRAULIC CONNECTION

A ACQUA UTILIZZO SENZA MODULO IDRAULICO
USER WATER WITHOUT HYDRAULIC MODULE

B ACQUA UTILIZZO CON MODULO IDRAULICO 1P
USER WATER WITH HYDRAULIC MODULE 1P

MODELLO MODEL	PESO WEIGHT (kg)	PESO IN FUNZIONE OPERATING WEIGHT (kg)
22	241	243
26	262	264
22 1P	253	255
26 1P	274	276

Ep	QUADRO ELETTRICO / ELECTRICAL PANEL	
Es	INGRESSO ALIMENTAZIONE ELETTRICA / ELECTRICAL SUPPLY INLET	
Lh	FORI SOLLEVAMENTO / LIFTING HOLES	Ø34
Rp	PANNELLO ASPORTABILE / REMOVABLE PANEL	
Pm	GRIGLIE DI PROTEZIONE / PROTECTIVE METAL MESH	
Cdh	SCARICO CONDENSA / CONDENSATE DRAIN	ø 20

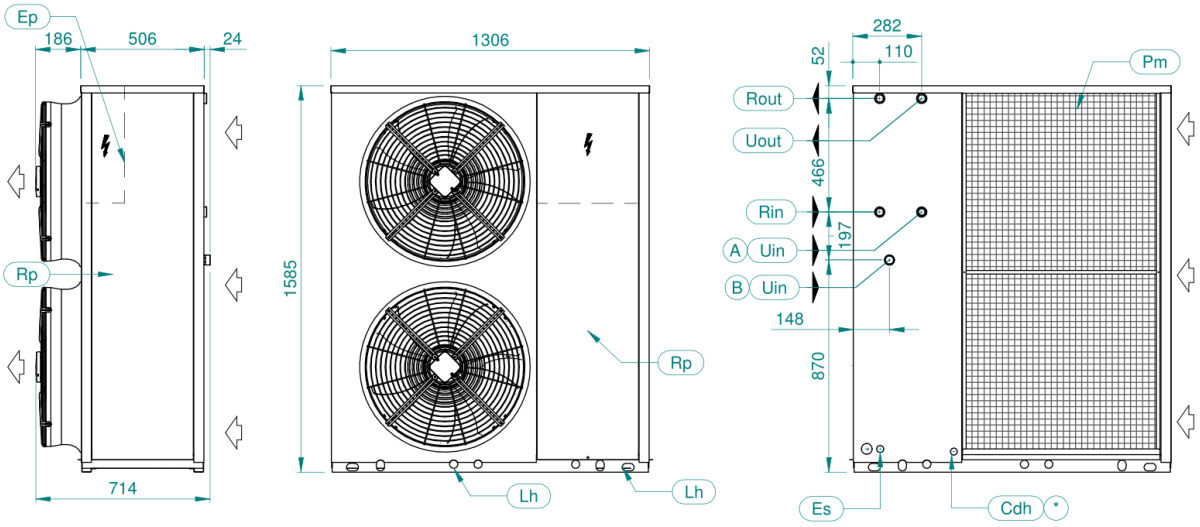
Uin	INGRESSO ACQUA UTILIZZO / USER WATER INLET	
Uout	USCITA ACQUA UTILIZZO / USER WATER OUTLET	
Rin	INGRESSO ACQUA RECUPERO / RECOVERY WATER INLET	1" BSPM
Rout	USCITA ACQUA RECUPERO / RECOVERY WATER OUTLET	1" BSPM
	FLUSSO ARIA / AIR FLOW	

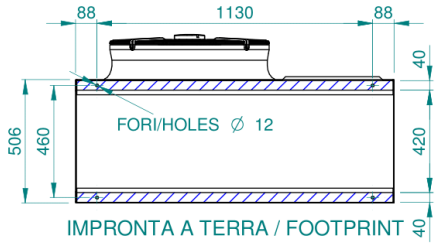
* OPZIONALE / OPTIONAL

Note: These drawings are not contractually binding. For the installation design, refer to the specific dimensional drawing available on request.

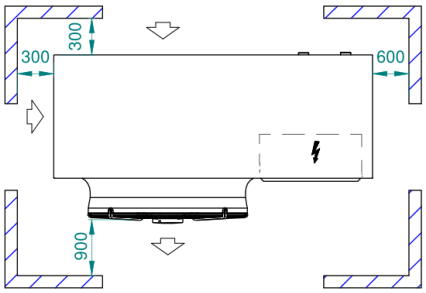
GEYSER 2 HT 32-41 /HWS

SD00339A

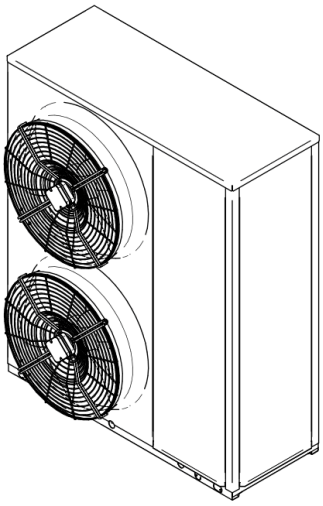




IMPRONTA A TERRA / FOOTPRINT



SPAZI DI INSTALLAZIONE / CLEARANCES



MODELLO MODEL	PESO WEIGHT (kg)	PESO IN FUNZIONE OPERATING WEIGHT (kg)
32	398	400
36	419	422
41	431	434
32 1P	413	415
36 1P	434	437
41 1P	447	450

CONNESSIONI IDRAULICHE / HYDRAULIC CONNECTION

(A) ACQUA UTILIZZO SENZA MODULO IDRAULICO
USER WATER WITHOUT HYDRAULIC MODULE

(B) ACQUA UTILIZZO CON MODULO IDRAULICO 1P
USER WATER WITH HYDRAULIC MODULE 1P

DIMENSIONI - DIMENSIONS		
LUNGHEZZA WIDTH	PROFONDITA' DEPTH	ALTEZZA HEIGHT
1306	714	1585

Ep	QUADRO ELETTRICO / ELECTRICAL PANEL	
Es	INGRESSO ALIMENTAZIONE ELETTRICA / ELECTRICAL SUPPLY INLET	
Lh	FORI SOLLEVAMENTO / LIFTING HOLES	Ø34
Rp	PANNELLO ASPORTABILE / REMOVABLE PANEL	
Pm	GRIGLIE DI PROTEZIONE / PROTECTIVE METAL MESH	
Cdh	SCARICO CONDENSA / CONDENSATE DRAIN	ø 20

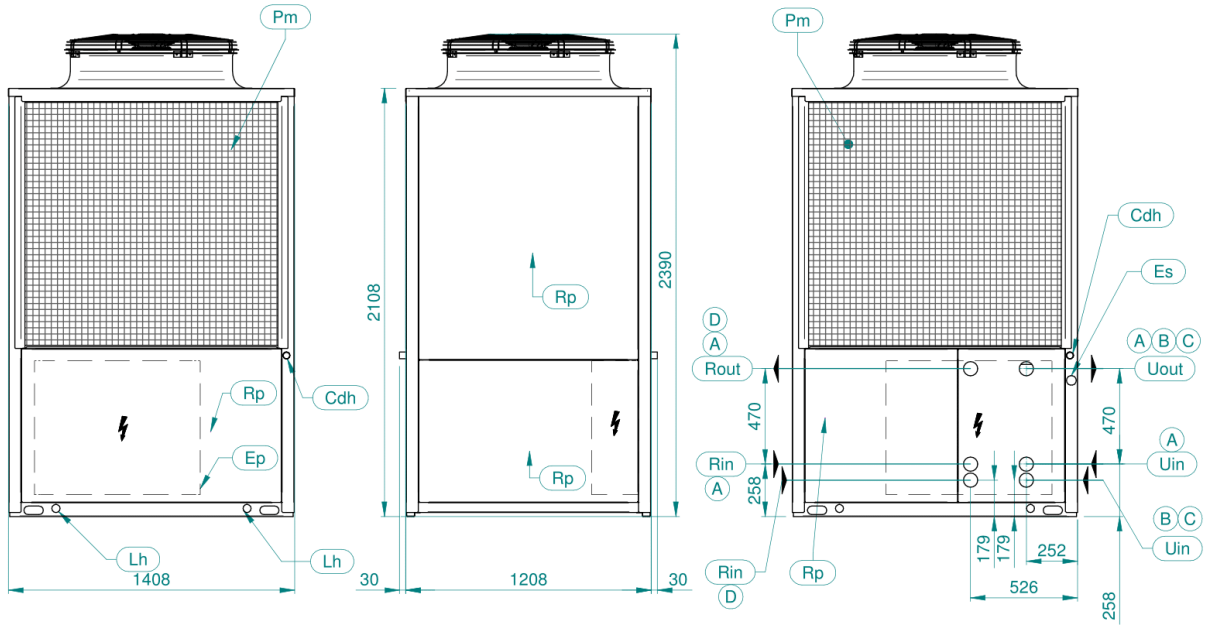
Uin	INGRESSO ACQUA UTILIZZO / USER WATER INLET	1" 1/4 BSPM
Uout	USCITA ACQUA UTILIZZO / USER WATER OUTLET	1" 1/4 BSPM
Rin	INGRESSO ACQUA RECUPERO / RECOVERY WATER INLET	1" 1/4 BSPM
Rout	USCITA ACQUA RECUPERO / RECOVERY WATER OUTLET	1" 1/4 BSPM
	FLUSSO ARIA / AIR FLOW	

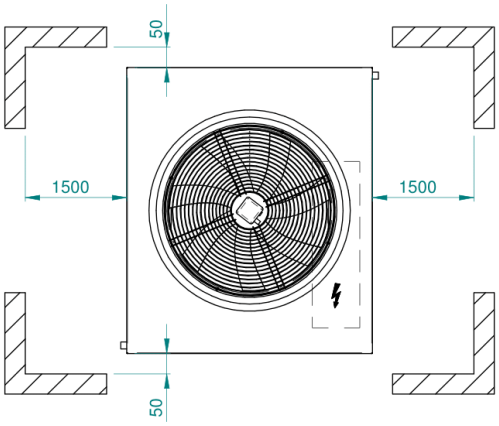
(*) OPZIONALE / OPTIONAL

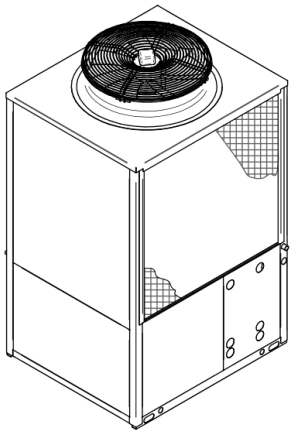
Note: These drawings are not contractually binding. For the installation design, refer to the specific dimensional drawing available on request.

GEYSER 2 HT 50-90 /HWS /1P /2P

SD00486A







SPAZI DI INSTALLAZIONE / CLEARANCES

CONNESSIONI IDRAULICHE / HYDRAULIC CONNECTIONS		
A	MODELLO STANDARD	STANDARD MODEL
B	MODELLO 1P (1 pompa)	1P MODEL (1 pump)
C	MODELLO 2P (2 pompe)	2P MODEL (2 pumps)
D	MODELLO 1R (1 pompa recupero)	1R MODEL (1 recovery pump)

DIMENSIONI / DIMENSIONS		
LUNGHEZZA WIDTH	PROFONDITA' DEPTH	ALTEZZA HEIGHT
1408	1208	2390

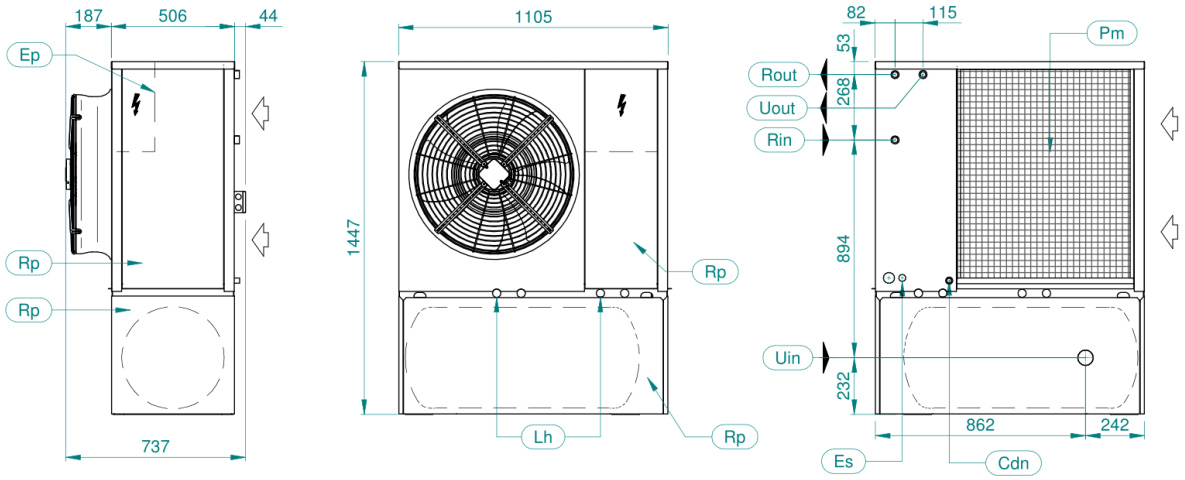
Ep	QUADRO ELETTRICO	ELECTRICAL PANEL
Es	INGRESSO ALIMENTAZIONE ELETTRICA	ELECTRICAL SUPPLY INLET
Lh	FORI DI SOLLEVAMENTO	LIFTING HOLES
Pm	GRIGLIE DI PROTEZIONE	PROTECTIVE METAL MESH
*	OPZIONALE	OPTIONAL
Rp	PANNELLO ASPORTABILE	REMOVABLE PANEL

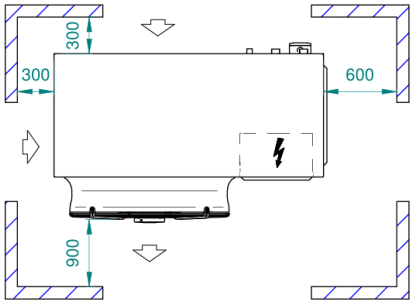
Cdh	SCARICO CONDENSA	CONDENSATE DRAIN	ø35
Uin	INGRESSO ACQUA UTILIZZO	USER WATER INLET	1" 1/2 BSPM
Uout	USCITA ACQUA UTILIZZO	USER WATER OUTLET	1" 1/2 BSPM
Rin	INGRESSO ACQUA RECUPERO	RECOVERYWATER INLET	1" 1/2 BSPM
Rout	USCITA ACQUA RECUPERO	RECOVERY WATER OUTLET	1" 1/2 BSPM

Note: These drawings are not contractually binding. For the installation design, refer to the specific dimensional drawing available on request.

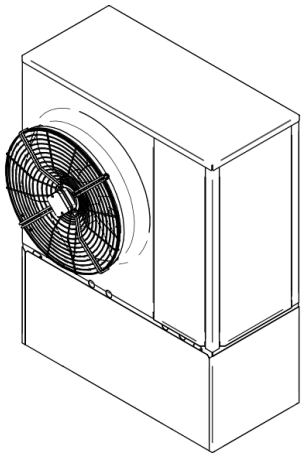
GEYSER 2 HT 7-17 /HWS /1PS

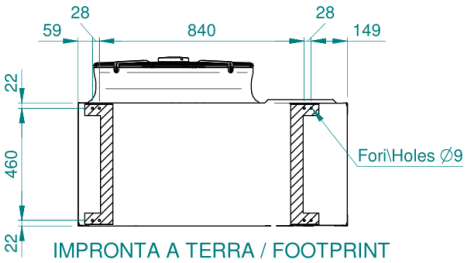
SD00336A





SPAZI DI INSTALLAZIONE / CLEARANCES





IMPRONTA A TERRA / FOOTPRINT

Ep	QUADRO ELETTRICO ELECTRICAL PANEL	
Es	INGRESSO ALIMENTAZIONE ELETTRICA ELECTRICAL SUPPLY INLET	
Lh	FORI SOLLEVAMENTO LIFTING HOLES	Ø35
Rp	PANNELLO ASPORTABILE REMOVABLE PANEL	
Pm	GRIGLIE DI PROTEZIONE PROTECTIVE METAL MESH	
	FLUSSO ARIA AIR FLOW	

Cdh	SCARICO CONDENSA CONDENSATE DRAIN	ø 22
Uin	INGRESSO ACQUA UTILIZZO USER WATER INLET	1" BSPM
Uout	USCITA ACQUA UTILIZZO USER WATER OUTLET	1" BSPM
Rin	INGRESSO ACQUA RECUPERO RECOVERY WATER INLET	1" BSPM
Rout	USCITA ACQUA RECUPERO RECOVERY WATER OUTLET	1" BSPM

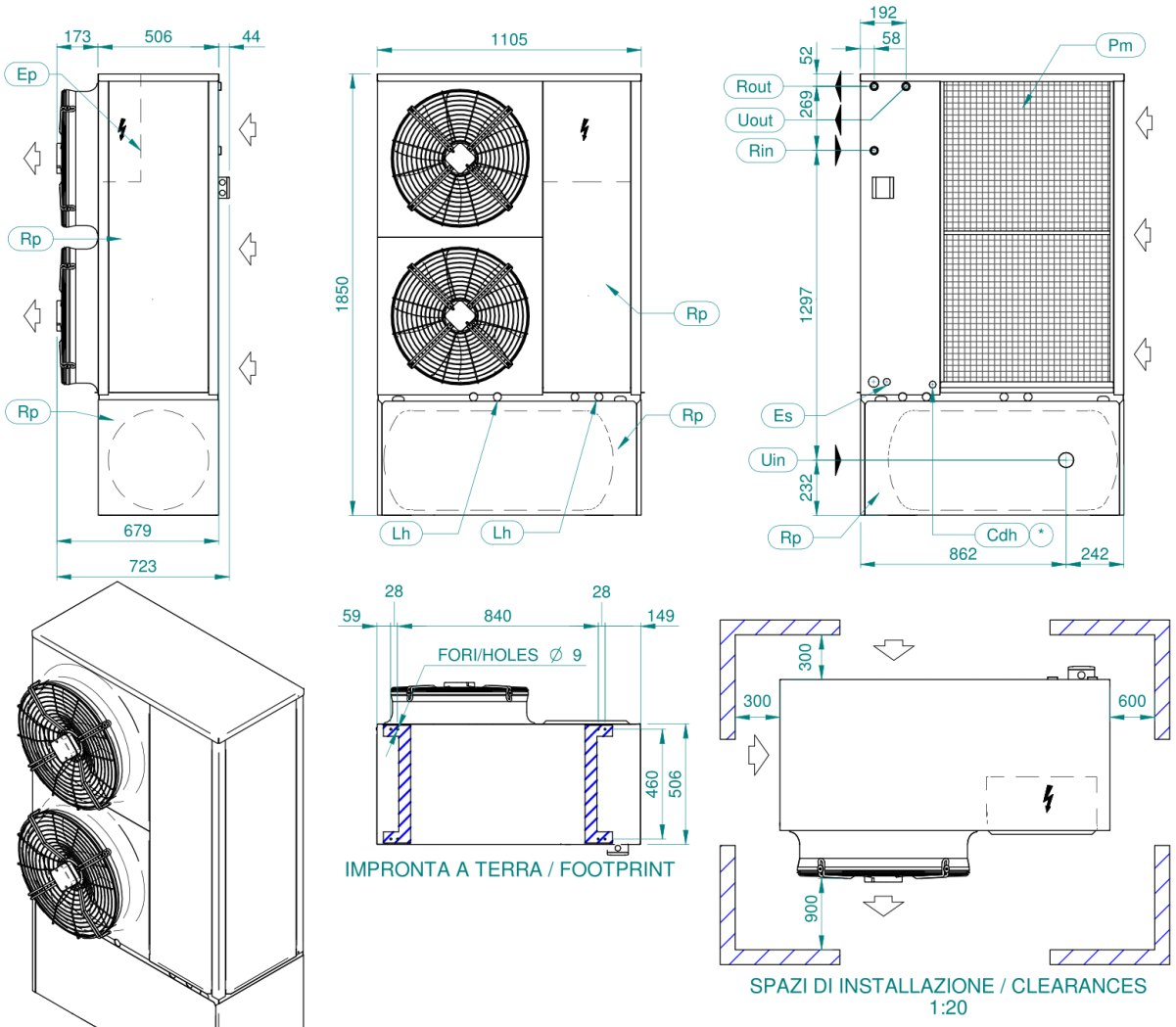
DIMENSIONI - DIMENSIONS		
LUNGHEZZA WIDTH	PROFONDITA' DEPTH	ALTEZZA HEIGHT
1105	737	1447

MODELLO MODEL	PESO WEIGHT (kg)	PESO IN FUNZIONE OPERATING WEIGHT (kg)
7	185	315
9	190	320
11	197	327
13	204	334
17	215	345

Note: These drawings are not contractually binding. For the installation design, refer to the specific dimensional drawing available on request.

GEYSER 2 HT 22-26 /HWS /1PS

SD00338A



DIMENSIONI - DIMENSIONS		
LUNGHEZZA WIDTH	PROFONDITA' DEPTH	ALTEZZA HEIGHT
1105	723	1850

MODELLO MODEL	PESO WEIGHT (kg)	PESO IN FUNZIONE OPERATING WEIGHT (kg)
22	318	448
26	339	469

Ep	QUADRO ELETTRICO ELECTRICAL PANEL	
Es	INGRESSO ALIMENTAZIONE ELETTRICA ELECTRICAL SUPPLY INLET	
Lh	FORI SOLLEVAMENTO LIFTING HOLES	Ø34
Rp	PANNELLO ASPORTABILE REMOVABLE PANEL	
Pm	GRIGLIE DI PROTEZIONE PROTECTIVE METAL MESH	
Cdh	SCARICO CONDENSA CONDENSATE DRAIN	ø 22

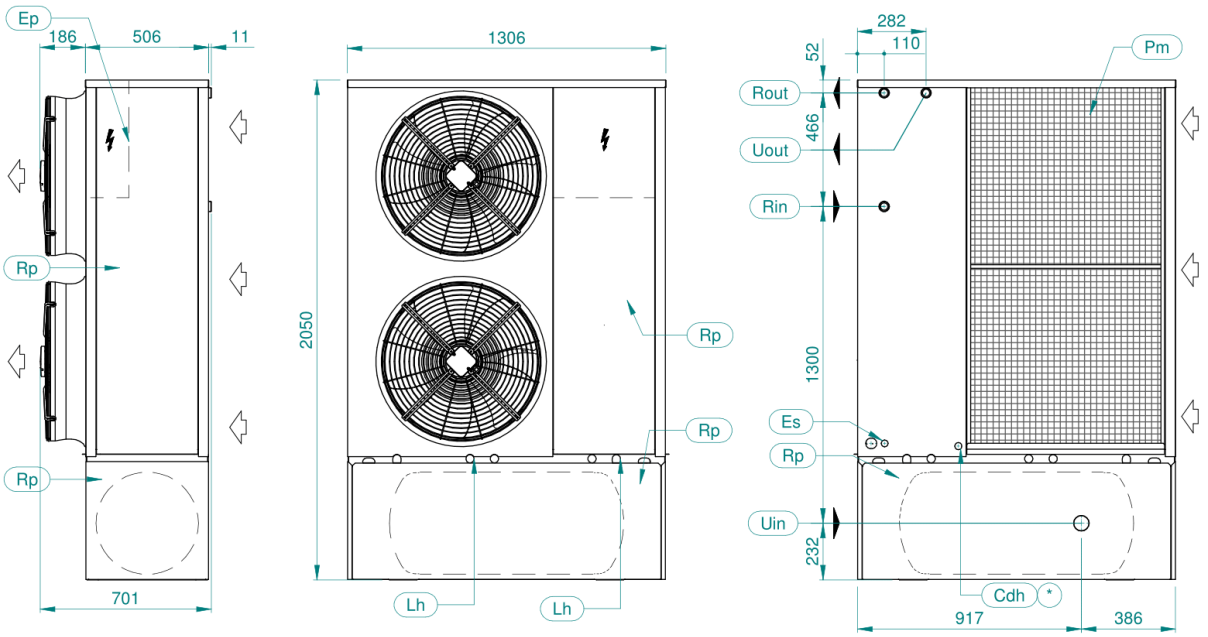
Uin	INGRESSO ACQUA UTILIZZO USER WATER INLET	1" 1/4 BSPM
Uout	USCITA ACQUA UTILIZZO USER WATER OUTLET	1" BSPM
Rin	INGRESSO ACQUA RECUPERO RECOVERY WATER INLET	1" BSPM
Rout	USCITA ACQUA RECUPERO RECOVERY WATER OUTLET	1" BSPM
	FLUSSO ARIA AIR FLOW	

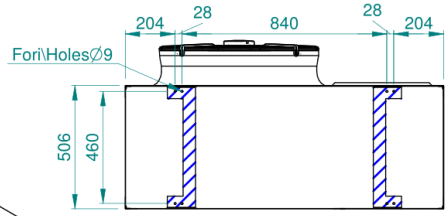
(*) OPZIONALE / OPTIONAL

Note: These drawings are not contractually binding. For the installation design, refer to the specific dimensional drawing available on request.

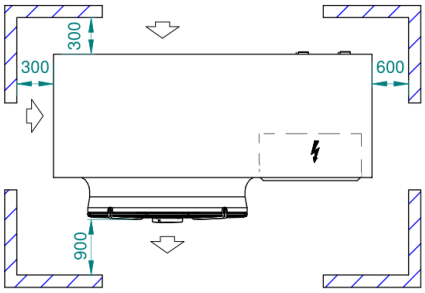
GEYSER 2 HT 32-41 /HWS /1PS

SD00340A

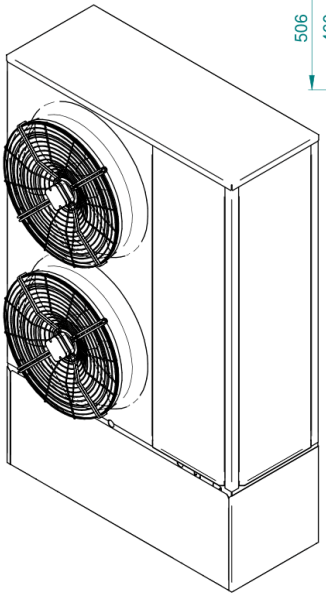




IMPRONTA A TERRA / FOOTPRINT



SPAZI DI INSTALLAZIONE / CLEARANCES



MODELLO MODEL	PESO WEIGHT (kg)	PESO IN FUNZIONE OPERATING WEIGHT (kg)
32	478	608
36	499	629
41	512	642

DIMENSIONI - DIMENSIONS		
LUNGHEZZA WIDTH	PROFONDITA' DEPTH	ALTEZZA HEIGHT
1306	701	2050

Ep	QUADRO ELETTRICO / ELECTRICAL PANEL	
Es	INGRESSO ALIMENTAZIONE ELETTRICA / ELECTRICAL SUPPLY INLET	
Lh	FORI SOLLEVAMENTO / LIFTING HOLES	Ø34
Rp	PANNELLO ASPORTABILE / REMOVABLE PANEL	
Pm	GRIGLIE DI PROTEZIONE / PROTECTIVE METAL MESH	
Cdh	SCARICO CONDENSA / CONDENSATE DRAIN	ø 22

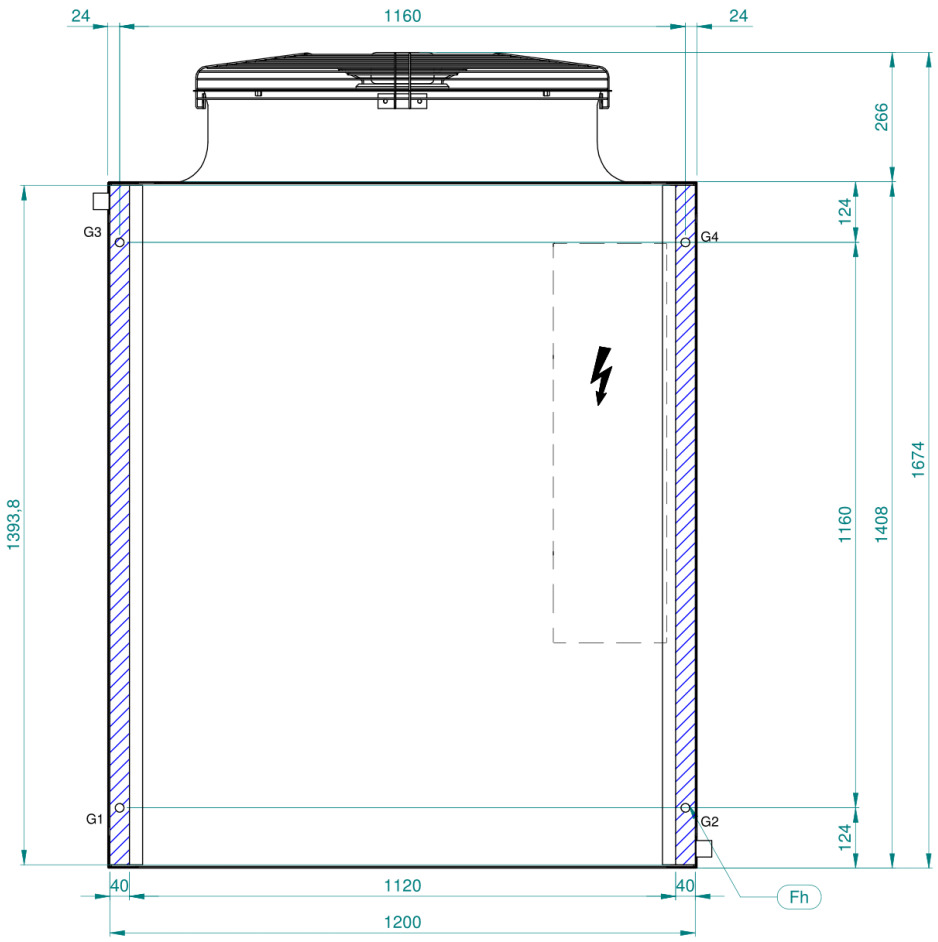
Uin	INGRESSO ACQUA UTILIZZO / USER WATER INLET	1" 1/4 BSPM
Uout	USCITA ACQUA UTILIZZO / USER WATER OUTLET	1" 1/4 BSPM
Rin	INGRESSO ACQUA RECUPERO / RECOVERY WATER INLET	1" 1/4 BSPM
Rout	USCITA ACQUA RECUPERO / RECOVERY WATER OUTLET	1" 1/4 BSPM
⇦	FLUSSO ARIA / AIR FLOW	

(*) OPZIONALE / OPTIONAL

Note: These drawings are not contractually binding. For the installation design, refer to the specific dimensional drawing available on request.

GEYSER 2 MT 52-92 /HWS /EAO

SD00489A



IMPRONTA A TERRA \ FOOTPRINT

Fh	FORI DI FISSAGGIO FIXING HOLES	Ø18
G..	PUNTI DI APPOGGIO ANTIVIBRANTI VIBRATION DAMPER FOOT HOLDS	

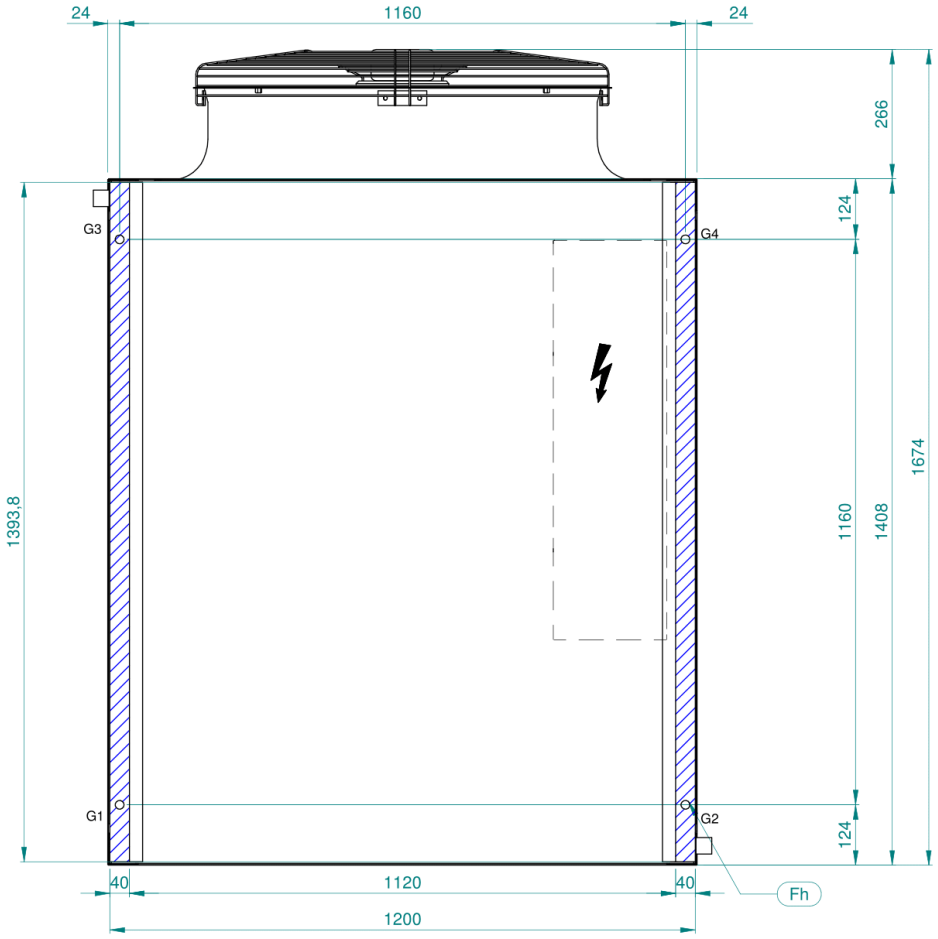
	MODELLO MODEL	PESO WEIGHT (kg)	PESO IN FUNZIONE OPERATING WEIGHT (kg)
	52	587	590
	62	604	607
	72	614	617
	82	632	635
	92	643	646
Δ PESO Δ WEIGHT	MOD. 1P	16	18
Δ PESO Δ WEIGHT	MOD. 2P	32	34

	G1 (kg)	G2 (kg)	G3 (kg)	G4 (kg)
52	159	164	155	112
62	164	169	160	115
72	166	171	162	117
82	171	176	167	121
92	174	179	170	123
52 1P	161	166	162	119
62 1P	166	171	167	122
72 1P	168	173	169	124
82 1P	173	178	174	128
92 1P	176	181	177	130
52 2P	167	172	170	127
62 2P	172	177	175	130
72 2P	174	179	177	132
82 2P	179	184	182	136
92 2P	182	187	185	138

Note: These drawings are not contractually binding. For the installation design, refer to the specific dimensional drawing available on request.

GEYSER 2 MT 52-92 /HWS /EAO

SD00489A



IMPRONTA A TERRA \ FOOTPRINT

Fh	FORI DI FISSAGGIO FIXING HOLES	Ø18
G..	PUNTI DI APPOGGIO ANTIVIBRANTI VIBRATION DAMPER FOOT HOLDS	

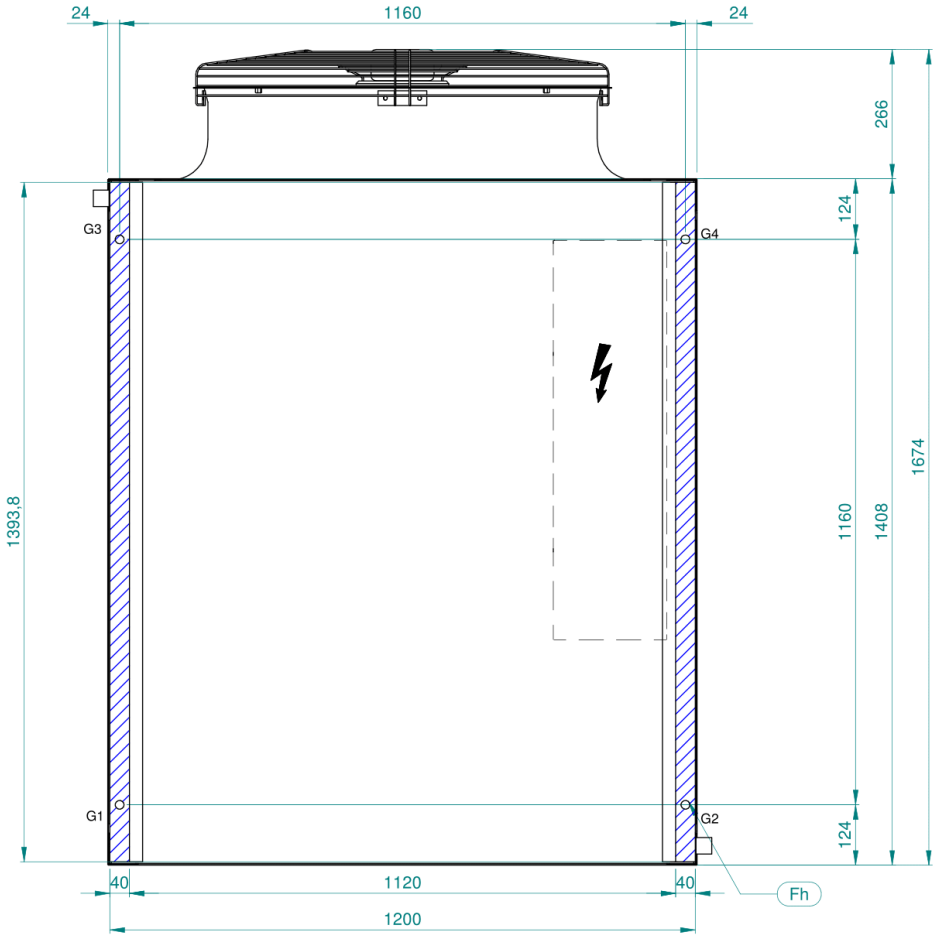
	MODELLO MODEL	PESO WEIGHT (kg)	PESO IN FUNZIONE OPERATING WEIGHT (kg)
	52	587	590
	62	604	607
	72	614	617
	82	632	635
	92	643	646
Δ PESO Δ WEIGHT	MOD. 1P	16	18
Δ PESO Δ WEIGHT	MOD. 2P	32	34

	G1 (kg)	G2 (kg)	G3 (kg)	G4 (kg)
52	159	164	155	112
62	164	169	160	115
72	166	171	162	117
82	171	176	167	121
92	174	179	170	123
52 1P	161	166	162	119
62 1P	166	171	167	122
72 1P	168	173	169	124
82 1P	173	178	174	128
92 1P	176	181	177	130
52 2P	167	172	170	127
62 2P	172	177	175	130
72 2P	174	179	177	132
82 2P	179	184	182	136
92 2P	182	187	185	138

Note: These drawings are not contractually binding. For the installation design, refer to the specific dimensional drawing available on request.

GEYSER 2 HT 50-90 /HWS /EAO

SD00490A



IMPRONTA A TERRA \ FOOTPRINT

Fh	FORI DI FISSAGGIO FIXING HOLES	Ø18
G..	PUNTI DI APPOGGIO ANTIVIBRANTI VIBRATION DAMPER FOOT HOLDS	

	MODELLO MODEL	PESO WEIGHT (kg)	PESO IN FUNZIONE OPERATING WEIGHT (kg)
	50	587	590
	60	604	607
	70	614	617
	80	632	635
	90	643	646
Δ PESO Δ WEIGHT	MOD. 1P	16	18
Δ PESO Δ WEIGHT	MOD. 2P	32	34

	G1 (kg)	G2 (kg)	G3 (kg)	G4 (kg)
50	159	164	155	112
60	164	169	160	115
70	166	171	162	117
80	171	176	167	121
90	174	179	170	123
50 1P	161	166	162	119
60 1P	166	171	167	122
70 1P	168	173	169	124
80 1P	173	178	174	128
90 1P	176	181	177	130
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60 2P	172	177	175	130
70 2P	174	179	177	132
80 2P	179	184	182	136
90 2P	182	187	185	138

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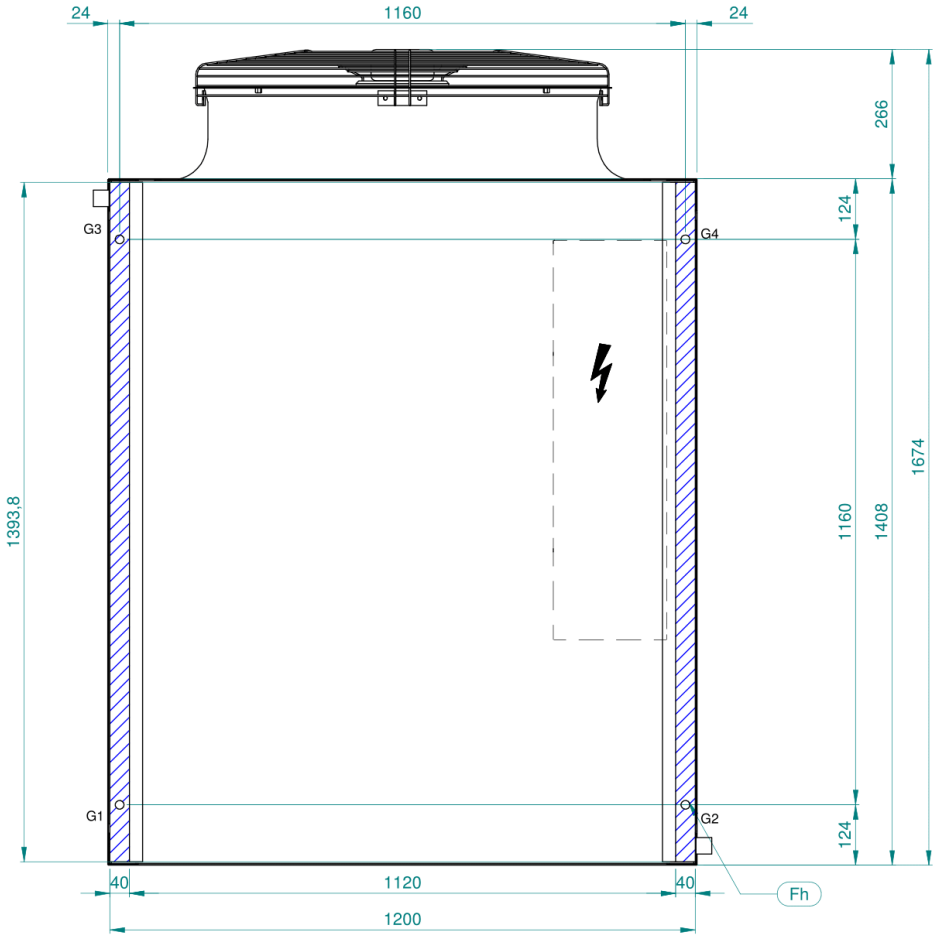
GEYSER 2 HT 50-90 /HWS /EAO

SD00490A



IMPRONTA A TERRA \ FOOTPRINT

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GEYSER 2 HT 50-90 /HWS /EAO

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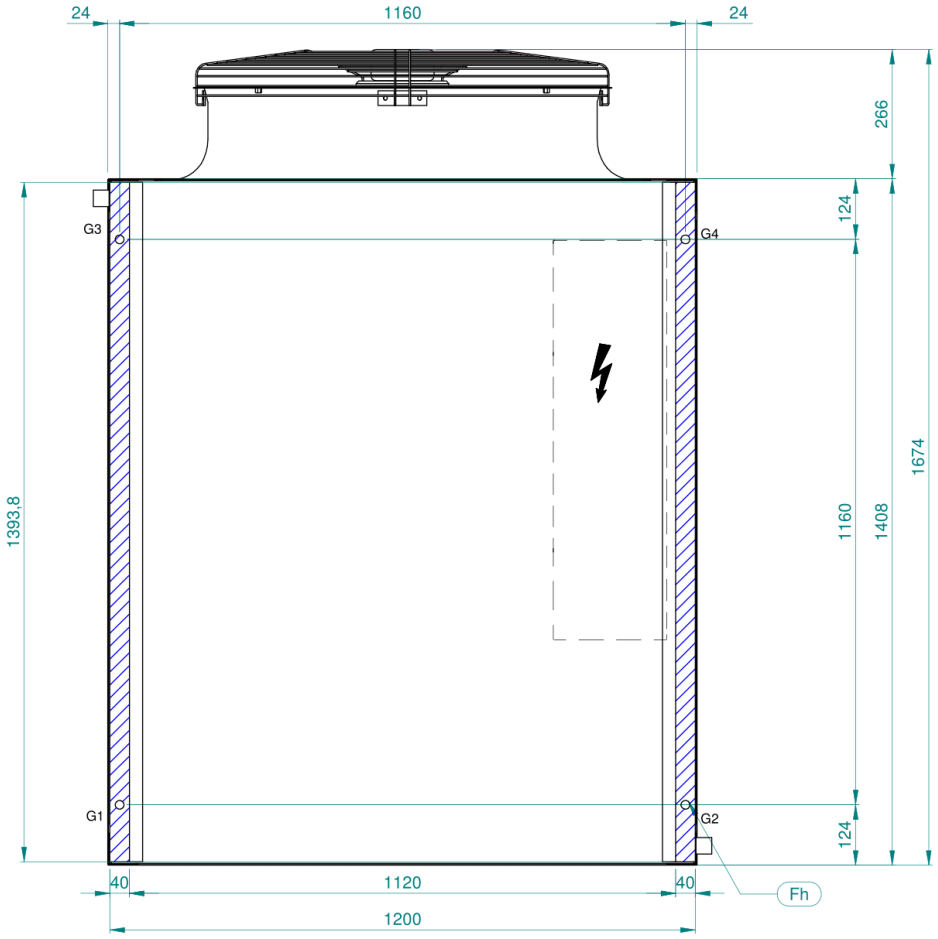

IMPRONTA A TERRA \ FOOTPRINT

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60 1P	166	171	167	122
70 1P	168	173	169	124
80 1P	173	178	174	128
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60 2P	172	177	175	130
70 2P	174	179	177	132
80 2P	179	184	182	136
90 2P	182	187	185	138

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