

LAMBDA ECHOS medium

85 to 166 kW



General

Self-contained, cooling only or heat pump air conditioner with scroll compressors in "Roof-Top" version.

Configurations

HP: Roof Top type conditioner in reversible heat pump version

Strengths

- ▶ High energy performance
- ▶ Easy and quick to install
- ▶ Wide configurability

TABLE OF CONTENTS

LAMBDA ECHOS MEDIUM	3
VERSIONS	4
ACCESSORIES	6
TECHNICAL SPECIFICATIONS - LAMBDA ECHOS MEDIUM	8
ELECTRICAL SPECIFICATIONS - LAMBDA ECHOS MEDIUM	9
TECHNICAL SPECIFICATIONS - LAMBDA ECHOS MEDIUM HE	10
ELECTRICAL SPECIFICATIONS - LAMBDA ECHOS MEDIUM HE	11
VERSIONS THAT ARE NOT POSSIBLE - LAMBDA ECHOS MEDIUM	11
AIR FLOW RATES - LAMBDA ECHOS MEDIUM	12
COOLING PERFORMANCE OF VERSIONS FC3S_GC3S	12
HEATING PERFORMANCE OF VERSIONS FC3S_GC3S	13
COOLING PERFORMANCE OF VERSION WITH HEAT RECOVERY UNIT	14
HEATING PERFORMANCE OF VERSION WITH HEAT RECOVERY UNIT	15
COOLING PERFORMANCE OF VERSIONS FC3S_GC3S (HE)	16
HEATING PERFORMANCE OF VERSIONS FC3S_GC3S (HE)	17
COOLING PERFORMANCE OF VERSION WITH HEAT RECOVERY UNIT (HE)	18
HEATING PERFORMANCE OF VERSION WITH HEAT RECOVERY UNIT (HE)	19
OPERATING LIMITS - LAMBDA ECHOS MEDIUM	20
COOLING	20
HEATING	20
OPERATING LIMITS - LAMBDA ECHOS MEDIUM HE	21
COOLING	21
HEATING	21
NOISE LEVELS - LAMBDA ECHOS MEDIUM	22
NOISE LEVELS - LAMBDA ECHOS MEDIUM (LN)	22
DIMENSIONAL DIAGRAMS	24

LAMBDA ECHOS MEDIUM

Self-contained, cooling only or air/air heat pump air conditioner with scroll compressors in "Roof-Top" version, available in "standard" version and in "high efficiency" "HE" version.

BODY

Base and cover: made of very thick, galvanized sheet-iron, which is epoxy polyester powder coated in RAL 7035 (light grey).

Framework: made of extruded aluminium alloy profiles connected with glass fibre reinforced nylon joints.

Panelling: made with 25mm thick sandwich panels (50mm on request) consisting of a 0.5mm thick externally pre-painted galvanized sheet-iron casing that encloses polyurethane foam matting, which guarantees the thermal and acoustic insulation of the unit. The surface of the panels in contact with the treated air is made of galvanized sheet-iron to facilitate cleaning and sanitizing operations.

The non-removable panels are fixed to the body with screws contained in nylon bushes with plug.

The removable panels are attached to the body with nylon eccentrics or inserts and have handles to make them easier to remove.

COMPRESSORS

Hermetic scroll compressors, with protection for starting at low temperatures by means of crankcase heaters and thermal overload protection of the motor by internal temperature sensor. The compressors are mounted on rubber anti-vibration mounts inside a technical compartment separated from the air flow, and therefore maintenance operations can be carried out in total safety even with units running. A safety device prevents reverse rotation of the compressor spiral.

REFRIGERANT CIRCUIT

Comprises: charging valves, valve on the liquid line, dehydrator filter, liquid sight glass, safety valve, thermostatic expansion valve, high and low pressure switches.

CONDENSER

Consists of finned coil with internally grooved copper tubes and louvred aluminium fins for each circuit. The particular geometry and careful sizing favour heat exchange performance and give the coil high efficiency. A protective metal grille is installed as standard to protect the finned pack. The HE version has a finned coil with a higher number of rows than the standard version so as to guarantee increased performance for the same operating conditions.

CONDENSING-SIDE FANS

Axial fans directly coupled to an electric motor, with internal klixon thermal overload protection.

All the fans are fixed to the body by interposition of rubber anti-vibration mounts.

The protection rating of the motors is IP 54. The fan includes a safety guard.

EVAPORATOR

Finned coil with copper tubes and corrugated aluminium fins. For units with 2 refrigerant circuits, the evaporating coil is made with interlaced circuits to make the treated air flow more homogeneous.

A stainless steel condensation collection basin is installed at the base of the coil, complete with drain fitting.

EVAPORATING-SIDE FANS

Statically and dynamically balanced dual suction centrifugal fans.

The transmission is a belt-pulley transmission with V belt and variable-diameter drive pulley.

The three-phase electric motor, with IP 55 protection rating, is installed on a belt-tightener slide.

Motors with powers of 7.5 kW or higher are started with the star/delta method to limit inrush currents.

Each fan is mounted on a special support frame separated from the rest of the body by rubber anti-vibration mounts.

The air supply, which in the basic version faces downwards (MD), can be supplied with different directions on request: up (MU), left (ML), right (MR), with the exception of the configurations shown in the "Versions that are not possible" diagram.

The standard available pressure is 100 Pa, and can be increased up to 400 Pa on request; any need for higher pressures must be assessed by our technical department.

The version with radial plug fans without scroll, directly coupled to an electronically controlled "EC" electric motor, is available as accessory.

The electric motor, with IP 55 protection rating, is directly flush fitted on the fan shaft, thereby avoiding the presence of transmissions and consequent dissipation of energy.

Each fan has an intake nozzle on which are fitted pressure probes that can provide a signal proportional to the processed air flow rate, so as to keep it constant regardless of the surrounding conditions (head losses in channel, dirtying of filters, etc.) over the entire life of the unit.

AIR FILTERS

All the units have a filtering section that precedes the treatment coil and therefore works on the entire flow of treated air with the same efficiency.

The standard version is supplied complete with 48mm thick corrugated filter with galvanized sheet-iron frame with filter grade G4 (according to EN 779). The filter media is made of synthetic matting, which is regeneratable and self-extinguishing.

There are other filter grades based on the type of pollutant to be removed:

F5: 48mm thick corrugated filter with galvanized sheet-iron frame with filter grade F5 (according to EN 779). The filter media is made of synthetic matting, which is regeneratable and self-extinguishing.

F7: 300mm thick rigid bag filter in polyester with pleated glass fibre paper filter media with even, calibrated spacing. F7 filters are always preceded by grade G4 filters to protect them.

The bag filter housing requires the addition of a special section that affects the final dimensions of the unit, as can be seen in the dimensional diagrams.

There is always a door or removable panel to make the filter maintenance and/or replacement operations easier.

ELECTRICAL CONTROL PANEL

The panel comprises:

- main disconnect switch
- fuses to protect the compressors
- fuses to protect the axial fans
- thermal magnetic circuit breakers for centrifugal fans
- fuses to protect the primary and secondary circuits of the transformer
- compressor contactors
- fan contactors
- connection for connection
- remote control panel
- terminals for external OK signal
- potential free contacts for general alarm
- terminals for external OK signal
- potential free contacts for general alarm
- Microprocessor to control the following functions.
 - Air temperature control with return control
 - Freeze protection on the hot water coil
 - Compressor timing
 - Automatic rotation of compressor starting sequence
 - Alarm signalling
 - Alarm reset
 - Stepped capacity reduction of the capacity delivered by the unit
 - Cumulative alarm contact for remote signalling
 - Forcing of capacity reduction due to pressure limit on machines with four compressors
 - Alarm log recording
 - Programming of operation on settable time bands
 - Display of the following on the display.
 - Return air temperature
 - Set temperature and differential set points
 - Description of alarms
 - Hour meter operation and number of unit, compressor and pump (where present) start-ups

Power supply 400V/3~/50Hz + N for sizes 9.4/10.2; 400V/3~/50Hz for sizes 12.2/13.2/14.2/16.2

CONTROLS AND SAFETY DEVICES

- High pressure switch with manual reset
- High pressure safety valve
- Minimum temperature probe for supply air
- Maximum temperature probe on heat generator
- Thermal cut-out device for compressors and fans

TESTING

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

VERSIONS

LAMBDA ECHOS /HP: reversible heat pump

LAMBDA ECHOS HE /HP: high efficiency reversible heat pump

In addition to the LAMBDA ECHOS components, this comprises: four-way reversing valve, liquid receiver, second thermostatic expansion valve, microprocessor for automatic summer/winter switching and a patented automatic coil defrost system with separate circuits.

ADDITIONAL VERSIONS

LAMBDA ECHOS /LN: low noise unit

LAMBDA ECHOS HE /LN: high efficiency low noise unit

The unit is designed to reduce the noise emissions propagating from it. The LN version has no consequence on the noise propagated inside the channels that depends directly on the combinations of required flow rates and pressures and can be reduced only through the use of channel silencers.

The LN version includes: soundproof casings on the compressors and axial fan speed governor.

AIR HANDLING MODULE SET-UP

LAMBDA ECHOS BASE

LAMBDA ECHOS HE BASE

Version suitable for working in 100% recirculation. Air exchanges are not included. The air return can only be rear.

LAMBDA ECHOS FC2S

LAMBDA ECHOS HE FC2S

Version suitable for working with input of external air.

Compared to the basic version, this is equipped with a 2-damper mixing chamber, where one damper is placed on the air return and the other on the external air intake.

The unit is suitable for working in free cooling/free heating mode.

For all versions that have dampers, the "damper servo controls" accessory is available. To obtain automatic modulation of them, the "Pco" control must also be installed.

LAMBDA ECHOS FC3S**LAMBDA ECHOS HE FC3S**

Version suitable for working with input of external air and with exhaustion of stale air. Compared to the FC2S version, this is equipped with a 3-damper mixing chamber and stale air exhaust fans. The unit is suitable for working in free cooling/free heating mode.

The return fan is supplied as standard with rear return and the same performance as the supply fan. The following can be supplied on request.

- Different air flow rates and pressures
- Different air flow return directions.

LAMBDA ECHOS GC2S**LAMBDA ECHOS HE GC2S**

Compared to the FC2S version, the unit is equipped with a module containing one or more direct exchange condensation gas heat generators.

The main components of the generator are:

- combustion chamber and surfaces that can be in contact with condensation are made of AISI 441
- premixed gas burner that guarantees absence of carbon monoxide and nitrogen oxide emissions below 24 parts per million
- electronic board that controls the burner and modulates heat output (fuel consumption) continuously between the minimum value and the maximum value according to the control parameters set and measured by the Pco control
- combustion fume exhaust flue.

With the technology of premixing and modulation as heat demand from the room falls, the generator consumes less gas and increases its efficiency up to 109% (value calculated according to the net calorific value).

The generator certified by the GASTEC body and built in compliance with gas directive 90/396/EC and 2009/142/CE is housed in a module whose panels are insulated with rock wool according to the criteria of Italian Ministerial Decree DM 12/04/96, the air flow is separated from the gas intake point and an aeration grille puts the external environment in contact with the burner.

The following safety devices are also present on the generator.

- Safety thermostat downline of the exchanger
- Flame detection electrode
- Safety pressure switch that controls any obstruction of the fume pipe and/or the air intake pipe
- Differential pressure switch for air flow detection (supplied as standard with all the units).

All these devices, when activated, cause the burner to stop. They are indicated cumulatively by the Pco control and must be reset manually.

LAMBDA ECHOS GC3S**LAMBDA ECHOS HE GC3S**

Compared to the FC3S version, the unit is equipped with a module containing a direct exchange condensation gas heat generator. For the characteristics of the generator, please see description of version GC2S.

LAMBDA ECHOS RS4S**LAMBDA ECHOS HE RS4S**

A module inside which is positioned a static air/air cross-flow plate heat recovery unit is added to the unit in FC3S set-up.

Consisting of an aluminium plate pack, it allows recovery of sensible heat from the exhausted air with an efficiency, during winter operation, ranging from 50 to 55% depending on the model. The two air flows (exhaustion and return) are completely separate and therefore every type of contamination between them is avoided.

The Pco control, which manages recovery according to a set-table logic depending on whether or not the air quality probe is present, will be installed as standard with this set-up too.

The possibility of obtaining the free cooling option with RS version unit too is guaranteed by the presence of a fourth damper for external air as recovery unit by-pass.

LAMBDA ECHOS GS4S**LAMBDA ECHOS HE GS4S**

Compared to the RS4S version, the unit is equipped with a module containing a direct exchange condensation gas heat generator. For the characteristics of the generator, please see description of version GC2S.

ACCESSORIES

MOTOCONDENSING SECTION ACCESSORIES

- Condensation control with speed governor
- High and low pressure gauges
- Suction and delivery valves
- Solenoid valve on the liquid line (double valve for the HP version)
- Liquid receiver (standard on the HP version)
- Pre-painted aluminium condensing coil
- Condensing coil treated with anti-corrosion paints
- Coil protection mesh with metal filter

VENTILATING SECTION ACCESSORIES

- Air supply different from the standard one
- Air return different from the standard one
- Increased pressure of the supply fans (from 100 to 400Pa)
- Increased pressure of the return fans (from 100 to 400Pa)
- Corrugated filters of grade F5
- Rigid bag filters of grade F7
- Hot water heating coil
- Electric heating coil
- 3-way valve with modulating servo control for hot water coil control
- Sandwich panels with increased thickness (50mm)
- Immersed electrode humidifier with steam distribution nozzle
- Servo controls for dampers
- Servo controls for dampers with spring return
- Dirty filter alarm
- Rain hoods on external dampers (exchange and exhaustion)
- Plug Fans without scroll with electronically controlled "EC" motor

ELECTRICAL ACCESSORIES

- "Pco" control
- Remote control panel
- RS485 serial interface
- Power factor correction to $\cos\theta \geq 0.9,5$
- Potential free operating contacts
- Enthalpy free-cooling
- Electronic soft starter
- Power supplies different from the standard one

OTHER ACCESSORIES

- Rubber anti-vibration mounts
- Soundproof casings on the compressors

TECHNICAL SPECIFICATIONS - LAMBDA ECHOS MEDIUM

Unit size		9.2	10.2	12.2	13.2	14.2	16.2
Cooling							
Nominal refrigeration capacity	(1) kW	85.1	93.9	116.3	128.8	141.3	154.9
Sensible cooling capacity	(1) kW	68.0	75.5	93.6	102.3	110.4	120.2
Power absorbed by the compressors	(1) kW	23.4	27.0	30.2	36.5	41.3	46.4
Heating							
Nominal heating capacity	(2) kW	87.6	95.4	117.1	131.8	149.0	166.2
Power absorbed by the compressors	(2) kW	18.3	21.6	24.4	27.9	33.8	39.0
Compressors							
Type		Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
Quantity/Refrigerant circuits	no./no.	2 / 2	2 / 2	2 / 2	2 / 2	2 / 2	2 / 2
Capacity reduction steps	no.	0 - 50 - 100	0 - 50 - 100	0 - 50 - 100	0 - 50 - 100	0 - 50 - 100	0 - 50 - 100
Total oil charge	l	6.5	6.76	8.05	9.34	11.47	13.6
Total refrigerant charge LAMBDA ECHOS	kg	22	22	30	32	36	46
Total refrigerant charge LAMBDA ECHOS/HP	kg	30	30	40	42	46	56
Ventilating section							
Type		Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal
Air flow	m³/h	15,400	17,600	20,900	23,650	25,300	27,500
Std available static pressure	Pa	100	100	100	100	100	100
Speed through coil	m/s	1.81	2.07	1.83	2.07	2.22	2.41
Air filters							
Thickness	mm	48	48	48	48	48	48
Efficiency		G4	G4	G4	G4	G4	G4
Motocondensing section							
Type		Axial	Axial	Axial	Axial	Axial	Axial
Air flow	m³/h	33,200	33,200	44,000	44,000	43,200	43,200
Water heating coil (accessory)							
Capacity	(3) kW	115.8	125	156.5	169.1	176.3	185.5
Water flow rate	l/s	1.9	2	2.55	2.76	2.88	3.03
Head loss	kPa	19.6	23.8	16.8	19.6	22.4	23.8
Electric heating coil (accessory)							
Capacity	kW	25	30	30	30	40	40
Operating stages	no.	2	2	2	2	2	2
Hot air generator GC2S GC3S GS4S RS4S							
Quantity		1	1	2	2	1	1
Model	(4)	L	L	S	S	XL	XL
Maximum nominal heating capacity	kW	97	97	126	126	160	160
Generator efficiency related to HI	%	97,1	97,1	96,8	96,8	97,6	97,6
Maximum natural gas consumption	(5) m³/h	10,6	10,6	13,7	13,7	17,3	17,3
Amount of condensation produced	l/h	2,7	2,7	4,2	4,2	6,6	6,6
Dimensions and weights of basic unit							
Length	mm	5,650	5,650	5,650	5,650	5,650	5,650
Depth	mm	2,240	2,240	2,240	2,240	2,240	2,240
Height	mm	1,830	1,830	2,180	2,180	2,180	2,180
Operating weight	kg	2,070	2,096	2,268	2,274	2,326	2,378

(1) Calculation conditions: ambient air 27°C DB, 19°C WB; external air 35°C. Mixture with 30% external air.

(2) Calculation conditions: ambient air 20°C; external air 7°C DB, 6°C WB. Mixture with 30% external air.

(3) Coil data related to: Incoming air temperature 20°C; in/out water temperature: 80/65

(4) Nominal heating capacity: S= 63 kW; L= 97 kW; LL= 130 kW; XL= 160 kW; XXL= 194 kW

(5) Related to 15°C, 1013 mbar and supply pressure of 20 mbar

ELECTRICAL SPECIFICATIONS - LAMBDA ECHOS MEDIUM

Unit size		9.4	10.2	12.2	13.2	14.2	16.2
Supply ventilating section	(3)						
nº of supply fans		1	1	2	2	2	2
Nominal fan power		3	4	2.2	3	3	4
Nominal fan current		7.1	9	5.1	7.1	7.1	9
Return ventilating section	(4)						
nº of return fans		1	1	2	2	2	2
Nominal fan power		2.2	3	1.5	2.2	2.2	3
Nominal fan current		5.1	7.1	3.6	5.1	5.1	7.1
Motocondensing section							
nº of axial fans		4	4	2	2	2	2
Nominal fan power		0.6	0.6	1.94	1.94	1.94	1.94
Nominal fan current		2.62	2.62	3.9	3.9	3.9	3.9
Electric heating coil (accessory)							
Capacity		25	30	30	30	40	40
Operating stages		2	2	2	2	2	2
Immersed electrode humidifier (accessory)							
Nominal steam production		15	15	15	23	23	23
Number of cylinders		1	1	1	1	1	1
Operating interval		10--15	10--15	10--15	15--23	15--23	15--23
Absorbed power		10.9	10.9	10.9	19	19	19
Absorbed current		15.8	15.8	15.8	27	27	27
Total							
Max. absorbed power	(1),(5)	37.2	43.4	50.9	59.5	64.5	73.1
Max. inrush current	(5)	187.2	230.6	280.2	293.7	340.7	356.6
Max. absorbed current	(2),(5)	71.7	86.6	91.7	105.2	113.3	129.2
Power supply	V/ph/Hz	400/3N~/50 ±5%	400/3N~/50 ±5%	400/3~/50 ±5%	400/3~/50 ±5%	400/3~/50 ±5%	400/3~/50 ±5%
Power supply for auxiliary circuits	V/ph/Hz	230-24/1~/50	230-24/1~/50	230-24/1~/50	230-24/1~/50	230-24/1~/50	230-24/1~/50

- (1) Electrical power that must be supplied by the electricity network for operation of the unit.
- (2) Current at which the internal unit protection devices are triggered. This is the max. current absorbed by the unit. This value is never exceeded and must be used to size the line and relevant protective devices (refer to the wiring diagram supplied with the units).
- (3) Value related to units in FC3S set-up and available supply pressure of 100Pa
- (4) Value related to units in FC3S set-up and for available return pressure of 100Pa
- (5) The indicated values refer solely to the unit in FC3S set-up with available pressure of 100Pa and cannot be used for sizing the power lines of units in other versions for which it is necessary to refer to the wiring diagram supplied with them.

TECHNICAL SPECIFICATIONS - LAMBDA ECHOS MEDIUM HE

Unit size		9.2	10.2	12.2	13.2	14.2	16.2
Cooling							
Nominal refrigeration capacity	(1) kW	90.2	101.2	120.3	132.1	147.6	166.0
Sensible cooling capacity	(1) kW	70.9	80.1	95.6	105.7	116.9	131.0
Power absorbed by the compressors	(1) kW	20.1	25.6	28.0	32.3	37.0	41.7
Heating							
Nominal heating capacity	(2) kW	90.7	102.1	120.9	133.0	153.6	172.8
Power absorbed by the compressors	(2) kW	17.3	21.0	23.7	26.5	31.2	35.3
Compressors							
Type		Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
Quantity/Refrigerant circuits	no./no.	2 / 2	2 / 2	2 / 2	2 / 2	2 / 2	2 / 2
Capacity reduction steps	no.	0 - 50 - 100	0 - 50 - 100	0 - 50 - 100	0 - 50 - 100	0 - 50 - 100	0 - 50 - 100
Total oil charge	l	6.5	6.76	8.05	9.34	11.47	13.6
Total refrigerant charge LAMBDA ECHOS	kg	22	22	30	32	36	46
Total refrigerant charge LAMBDA ECHOS/HP	kg	30	30	40	42	46	56
Ventilating section							
Type		Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal
Air flow	m³/h	15,400	17,600	20,900	23,650	25,300	27,500
Std available static pressure	Pa	100	100	100	100	100	100
Speed through coil	m/s	1.81	2.07	1.83	2.07	2.22	2.41
Air filters							
Thickness	mm	48	48	48	48	48	48
Efficiency		G4	G4	G4	G4	G4	G4
Motocondensing section							
Type		Axial	Axial	Axial	Axial	Axial	Axial
Air flow	m³/h	33,200	33,200	42,400	42,400	41,600	40,800
Water heating coil (accessory)							
Capacity	(3) kW	115.8	125	156.5	169.1	176.3	185.5
Water flow rate	l/s	1.9	2	2.55	2.76	2.88	3.03
Head loss	kPa	19.6	23.8	16.8	19.6	22.4	23.8
Electric heating coil (accessory)							
Capacity	kW	25	30	30	30	40	40
Operating stages	no.	2	2	2	2	2	2
Hot air generator GC2S GC3S GS4S RS4S							
Quantity		1	1	2	2	1	1
Model	(4)	L	L	S	S	XL	XL
Maximum nominal heating capacity	kW	97	97	126	126	160	160
Generator efficiency related to HI	%	97,1	97,1	96,8	96,8	97,6	97,6
Maximum natural gas consumption	(5) m³/h	10,6	10,6	13,7	13,7	17,3	17,3
Amount of condensation produced	l/h	2,7	2,7	4,2	4,2	6,6	6,6
Dimensions and weights of basic unit							
Length	mm	5,650	5,650	5,650	5,650	5,650	5,650
Depth	mm	2,240	2,240	2,240	2,240	2,240	2,240
Height	mm	1,830	1,830	2,180	2,180	2,180	2,180
Operating weight	kg	2,070	2,096	2,268	2,274	2,326	2,378

- (1) Calculation conditions: ambient air 27°C DB, 19°C WB; external air 35°C. Mixture with 30% external air.
 (2) Calculation conditions: ambient air 20°C; external air 7°C DB, 6°C WB. Mixture with 30% external air.
 (3) Coil data related to: Incoming air temperature 20°C; in/out water temperature: 80/65
 (4) Nominal heating capacity: S= 63 kW; L= 97 kW; LL= 130 kW; XL= 160 kW; XXL= 194 kW
 (5) Related to 15°C, 1013 mbar and supply pressure of 20 mbar

ELECTRICAL SPECIFICATIONS - LAMBDA ECHOS MEDIUM HE

Unit size		9.4	10.2	12.2	13.2	14.2	16.2
Supply ventilating section	(3)						
nº of supply fans		1	1	2	2	2	2
Nominal fan power		3	4	2.2	3	3	4
Nominal fan current		7.1	9	5.1	7.1	7.1	9
Return ventilating section	(4)						
nº of return fans		1	1	2	2	2	2
Nominal fan power		2.2	3	1.5	2.2	2.2	3
Nominal fan current		5.1	7.1	3.6	5.1	5.1	7.1
Motocondensing section							
nº of axial fans		4	4	2	2	2	2
Nominal fan power		0.6	0.6	1.94	1.94	1.94	1.94
Nominal fan current		2.62	2.62	3.9	3.9	3.9	3.9
Electric heating coil (accessory)							
Capacity		25	30	30	30	40	40
Operating stages		2	2	2	2	2	2
Immersed electrode humidifier (accessory)							
Nominal steam production		15	15	15	23	23	23
Number of cylinders		1	1	1	1	1	1
Operating interval		10--15	10--15	10--15	15--23	15--23	15--23
Absorbed power		10.9	10.9	10.9	19	19	19
Absorbed current		15.8	15.8	15.8	27	27	27
Total							
Max. absorbed power	(1),(5)	37.2	43.4	50.9	59.5	64.5	73.1
Max. inrush current	(5)	187.2	230.6	280.2	293.7	340.7	356.6
Max. absorbed current	(2),(5)	71.7	86.6	91.7	105.2	113.3	129.2
Power supply	V/ph/Hz	400/3N~/50 ±5%	400/3N~/50 ±5%	400/3~/50 ±5%	400/3~/50 ±5%	400/3~/50 ±5%	400/3~/50 ±5%
Power supply for auxiliary circuits	V/ph/Hz	230-24/1~/50	230-24/1~/50	230-24/1~/50	230-24/1~/50	230-24/1~/50	230-24/1~/50

(1) Electrical power that must be supplied by the electricity network for operation of the unit.

(2) Current at which the internal unit protection devices are triggered. This is the max. current absorbed by the unit. This value is never exceeded and must be used to size the line and relevant protective devices (refer to the wiring diagram supplied with the units).

(3) Value related to units in FC3S set-up and available supply pressure of 100Pa

(4) Value related to units in FC3S set-up and for available return pressure of 100Pa

(5) The indicated values refer solely to the unit in FC3S set-up with available pressure of 100Pa and cannot be used for sizing the power lines of units in other versions for which it is necessary to refer to the wiring diagram supplied with them.

VERSIONS THAT ARE NOT POSSIBLE - LAMBDA ECHOS MEDIUM

Configuration	BASIC	FC2S	FC3S	GC2S	GC3S	RS4S	GS4S
Return from right + External air from right	X			X			
Return from left + External air from left	X			X			
Return from above + External air from above		X					
Return from above + External air from above							
Exhaustion to right + External air from right			X				
Exhaustion to left + External air from left			X		X		
Return from right + Exhaustion to right						X	X
Return from left + Exhaustion to left						X	X
Return from right + By-pass from left						X	X
Return from left + By-pass from right						X	X
Exhaustion to right + By-pass from right						X	X
Exhaustion to left + By-pass from right						X	X
EC fans + Return from top						X	X
EC fans + Return from bottom						X	X
Low noise version (LN) + High temperature version (HIT)	X	X	X	X	X	X	X

X: not possible

AIR FLOW RATES - LAMBDA ECHOS MEDIUM

Unit size	9.2	10.2	12.2	13.2	14.2	16.2
Max. air flow rate [m³/h]	16,100	18,400	21,850	24,725	26,450	28,750
Standard air flow rate [m³/h]	15,400	17,600	20,900	23,650	25,300	27,500
Min. air flow rate [m³/h]	11,900	13,600	16,150	18,275	19,550	21,250

The table indicates the interval of flow rate values within which the units can be selected by selection software.

Outside the indicated flow rates, please contact our technical department for feasibility verification.

COOLING PERFORMANCE OF VERSIONS FC3S_GC3S (NOMINAL AIR FLOW RATE)

Model	Air flow rate [m³/h]	Internal Air		External air conditions T DB [°C] / T WB [°C]														
		T DB	T WB	25 / 18						30 / 22			35 / 24			40 / 25		
		[°C]	[°C]	kWf	kWs	kWe	kWf	kWs	kWe	kWf	kWs	kWe	kWf	kWs	kWe	kWf	kWs	kWe
9.2	15400	24	17	84.6	66.4	18.4	83.5	63.9	20.5	81.9	65.4	23.1	79.5	71.0	25.8	78.5	72.9	27.0
		26	18	87.0	66.5	18.5	86.1	63.9	20.9	84.3	65.8	23.4	82.0	71.3	26.1	81.1	73.6	27.1
		27	19	87.9	68.4	18.6	86.7	66.3	20.9	85.1	68.0	23.4	82.7	73.8	26.2	81.9	75.8	27.2
		28	20	89.1	68.4	18.7	88.3	66.3	21.0	86.9	65.9	23.6	83.9	74.0	26.3	83.2	76.0	27.3
		30	22	92.4	65.8	18.8	91.2	64.1	21.2	89.5	65.9	23.8	87.1	71.3	26.5	86.3	73.3	27.6
10.2	17600	24	17	92.7	74.3	21.4	92.2	71.2	23.9	90.5	72.8	26.7	87.8	78.7	29.5	87.0	80.8	30.5
		26	18	95.5	73.9	21.8	95.0	71.2	24.2	93.0	73.1	26.9	90.6	78.6	29.6	89.5	81.1	30.8
		27	19	96.4	76.2	21.8	95.6	73.7	24.3	93.9	75.5	27.0	91.3	81.6	29.7	90.4	83.8	30.8
		28	20	97.7	76.2	21.9	96.8	73.8	24.4	95.4	73.3	27.2	92.4	81.8	29.8	91.6	83.9	31.0
		30	22	101.1	73.0	22.1	100.3	71.1	24.6	98.3	72.9	27.4	95.6	78.8	30.1	94.7	80.8	31.3
12.2	20900	24	17	113.9	89.3	24.1	113.2	86.8	26.9	111.7	89.4	29.8	108.3	98.7	33.1	107.4	98.5	34.6
		26	18	117.5	89.2	24.4	117.1	86.7	27.2	115.3	89.9	30.1	111.3	99.2	33.4	110.5	98.9	34.9
		27	19	118.8	92.4	24.4	118.0	90.1	27.2	116.3	93.6	30.2	112.7	103.0	33.4	111.5	102.3	34.9
		28	20	120.4	92.2	24.6	120.0	90.0	27.3	118.4	90.3	30.4	114.3	103.0	33.5	113.1	102.4	35.1
		30	22	124.7	88.2	24.8	124.1	86.6	27.6	121.9	90.2	30.6	118.2	96.3	34.0	116.9	98.8	35.3
13.2	23650	24	17	126.8	101.3	28.7	126.3	97.0	32.2	124.2	98.7	36.0	120.7	106.3	39.8	119.6	108.8	41.3
		26	18	130.9	100.6	29.1	130.0	97.2	32.6	127.3	99.3	36.4	124.4	106.6	40.1	122.8	109.3	41.7
		27	19	132.2	103.5	29.2	131.0	100.2	32.7	128.8	102.3	36.5	125.4	110.2	40.3	124.3	112.8	41.8
		28	20	134.0	103.4	29.3	132.7	100.3	32.9	130.9	99.4	36.7	127.1	110.2	40.5	125.9	113.1	42.0
		30	22	138.2	99.6	29.6	136.9	96.9	33.2	134.7	99.0	37.1	131.0	106.3	40.9	129.9	109.0	42.4
14.2	25300	24	17	137.6	110.2	33.0	137.6	106.0	36.8	135.9	107.2	40.9	132.7	114.0	45.3	131.5	116.0	47.1
		26	18	141.9	109.8	33.3	141.5	106.1	37.1	139.6	107.5	41.2	136.6	114.2	45.7	135.0	116.3	47.6
		27	19	143.6	112.5	33.3	143.3	108.8	37.2	141.3	110.4	41.3	137.9	117.4	45.8	136.5	119.6	47.7
		28	20	145.7	112.3	33.5	145.3	108.8	37.3	143.7	107.5	41.5	140.0	117.4	46.0	138.3	119.4	47.9
		30	22	150.7	108.1	33.8	149.9	105.3	37.7	147.7	107.1	41.9	144.3	113.6	46.4	142.8	115.6	48.3
16.2	27500	24	17	152.1	120.7	37.2	151.3	115.9	41.3	148.8	116.9	45.9	145.3	123.8	50.4	144.0	125.9	52.2
		26	18	156.4	120.4	37.6	155.6	115.9	41.7	153.1	117.2	46.2	149.3	124.0	50.7	147.8	126.2	52.5
		27	19	158.2	123.3	37.7	157.1	119.0	41.9	154.9	120.2	46.4	151.1	127.4	50.8	149.1	129.7	52.8
		28	20	160.5	123.0	37.9	159.5	118.8	42.1	157.4	117.0	46.6	152.9	127.5	51.0	151.5	129.6	53.0
		30	22	165.6	118.6	38.3	164.3	115.0	42.6	161.4	116.5	47.1	157.8	123.2	51.6	156.3	125.4	53.4

KWf: refrigeration capacity [kW]

kWs: sensible cooling capacity [kW]

kWe: electrical power absorbed by the compressors [kW]

The performance values are related to operation with 30% external air and 70% recirculation air

HEATING PERFORMANCE OF VERSIONS FC3S_GC3S (NOMINAL AIR FLOW RATE)

Model	Air flow rate [m³/h]	Internal Air		Internal air conditions T DB [°C]											
		T DB [°C]	T WB [°C]	10		15		18		19		20		25	
		Kwt	kWe	Kwt	kWe	Kwt	kWe	Kwt	kWe	Kwt	kWe	Kwt	kWe	Kwt	kWe
9.2	15400	-10.0	-10.3	67.2	12.9	66.0	13.5	65.1	14.0	64.6	14.1	64.4	14.3	63.3	15.2
		-5.0	-6.0	73.4	13.7	71.8	14.4	71.2	15.0	70.9	15.1	70.6	15.3	69.6	16.4
		0.0	-1.0	80.3	14.5	79.1	15.5	78.3	16.0	77.8	16.3	77.6	16.4	76.6	17.6
		5.0	4.0	87.6	15.6	86.5	16.6	85.8	17.3	85.4	17.5	85.2	17.7	84.1	19.1
		7.0	6.0	89.6	15.9	88.4	17.1	88.2	17.7	87.4	17.9	87.6	18.3	86.5	19.6
		10.0	9.0	94.2	16.6	92.9	17.7	92.1	18.5	91.9	18.8	91.5	19.1	90.7	20.4
		15.0	13.0	103.0	17.9	101.6	19.2	101.0	20.1	100.6	20.4	100.6	20.6	99.5	22.2
10.2	17600	-10.0	-10.3	69.7	14.8	68.8	15.9	68.2	16.6	68.0	16.9	67.7	17.1	66.8	18.4
		-5.0	-6.0	76.8	15.9	75.7	17.0	75.3	17.8	75.2	18.0	75.1	18.3	74.1	19.6
		0.0	-1.0	84.9	17.1	84.3	18.3	83.9	19.1	83.7	19.4	83.6	19.6	83.1	21.0
		5.0	4.0	93.9	18.4	93.3	19.7	93.0	20.5	92.8	20.8	92.8	21.1	91.8	22.6
		7.0	6.0	96.8	18.9	96.3	20.2	95.8	21.1	95.6	21.3	95.4	21.6	94.9	23.2
		10.0	9.0	102.0	19.7	101.3	21.1	101.1	22.0	100.8	22.3	100.3	22.6	100.0	24.2
		15.0	13.0	112.2	21.3	111.6	22.8	111.1	23.8	111.0	24.1	110.5	24.4	109.7	26.1
12.2	20900	-10.0	-10.3	82.7	16.2	81.5	17.6	80.8	18.3	80.6	18.6	80.2	18.9	79.2	20.3
		-5.0	-6.0	92.4	17.5	91.6	18.9	90.9	19.8	90.9	20.0	90.8	20.3	90.0	21.9
		0.0	-1.0	103.1	19.0	102.3	20.4	101.9	21.3	101.8	21.7	101.6	21.9	100.8	23.6
		5.0	4.0	115.0	20.6	113.5	22.1	113.4	23.1	113.4	23.4	113.1	23.8	112.3	25.5
		7.0	6.0	118.5	21.2	117.9	22.7	117.3	23.8	117.0	24.0	117.1	24.4	116.4	26.3
		10.0	9.0	124.8	22.1	124.0	23.8	123.2	24.8	123.1	25.2	122.9	25.5	122.4	27.5
		15.0	13.0	138.7	24.1	136.8	25.7	136.0	26.9	136.1	27.4	135.8	27.7	134.8	29.7
13.2	23650	-10.0	-10.3	91.2	18.1	91.8	19.7	91.0	20.6	90.7	20.9	90.3	21.2	90.6	22.9
		-5.0	-6.0	103.3	19.7	102.6	21.3	102.2	22.2	102.2	22.6	102.1	22.9	101.8	24.7
		0.0	-1.0	115.9	21.5	114.8	23.1	114.8	24.2	114.6	24.6	114.3	24.9	113.6	26.8
		5.0	4.0	128.7	23.4	127.7	25.2	127.8	26.3	127.6	26.7	127.4	27.1	126.6	29.2
		7.0	6.0	133.2	24.0	132.3	25.9	131.8	27.1	131.7	27.6	131.8	27.9	130.8	30.0
		10.0	9.0	140.0	25.3	139.1	27.2	138.4	28.4	138.2	28.8	138.6	29.3	137.7	31.4
		15.0	13.0	154.2	27.6	154.0	29.6	152.7	30.9	152.3	31.4	152.2	31.9	151.1	34.2
14.2	25300	-10.0	-10.3	102.0	21.9	101.4	23.5	101.1	24.5	101.2	24.9	101.0	25.2	100.7	27.0
		-5.0	-6.0	115.7	23.8	113.8	25.5	113.1	26.5	112.7	26.9	112.4	27.3	112.1	29.2
		0.0	-1.0	130.5	26.1	129.4	27.9	129.1	29.2	129.1	29.5	128.5	29.9	127.6	32.0
		5.0	4.0	145.6	28.6	144.4	30.6	144.4	31.8	144.1	32.3	143.6	32.7	142.5	35.0
		7.0	6.0	150.1	29.4	149.6	31.5	149.3	32.9	148.9	33.3	149.0	33.8	147.1	36.1
		10.0	9.0	158.6	31.0	157.3	33.1	156.8	34.5	156.4	35.0	155.7	35.3	154.5	37.8
		15.0	13.0	175.5	34.0	174.0	36.3	172.6	37.7	172.1	38.2	172.1	38.8	169.9	41.1
16.2	27500	-10.0	-10.3	116.1	25.9	115.5	27.6	114.8	28.7	114.6	29.1	114.5	29.5	114.0	31.4
		-5.0	-6.0	130.6	28.1	129.6	29.9	129.3	31.2	129.1	31.5	129.0	31.9	128.6	34.1
		0.0	-1.0	146.5	30.6	145.6	32.6	145.1	33.9	145.0	34.3	144.7	34.8	143.9	37.1
		5.0	4.0	163.4	33.3	162.1	35.5	161.6	37.0	161.2	37.4	160.5	37.9	160.2	40.4
		7.0	6.0	167.5	34.2	166.8	36.5	166.4	38.0	166.2	38.5	166.2	39.0	165.1	41.6
		10.0	9.0	176.8	35.9	175.5	38.3	174.3	39.7	174.6	40.3	173.9	40.9	172.3	43.4
		15.0	13.0	195.4	39.3	193.3	41.8	192.1	43.4	191.5	43.9	191.3	44.5	190.0	47.2

kWt: heating capacity [kW]

kWe: electrical power absorbed by the compressors [kW]

The performance values are related to operation with 30% external air and 70% recirculation air

COOLING PERFORMANCE OF VERSION WITH HEAT RECOVERY UNIT (NOMINAL AIR FLOW RATE)

Model	Air flow rate [m³/h]	External air conditions T DB [°C] / T WB [°C]																										
		T DB		T WB		25 / 18				30 / 22				35 / 24				40 / 25				42 / 25.5						
		[°C]	[°C]	kWf+r	kWf	kWs+r	kWs	kWe	kWf+r	kWf	kWs+r	kWs	kWe	kWf+r	kWf	kWs+r	kWs	kWe	kWf+r	kWf	kWs+r	kWs	kWe					
9.2	15400	24	17	88.4	87.1	67.3	66.0	18.5	94.1	86.0	67.2	59.1	20.9	99.0	84.2	73.1	58.3	23.4	102.9	81.4	84.6	63.1	26.1	104.6	80.4	88.5	64.3	27.1
		26	18	-	-	-	-	-	93.9	88.5	66.5	61.1	21.1	98.9	86.8	72.4	60.3	23.7	102.8	84.0	84.0	65.2	26.4	104.4	82.9	88.1	66.6	27.4
		27	19	-	-	-	-	-	93.7	89.7	67.3	63.3	21.1	98.3	87.6	73.7	63.0	23.8	102.1	84.6	85.4	67.9	26.4	104.0	83.9	89.5	69.4	27.5
		28	20	-	-	-	-	-	93.5	90.8	67.0	64.3	21.2	98.4	89.0	73.2	63.8	23.8	102.1	86.0	85.1	69.0	26.5	103.9	85.1	89.5	70.7	27.7
		30	22	-	-	-	-	-	93.9	93.9	64.4	64.4	21.5	98.5	91.8	70.9	64.2	24.1	102.2	88.8	82.7	69.3	26.8	104.0	87.9	86.9	70.8	27.8
10.2	17600	24	17	96.6	95.1	74.0	72.5	21.7	103.5	94.5	74.3	65.3	24.2	109.2	92.6	81.2	64.6	26.9	113.7	89.6	93.6	69.5	29.5	115.7	88.6	97.9	70.8	30.7
		26	18	-	-	-	-	-	103.1	97.1	73.9	67.9	24.4	108.7	95.1	80.2	66.6	27.2	113.1	92.0	93.0	71.9	29.8	115.1	91.0	97.3	73.2	31.0
		27	19	-	-	-	-	-	102.5	98.0	74.5	70.0	24.5	108.1	96.1	81.2	69.2	27.3	112.5	92.9	94.2	74.6	29.9	114.7	92.1	98.7	76.1	31.1
		28	20	-	-	-	-	-	102.4	99.4	73.8	70.8	24.6	108.0	97.5	80.8	70.3	27.4	112.3	94.2	93.9	75.8	30.1	114.3	93.2	98.5	77.4	31.2
		30	22	-	-	-	-	-	102.4	102.4	70.9	70.9	24.9	107.8	100.3	78.0	70.5	27.6	112.1	97.0	90.9	75.8	30.3	114.2	96.1	95.4	77.3	31.4
12.2	20900	24	17	119.2	117.4	91.7	89.9	24.2	127.9	117.1	91.8	81.0	27.1	134.8	115.0	99.7	79.9	30.1	140.1	111.3	115.3	86.5	33.3	142.4	110.0	120.4	88.0	34.6
		26	18	-	-	-	-	-	127.4	120.2	90.8	83.6	27.4	134.3	118.1	98.8	82.6	30.5	139.5	114.3	114.5	89.3	33.6	141.7	112.9	119.7	90.9	35.0
		27	19	-	-	-	-	-	127.0	121.6	92.1	86.7	27.4	133.6	119.2	100.3	85.9	30.6	139.0	115.6	116.0	92.6	33.7	141.0	114.0	121.5	94.5	35.1
		28	20	-	-	-	-	-	126.7	123.1	91.4	87.8	27.6	133.1	120.5	100.0	87.4	30.7	138.4	116.8	115.8	94.2	33.9	140.7	115.5	121.2	96.0	35.2
		30	22	-	-	-	-	-	126.8	126.8	88.0	88.0	27.8	133.4	124.4	96.9	87.9	31.0	138.5	120.5	112.3	94.3	34.2	140.6	119.0	117.7	96.1	35.5
13.2	23650	24	17	132.6	130.6	101.7	99.7	29.0	141.9	129.9	101.7	89.7	32.6	149.6	127.6	110.4	88.4	36.3	155.7	123.7	127.1	95.1	40.1	158.3	122.3	132.7	96.7	41.7
		26	18	-	-	-	-	-	141.4	133.4	100.3	92.3	33.0	148.9	130.9	109.3	91.3	36.7	155.0	127.0	126.0	98.0	40.5	157.6	125.6	131.8	99.8	42.1
		27	19	-	-	-	-	-	140.8	134.8	101.5	95.5	33.1	148.3	132.3	110.6	94.6	36.9	154.4	128.4	127.6	101.6	40.7	157.1	127.1	133.6	103.6	42.2
		28	20	-	-	-	-	-	140.5	136.5	100.8	96.8	33.2	148.0	134.0	101.0	96.0	37.0	154.3	130.3	127.0	103.0	40.8	156.7	128.7	133.0	105.0	42.3
		30	22	-	-	-	-	-	140.7	140.7	96.7	96.7	33.5	148.0	138.0	106.2	96.2	37.3	153.8	133.8	123.2	103.2	41.1	156.4	132.4	129.3	105.3	42.7
14.2	25300	24	17	143.5	141.4	110.4	108.3	33.3	154.2	141.5	111.2	98.5	37.1	162.8	139.5	120.3	97.0	41.2	169.7	135.8	136.8	102.9	45.6	172.3	134.1	142.4	104.2	47.5
		26	18	-	-	-	-	-	154.2	145.7	109.2	100.7	37.4	162.5	143.4	118.5	99.4	41.5	169.2	139.5	135.2	105.5	46.0	171.7	137.8	140.8	106.9	48.0
		27	19	-	-	-	-	-	153.5	147.1	110.3	103.9	37.5	162.0	145.0	119.5	102.5	41.7	168.6	141.0	136.6	109.0	46.2	171.2	139.4	142.2	110.4	48.1
		28	20	-	-	-	-	-	153.6	149.4	109.1	104.9	37.7	161.9	147.1	118.7	103.9	41.9	168.3	142.8	135.7	110.2	46.4	170.9	141.2	141.4	111.7	48.3
		30	22	-	-	-	-	-	153.6	153.6	105.0	105.0	38.0	161.8	151.2	114.5	103.9	42.3	168.3	147.1	113.1	110.1	46.7	170.9	145.4	137.1	111.6	48.6
16.2	27500	24	17	158.8	156.5	121.2	118.9	37.7	169.6	155.9	121.6	107.9	41.9	178.1	153.1	113.1	1106.1	46.4	185.4	149.0	148.7	112.3	50.7	188.5	147.5	154.6	113.6	52.5
		26	18	-	-	-	-	-	169.3	160.2	119.6	110.5	42.2	177.9	157.4	129.2	1108.7	46.7	184.9	153.0	146.9	115.0	51.2	187.9	151.5	152.9	116.5	53.0
		27	19	-	-	-	-	-	168.6	161.8	120.6	113.8	42.5	177.2	159.0	130.3	112.1	46.9	184.2	154.6	148.3	118.7	51.4	187.1	152.9	154.4	120.2	53.2
		28	20	-	-	-	-	-	168.7	164.1	119.5	114.9	42.6	177.0	161.1	129.3	113.4	47.1	184.0	156.7	147.3	120.0	51.6	186.8	154.9	153.5	121.6	53.4
		30	22	-	-	-	-	-	169.2	169.2	114.3	114.3	42.9	177.2	165.8	124.6	113.2	47.6	184.2	161.4	142.6	1119.8	52.0	186.8	159.5	148.8	121.5	53.9

- : free cooling conditions

kWf+r: refrigeration capacity + recovery [kW]

kWf: refrigeration capacity [kW]

kWs+r: sensible cooling capacity + recovery [kW]

kWs: sensible cooling capacity [kW]

kWe: electrical power absorbed by the compressors [kW]

The performance values are related to operation with 50% external air, 50% recirculation air and with static recovery

HEATING PERFORMANCE OF VERSION WITH HEAT RECOVERY UNIT (NOMINAL AIR FLOW RATE)

Model	Air flow rate [m³/h]	Internal air conditions T DB [°C]																
		Internal Air		T DB		T WB		10		15		18		19		20		
		[°C]	[°C]	kWt+r	kWt	kWe												
9.2	15400	-10.0	-10.3	97.3	68.9	13.3	103.7	67.0	13.7	108.1	66.2	14.1	109.8	65.7	14.3	113.9	65.2	14.6
9.2	15400	-5.0	-6.0	95.4	74.5	14.1	101.4	73.0	14.6	105.7	71.9	15.1	107.0	71.7	15.2	110.3	71.0	15.7
9.2	15400	0.0	-1.0	93.9	80.5	15.2	100.4	79.5	15.7	104.3	78.8	16.1	105.7	78.8	16.3	108.4	78.0	16.8
9.2	15400	5.0	4.0	93.8	87.1	16.5	99.6	86.2	17.2	103.3	85.8	17.7	104.2	85.4	17.8	106.2	84.9	18.1
9.2	15400	7.0	6.0	92.9	88.9	17.1	98.7	88.0	17.7	102.7	87.9	18.3	103.3	87.2	18.4	105.8	87.4	18.4
9.2	15400	10.0	9.0	93.2	93.2	17.9	98.8	92.1	18.7	102.4	91.7	19.3	103.5	91.4	19.5	104.9	91.5	19.7
9.2	15400	15.0	13.0	-	-	-	100.8	100.8	20.8	104.2	100.2	21.4	105.3	99.9	21.6	106.5	99.8	21.8
9.2	15400	15.0	13.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10.2	17600	-10.0	-10.3	101.9	70.1	14.5	110.4	69.2	15.6	115.5	68.5	16.3	117.9	68.4	16.6	122.5	67.9	17.2
10.2	17600	-5.0	-6.0	100.4	77.0	15.7	108.1	76.3	16.8	113.3	75.4	17.5	114.8	75.2	17.8	119.1	75.0	18.5
10.2	17600	0.0	-1.0	99.7	84.6	17.5	107.5	84.1	18.3	112.4	83.8	18.9	114.1	83.9	19.1	117.5	83.4	19.8
10.2	17600	5.0	4.0	101.0	93.5	19.3	107.9	92.8	20.2	112.4	92.8	20.8	113.7	92.6	21.0	116.3	92.4	21.3
10.2	17600	7.0	6.0	100.2	95.7	19.9	108.1	96.1	21.0	111.9	95.3	21.6	113.3	95.2	21.8	115.8	95.1	21.8
10.2	17600	10.0	9.0	100.7	100.7	21.0	108.3	100.8	22.1	112.2	100.2	22.6	113.5	99.9	23.0	115.1	100.0	23.2
10.2	17600	15.0	13.0	-	-	-	110.7	110.7	24.4	114.6	110.1	25.1	115.9	109.9	25.3	117.5	110.0	25.6
10.2	17600	15.0	13.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12.2	20900	-10.0	-10.3	121.1	83.1	15.7	131.2	81.9	17.0	137.4	81.3	17.9	140.2	81.0	18.0	145.7	80.4	18.8
12.2	20900	-5.0	-6.0	120.6	92.6	17.3	129.7	91.7	18.5	136.7	91.4	19.2	138.3	91.0	19.5	143.0	90.3	20.3
12.2	20900	0.0	-1.0	120.8	102.8	19.3	129.9	101.9	20.1	136.0	101.8	20.9	137.8	101.7	21.2	142.0	101.2	21.9
12.2	20900	5.0	4.0	122.7	113.7	21.4	131.2	113.2	22.5	136.5	113.1	23.1	138.1	112.9	23.5	141.3	112.8	23.8
12.2	20900	7.0	6.0	123.1	117.7	22.3	131.6	117.2	23.4	136.7	116.9	24.1	138.2	116.6	24.4	141.2	116.5	24.5
12.2	20900	10.0	9.0	123.5	123.5	23.6	131.8	122.8	24.7	137.0	122.6	25.4	138.7	122.5	25.8	140.7	122.7	26.0
12.2	20900	15.0	13.0	-	-	-	135.7	135.7	27.4	140.6	135.2	28.3	142.0	134.8	28.5	143.8	134.8	28.8
12.2	20900	15.0	13.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13.2	23650	-10.0	-10.3	134.7	92.4	17.8	145.1	90.3	19.1	153.8	91.4	20.0	156.9	91.1	20.4	163.0	90.4	21.3
13.2	23650	-5.0	-6.0	134.5	103.3	19.5	144.4	102.1	20.9	152.3	101.9	21.8	154.4	101.8	22.1	160.2	101.6	23.1
13.2	23650	0.0	-1.0	135.3	115.3	21.9	145.5	114.3	23.1	152.4	114.3	23.8	154.0	113.8	24.1	159.3	113.9	25.1
13.2	23650	5.0	4.0	138.0	128.0	24.4	147.4	127.4	25.7	152.5	126.5	26.6	155.0	127.0	26.9	158.6	126.9	27.3
13.2	23650	7.0	6.0	138.2	132.2	25.5	147.7	131.7	26.8	152.9	130.9	27.6	155.4	131.4	27.9	158.5	131.0	28.0
13.2	23650	10.0	9.0	138.3	138.3	27.0	147.8	137.8	28.4	153.5	137.5	29.4	155.5	137.5	29.5	157.4	137.4	29.9
13.2	23650	15.0	13.0	-	-	-	151.8	151.8	31.6	157.7	151.7	32.7	159.3	151.3	33.0	161.3	151.3	33.3
13.2	23650	15.0	13.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14.2	25300	-10.0	-10.3	147.3	102.5	21.7	159.5	101.4	23.1	168.7	101.4	24.0	170.9	101.2	24.4	177.9	100.9	25.4
14.2	25300	-5.0	-6.0	149.1	116.1	23.8	160.0	115.2	25.3	167.4	114.0	26.2	169.5	113.8	26.6	174.8	112.7	27.6
14.2	25300	0.0	-1.0	151.6	130.4	26.8	162.8	129.8	27.9	169.7	129.4	28.8	171.7	129.1	29.2	177.0	128.9	30.2
14.2	25300	5.0	4.0	156.0	145.4	29.8	165.8	144.6	31.4	171.2	143.6	32.3	173.0	143.3	32.6	177.5	143.9	33.1
14.2	25300	7.0	6.0	155.3	148.9	30.9	165.9	148.9	32.6	172.8	149.5	33.6	174.7	149.2	33.9	177.8	148.7	33.9
14.2	25300	10.0	9.0	158.0	158.0	33.0	167.7	157.1	34.6	173.6	156.6	35.6	175.5	156.4	36.0	177.7	156.5	36.4
14.2	25300	15.0	13.0	-	-	-	173.4	173.4	38.7	178.5	172.1	39.7	180.3	171.8	40.1	182.4	171.8	40.5
14.2	25300	15.0	13.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16.2	27500	-10.0	-10.3	163.7	115.6	25.7	177.3	114.9	27.3	187.2	114.9	28.3	189.6	114.7	28.7	196.7	114.0	29.6
16.2	27500	-5.0	-6.0	165.3	129.8	28.0	177.3	129.2	29.6	186.3	128.9	30.8	188.7	128.8	31.2	195.2	128.5	32.3
16.2	27500	0.0	-1.0	168.1	145.3	31.3	180.6	145.1	32.6	187.7	144.4	33.4	190.0	144.3	33.9	195.8	144.2	35.1
16.2	27500	5.0	4.0	173.0	161.6	34.7	183.5	160.7	36.3	190.1	160.5	37.3	192.0	160.1	37.7	196.4	160.3	38.2
16.2	27500	7.0	6.0	173.1	166.3	35.8	184.8	166.6	37.7	190.5	165.5	38.8	193.1	165.8	39.1	196.6	165.3	39.2
16.2	27500	10.0	9.0	175.5	175.5	38.0	186.0	174.6	39.9	191.7	173.5	40.9	193.7	173.2	41.3	196.0	173.2	41.8
16.2	27500	15.0	13.0	-	-	-	191.2	191.2	44.3	197.3	190.5	45.5	199.3	190.2	45.9	201.8	190.4	46.5
16.2	27500	15.0	13.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

- : free heating conditions

kWt+r: heating capacity + recovery [kW]

kWt: heating capacity [kW]

kWe: electrical power absorbed by the compressors [kW]

The performance values are related to operation with 50% external air, 50% recirculation air and with static recovery

COOLING PERFORMANCE OF VERSIONS FC3S_GC3S (HE) (NOMINAL AIR FLOW RATE)

Model	Air flow rate [m³/h]	Internal Air		External air conditions T DB [°C] / T WB [°C]														
		T DB [°C]	T WB [°C]	25 / 18				30 / 22				35 / 24			40 / 25			
		kWf	kWs	kWe	kWf	kWs	kWe	kWf	kWs	kWe	kWf	kWs	kWe	kWf	kWs	kWe		
9.2	15400	24	17	88.4	69.2	16.0	88.4	66.9	17.7	87.0	68.4	19.8	84.4	74.3	22.0	83.3	76.2	22.9
		26	18	90.9	69.2	16.1	90.8	67.1	17.9	89.3	68.8	20.0	86.8	74.5	22.1	85.8	76.5	23.1
		27	19	92.0	71.2	16.2	91.9	69.0	18.0	90.2	70.9	20.1	87.7	77.0	22.2	86.4	79.1	23.2
		28	20	93.2	71.2	16.3	92.8	69.3	18.1	91.4	71.2	20.1	88.7	77.2	22.3	87.6	78.9	23.2
		30	22	96.3	68.4	16.5	95.9	66.9	18.3	94.3	68.6	20.4	91.8	74.3	22.5	90.6	76.3	23.5
10.2	17600	24	17	98.8	78.7	20.2	98.7	76.1	22.6	97.5	77.6	25.2	95.1	83.7	28.1	94.1	85.6	29.3
		26	18	101.6	78.6	20.4	101.4	76.2	22.8	100.1	77.9	25.5	97.9	83.8	28.4	96.6	85.9	29.6
		27	19	102.8	80.8	20.5	102.4	78.5	23.0	101.2	80.1	25.6	98.7	86.5	28.5	97.7	88.6	29.7
		28	20	104.2	80.7	20.6	103.8	78.5	23.0	102.3	80.4	25.7	100.1	86.5	28.6	98.9	88.7	29.8
		30	22	107.5	77.5	20.9	107.1	75.9	23.3	105.5	77.8	25.9	103.2	83.5	28.8	102.1	85.5	30.0
12.2	20900	24	17	117.9	93.0	22.3	117.6	90.0	24.8	116.1	92.0	27.6	113.1	99.6	30.8	111.9	102.1	32.1
		26	18	121.4	92.9	22.6	121.0	90.3	25.1	119.6	92.5	27.8	116.8	100.0	31.0	115.4	102.6	32.3
		27	19	122.4	95.4	22.7	122.2	93.1	25.2	120.3	95.6	28.0	117.6	103.3	31.1	116.5	105.9	32.4
		28	20	124.4	95.6	22.7	123.9	93.1	25.3	122.2	95.6	28.1	119.2	103.5	31.2	117.9	106.2	32.6
		30	22	128.5	91.9	23.0	127.9	89.9	25.6	126.0	92.5	28.4	123.4	99.8	31.5	122.2	102.3	32.9
13.2	23650	24	17	129.5	103.9	25.8	128.9	100.2	28.6	127.1	102.3	31.8	124.0	110.2	35.4	122.8	112.8	36.9
		26	18	133.2	103.7	26.1	132.6	100.5	28.9	130.8	102.7	32.1	127.9	110.5	35.8	126.4	113.3	37.3
		27	19	134.8	106.7	26.2	134.5	103.1	29.1	132.1	105.7	32.3	128.9	113.8	36.0	127.8	116.8	37.5
		28	20	136.6	106.6	26.3	135.8	103.5	29.2	133.8	106.0	32.5	130.7	114.2	36.1	129.3	117.0	37.7
		30	22	141.2	102.5	26.6	140.2	100.0	29.6	138.0	102.5	32.9	135.1	110.2	36.5	133.9	112.8	38.1
14.2	25300	24	17	143.0	115.9	29.6	142.9	112.0	32.8	141.4	113.8	36.4	138.9	121.3	40.4	137.9	123.4	42.1
		26	18	147.3	115.7	29.9	147.3	112.1	33.1	145.7	114.1	36.7	143.0	121.6	40.7	141.9	124.0	42.4
		27	19	149.2	118.6	30.0	148.9	115.1	33.3	147.6	116.9	37.0	144.2	125.2	40.9	143.1	127.7	42.6
		28	20	151.5	118.3	30.2	151.0	115.0	33.5	149.2	117.3	37.1	146.4	125.2	41.0	145.2	127.7	42.8
		30	22	156.5	113.9	30.5	156.0	111.2	33.8	154.2	113.6	37.4	151.0	121.0	41.5	149.8	123.5	43.2
16.2	27500	24	17	161.4	130.5	33.2	161.2	126.0	36.9	159.4	127.6	40.9	156.5	135.6	45.3	154.5	138.4	47.3
		26	18	166.4	129.9	33.6	165.9	125.9	37.3	163.9	127.9	41.4	160.7	135.9	45.8	159.4	138.4	47.7
		27	19	168.3	133.3	33.7	167.8	129.2	37.5	166.0	131.0	41.7	162.4	139.8	46.0	160.5	142.6	47.9
		28	20	170.8	132.9	33.9	170.1	129.1	37.7	167.9	131.4	41.8	164.5	139.8	46.2	162.9	142.6	48.1
		30	22	176.3	128.0	34.4	175.5	124.8	38.1	173.1	127.1	42.3	169.3	135.1	46.8	168.0	137.6	48.5

kWf: refrigeration capacity [kW]

kWs: sensible cooling capacity [kW]

kWe: electrical power absorbed by the compressors [kW]

The performance values are related to operation with 30% external air and 70% recirculation air

HEATING PERFORMANCE OF VERSIONS FC3S_GC3S (HE) (NOMINAL AIR FLOW RATE)

Model	Air flow rate [m³/h]	Internal Air		Internal air conditions T DB [°C]											
		T DB [°C]	T WB [°C]	10		15		18		19		20		25	
		Kwt	kWe	Kwt	kWe	Kwt	kWe	Kwt	kWe	Kwt	kWe	Kwt	kWe	Kwt	kWe
9.2	15400	-10.0	-10.3	62.4	11.0	61.5	11.9	61.0	12.4	60.8	12.6	61.8	12.8	61.2	13.8
		-5.0	-6.0	71.1	12.1	70.5	13.0	70.0	13.6	69.9	13.8	69.8	14.0	69.4	15.0
		0.0	-1.0	80.1	13.3	79.5	14.3	79.4	14.9	79.2	15.1	78.8	15.3	78.5	16.5
		5.0	4.0	90.1	14.6	88.9	15.7	88.6	16.3	88.5	16.6	88.1	16.8	87.5	18.0
		7.0	6.0	92.7	15.1	92.2	16.2	91.3	16.9	91.4	17.1	90.7	17.3	90.5	18.6
		10.0	9.0	98.0	15.9	97.2	17.1	96.4	17.8	96.8	18.0	96.3	18.3	95.2	19.5
		15.0	13.0	108.9	17.6	107.5	18.7	106.6	19.5	107.5	19.8	107.0	20.1	105.6	21.4
10.2	17600	-10.0	-10.3	71.2	13.7	70.8	14.8	70.3	15.4	70.3	15.6	70.2	15.8	69.8	17.0
		-5.0	-6.0	80.1	14.9	79.7	16.0	79.4	16.7	79.3	17.0	79.2	17.2	79.1	18.5
		0.0	-1.0	90.0	16.2	89.3	17.4	89.2	18.2	89.0	18.5	89.1	18.8	88.6	20.2
		5.0	4.0	100.7	17.7	100.3	19.1	99.7	19.9	99.4	20.2	99.6	20.5	98.9	22.0
		7.0	6.0	103.5	18.2	102.8	19.6	102.6	20.5	102.8	20.8	102.1	21.0	101.9	22.6
		10.0	9.0	109.5	19.2	109.2	20.6	108.3	21.5	108.7	21.9	108.4	22.2	107.3	23.8
		15.0	13.0	121.8	21.1	120.7	22.6	119.7	23.6	119.4	23.9	119.6	24.3	118.7	26.0
12.2	20900	-10.0	-10.3	83.2	15.8	82.0	16.9	81.3	17.5	81.1	17.7	82.3	18.0	81.0	19.2
		-5.0	-6.0	94.9	17.2	94.0	18.3	93.3	19.0	92.8	19.2	92.9	19.5	91.1	20.7
		0.0	-1.0	107.5	18.7	106.0	19.9	105.8	20.7	105.5	21.0	105.1	21.2	104.3	22.7
		5.0	4.0	120.2	20.3	119.0	21.6	118.1	22.5	118.0	22.8	117.5	23.1	116.5	24.6
		7.0	6.0	123.6	20.9	122.9	22.3	121.8	23.1	121.7	23.5	120.9	23.7	120.7	25.4
		10.0	9.0	131.3	22.0	129.6	23.4	129.6	24.3	129.1	24.6	128.4	24.9	127.2	26.7
		15.0	13.0	146.8	24.1	144.0	25.6	143.7	26.6	142.5	26.9	142.6	27.3	140.8	29.2
13.2	23650	-10.0	-10.3	90.8	17.8	89.6	18.9	90.7	19.7	90.4	19.9	90.0	20.2	88.8	21.4
		-5.0	-6.0	105.0	19.4	103.5	20.5	102.7	21.3	90.4	21.5	102.4	21.8	100.9	23.1
		0.0	-1.0	118.1	21.0	116.9	22.3	116.4	23.1	90.4	23.4	115.5	23.7	114.6	25.2
		5.0	4.0	132.4	22.8	131.2	24.3	129.9	25.2	129.7	25.5	129.3	25.8	128.0	27.5
		7.0	6.0	136.2	23.5	135.1	25.0	134.0	25.9	133.6	26.2	133.0	26.5	132.1	28.3
		10.0	9.0	144.8	24.7	142.8	26.3	141.6	27.2	141.1	27.5	141.3	27.9	139.6	29.8
		15.0	13.0	160.2	27.0	158.1	28.7	156.6	29.8	156.3	30.2	155.6	30.6	154.5	32.7
14.2	25300	-10.0	-10.3	105.3	20.1	104.1	21.5	102.5	22.3	103.3	22.6	103.1	22.9	102.3	24.5
		-5.0	-6.0	118.3	22.0	117.2	23.4	116.6	24.3	116.2	24.7	115.7	25.0	114.9	26.6
		0.0	-1.0	136.2	24.3	134.3	25.8	133.1	26.8	244.7	49.5	132.0	27.4	130.2	29.2
		5.0	4.0	152.6	26.7	150.6	28.4	149.7	29.4	132.5	27.1	148.6	30.2	146.7	32.2
		7.0	6.0	157.3	27.5	156.1	29.3	154.8	30.4	149.3	29.8	153.6	31.2	152.6	33.3
		10.0	9.0	166.3	29.0	164.3	30.8	163.2	32.0	162.9	32.5	162.7	32.9	160.5	35.0
		15.0	13.0	185.1	32.1	182.1	34.1	181.1	35.4	180.3	35.8	179.8	36.3	177.5	38.5
16.2	27500	-10.0	-10.3	119.1	22.4	117.9	24.1	116.9	25.1	117.1	25.5	116.9	25.8	116.0	27.7
		-5.0	-6.0	134.5	24.7	133.7	26.4	132.5	27.5	132.7	27.9	132.6	28.4	131.9	30.3
		0.0	-1.0	152.3	27.2	151.3	29.1	150.7	30.3	150.2	30.7	150.1	31.2	148.6	33.3
		5.0	4.0	171.2	30.0	169.6	32.1	168.5	33.4	168.4	33.8	168.2	34.3	166.9	36.6
		7.0	6.0	175.7	31.0	174.5	33.1	174.1	34.5	173.6	34.9	172.8	35.3	171.6	37.9
		10.0	9.0	186.2	32.7	184.8	34.9	183.3	36.3	183.8	36.8	182.9	37.3	180.6	39.8
		15.0	13.0	207.1	36.2	204.3	38.5	204.8	40.1	204.2	40.6	203.3	41.0	200.8	43.5

kWt: heating capacity [kW]

kWe: electrical power absorbed by the compressors [kW]

The performance values are related to operation with 30% external air and 70% recirculation air

COOLING PERFORMANCE OF VERSION WITH HEAT RECOVERY UNIT (HE) (NOMINAL AIR FLOW RATE)

Model	Air flow rate [m³/h]	External air conditions T DB [°C] / T WB [°C]																																																
		T DB		T WB		25 / 18									30 / 22									35 / 24									40 / 25									42 / 25.5								
		[°C]	[°C]	kWf+r	kWf	kWs+r	kWs	kWe	kWf+r	kWf	kWs+r	kWs	kWe	kWf+r	kWf	kWs+r	kWs	kWe	kWf+r	kWf	kWs+r	kWs	kWe	kWf+r	kWf	kWs+r	kWs	kWe	kWf+r	kWf	kWs+r	kWs	kWe																	
9.2	15400	24	17	89.7	88.4	69.6	68.3	16.0	96.5	88.4	69.5	61.4	17.8	101.7	86.9	75.6	60.8	19.9	105.6	84.1	87.0	65.5	22.0	107.1	82.9	91.0	66.8	22.9																						
		26	18	-	-	-	-	-	96.4	91.0	68.6	63.2	18.0	101.4	89.3	74.9	62.8	20.0	105.2	86.4	86.6	67.8	22.2	106.9	85.4	90.6	69.1	23.1																						
		27	19	-	-	-	-	-	96.1	92.1	69.6	65.6	18.1	101.2	90.5	75.9	65.2	20.1	105.0	87.5	87.8	70.3	22.2	106.4	86.3	92.0	71.9	23.1																						
		28	20	-	-	-	-	-	96.0	93.3	69.2	66.5	18.2	101.2	91.8	75.5	66.1	20.2	104.6	88.5	87.6	71.5	22.4	106.0	87.2	91.7	72.9	23.3																						
		30	22	-	-	-	-	-	96.4	96.4	66.4	66.4	18.3	101.2	94.5	73.0	66.3	20.4	104.7	91.3	85.1	71.7	22.5	106.1	90.0	89.2	73.1	23.5																						
		24	17	100.3	98.8	79.3	77.8	20.3	107.9	98.9	79.3	70.3	22.7	114.0	97.4	85.9	69.3	25.4	118.5	94.4	99.0	74.9	28.1	120.8	93.7	102.9	75.8	29.3																						
		26	18	*	*	*	*	*	107.7	101.7	78.2	72.2	22.9	113.7	100.1	85.1	71.5	25.5	118.4	97.3	97.9	76.8	28.4	120.3	96.2	102.3	78.2	29.6																						
		27	19	*	*	*	*	*	107.3	102.8	79.2	74.7	23.0	113.3	101.3	86.1	74.1	25.6	118.0	98.4	99.2	79.6	28.5	119.8	97.2	103.7	81.1	29.7																						
		28	20	*	*	*	*	*	107.3	104.3	78.6	75.6	23.1	113.2	102.7	85.6	75.1	25.7	117.8	99.7	98.9	80.8	28.6	119.6	98.5	103.4	82.3	29.8																						
		30	22	*	*	*	*	*	107.4	107.4	75.4	75.4	23.3	113.2	105.7	82.7	75.2	26.0	117.7	102.6	95.9	80.8	28.8	119.5	101.4	100.4	82.3	30.0																						
10.2	17600	24	17	119.6	117.8	93.6	91.8	22.4	128.7	117.9	93.5	82.7	25.0	136.1	116.3	101.7	81.9	27.7	141.8	113.0	117.2	88.4	30.8	144.2	111.8	122.5	90.1	32.1																						
		26	18	-	-	-	-	-	128.5	121.3	92.5	85.3	25.2	135.7	119.5	100.9	84.7	27.9	141.4	116.2	116.5	91.3	31.0	143.7	114.9	121.9	93.1	32.3																						
		27	19	-	-	-	-	-	128.2	122.8	93.7	88.3	25.2	135.3	120.9	102.2	87.8	28.0	140.8	117.4	118.3	94.9	31.1	143.1	116.1	123.7	96.7	32.5																						
		28	20	-	-	-	-	-	128.2	124.6	93.0	89.4	25.4	135.2	122.6	101.7	89.1	28.2	140.8	119.2	117.6	96.0	31.2	142.9	117.7	123.3	98.1	32.6																						
		30	22	-	-	-	-	-	128.5	128.5	89.5	89.9	25.6	135.4	126.4	98.3	89.3	28.5	140.7	122.7	114.5	96.5	31.5	143.0	121.4	119.9	98.3	32.9																						
		24	17	131.6	129.6	104.4	102.4	25.9	141.3	129.3	104.4	92.4	28.8	149.2	127.2	113.5	91.5	31.9	155.8	123.8	130.5	98.5	35.4	158.5	122.5	136.1	100.1	37.0																						
		26	18	-	-	-	-	-	141.1	133.1	1103.0	95.0	29.1	148.9	130.9	112.2	94.2	32.3	155.3	127.3	129.6	101.6	35.8	157.9	125.9	135.4	103.4	37.3																						
		27	19	-	-	-	-	-	140.6	134.6	104.4	98.4	29.2	148.4	132.4	113.6	97.6	32.4	154.7	128.7	131.2	105.2	35.9	157.3	127.3	137.1	107.1	37.5																						
		28	20	-	-	-	-	-	140.5	136.5	103.6	99.6	29.3	148.4	134.4	112.6	98.6	32.5	154.5	130.5	130.7	106.7	36.1	157.0	129.0	136.7	108.7	37.6																						
		30	22	-	-	-	-	-	140.8	140.8	99.5	99.5	29.7	148.3	138.3	109.1	99.1	32.9	154.5	134.5	126.6	106.6	36.5	157.1	133.1	132.8	108.8	38.0																						
12.2	20900	24	17	145.4	143.3	1116.5	114.4	29.7	156.4	143.7	1116.6	103.9	32.9	165.2	141.9	126.0	102.7	36.5	172.3	138.4	143.5	109.6	40.4	175.2	137.0	149.4	111.2	42.0																						
		26	18	-	-	-	-	-	156.1	147.6	1115.1	106.6	33.3	165.2	146.1	124.4	105.3	36.8	171.9	142.2	142.3	112.6	40.7	174.8	140.9	148.3	114.4	42.4																						
		27	19	-	-	-	-	-	155.9	149.5	1116.2	109.8	33.4	164.5	147.5	125.9	108.9	37.0	171.4	143.8	143.9	116.3	40.9	174.2	142.4	150.0	118.2	42.6																						
		28	20	-	-	-	-	-	155.9	151.7	1115.3	111.1	33.5	164.6	149.8	125.0	110.2	37.1	171.4	145.9	143.2	117.7	41.0	174.3	144.6	149.4	119.7	42.7																						
		30	22	-	-	-	-	-	156.4	156.4	1110.8	110.8	33.9	164.9	154.3	120.9	110.3	37.5	171.7	150.5	138.7	117.5	41.4	174.5	149.0	145.0	119.5	43.1																						
		24	17	164.0	161.7	131.1	1128.8	33.3	175.5	161.8	130.6	116.9	37.1	184.5	159.5	140.4	115.4	41.2	192.1	155.7	159.3	122.9	45.4	195.1	154.1	165.7	124.7	47.2																						
		26	18	-	-	-	-	-	175.5	166.4	1129.0	119.9	37.5	184.7	164.2	123.8	118.3	41.6	192.0	160.1	158.0	126.1	45.8	194.7	158.3	164.4	128.0	47.7																						
		27	19	-	-	-	-	-	175.2	168.4	1130.3	123.5	37.6	184.3	166.1	140.5	122.3	41.7	191.4	161.8	159.9	130.3	46.0	194.3	160.1	166.3	132.1	47.8																						
		28	20	-	-	-	-	-	175.4	170.8	129.3	124.7	37.8	184.3	168.4	139.6	123.7	41.9	191.3	164.0	159.2	131.9	46.2	194.0	162.1	165.8	133.9	48.0																						
		30	22	-	-	-	-	-	176.1	176.1	1124.4	124.4	38.2	184.7	173.3	134.9	123.5	42.3	191.6	168.8	154.4	131.6	46.7	194.4	167.1	161.0	133.7	48.5																						

- : free cooling conditions

kWf+r: refrigeration capacity + recovery [kW]

kWf: refrigeration capacity [kW]

kWs+r: sensible cooling capacity + recovery [kW]

kWs: sensible cooling capacity [kW]

kWe: electrical power absorbed by the compressors [kW]

The performance values are related to operation with 50% external air, 50% recirculation air and with static recovery

HEATING PERFORMANCE OF VERSION WITH HEAT RECOVERY UNIT (HE) (NOMINAL AIR FLOW RATE)

Model	Air flow rate [m³/h]	Internal air conditions T DB [°C]																							
		Internal Air		T DB		T WB		10									15								
		[°C]	[°C]	kWt+r	kWt	kWe	kWt+r	kWt	kWe	kWt+r	kWt	kWe	kWt+r	kWt	kWe										
9.2	15400	-10.0	-10.3	91.6	63.2	10.1	99.2	62.5	10.8	103.8	61.9	11.3	105.9	61.8	11.4	111.0	62.3	11.9	116.9	61.9	12.6				
		-5.0	-6.0	91.6	70.7	11.1	98.7	70.3	11.9	104.1	70.3	12.4	105.6	70.3	12.6	109.4	70.1	13.1	115.4	69.8	13.8				
		0.0	-1.0	92.6	79.2	12.6	99.6	78.7	13.2	104.0	78.5	13.6	105.5	78.6	13.8	108.8	78.4	14.3	114.9	78.2	15.1				
		5.0	4.0	95.2	88.5	14.2	101.4	88.0	14.9	105.4	87.9	15.4	106.6	87.8	15.5	108.9	87.6	15.7	115.6	87.2	16.5				
		7.0	6.0	96.5	92.5	14.9	102.8	92.1	15.6	106.8	92.0	16.1	108.1	92.0	16.3	110.3	91.9	16.3	116.5	91.0	17.0				
		10.0	9.0	98.1	98.1	15.9	104.3	97.6	16.7	107.7	97.0	17.2	108.8	96.7	17.3	110.5	97.1	17.5	116.1	96.0	18.3				
		15.0	13.0	-	-	-	107.5	107.5	18.7	110.9	106.9	19.3	113.2	107.8	19.5	114.1	107.4	19.6	119.8	106.4	20.5				
		-10.0	-10.3	102.8	71.0	12.7	111.3	70.1	13.5	117.6	70.6	14.1	120.2	70.7	14.3	125.2	70.6	14.9	131.9	70.2	15.7				
		-5.0	-6.0	102.8	79.4	13.8	110.7	78.9	14.7	116.6	78.7	15.3	118.1	78.5	15.5	122.3	78.2	16.1	129.2	78.0	17.0				
		0.0	-1.0	104.0	88.9	15.4	112.3	88.9	16.2	116.9	88.3	16.6	118.4	88.2	16.9	122.2	88.1	17.6	129.0	87.8	18.5				
10.2	17600	5.0	4.0	106.8	99.3	17.2	113.9	98.8	18.1	118.2	98.6	18.7	119.6	98.5	18.9	122.3	98.4	19.1	129.8	98.0	20.1				
		7.0	6.0	108.3	103.8	18.0	115.4	103.4	19.0	119.3	102.7	19.5	120.5	102.4	19.7	123.6	102.9	19.8	130.8	102.2	20.7				
		10.0	9.0	109.6	109.6	19.2	116.6	109.1	20.2	120.9	108.9	20.8	122.2	108.6	21.0	124.1	109.0	21.3	130.5	107.9	22.3				
		15.0	13.0	-	-	-	120.7	120.7	22.6	124.6	120.1	23.3	125.9	119.9	23.5	128.2	120.7	23.8	133.8	118.7	24.9				
		-10.0	-10.3	122.3	84.3	14.7	132.5	83.2	15.6	138.7	82.6	16.2	141.4	82.2	16.4	148.3	83.0	17.0	156.3	82.5	17.9				
		-5.0	-6.0	122.5	94.5	16.0	132.0	94.0	16.9	139.0	93.7	17.6	140.8	93.5	17.8	146.0	93.3	18.4	154.0	92.8	19.4				
		0.0	-1.0	124.4	106.4	17.8	133.7	105.7	18.5	139.8	105.6	19.1	141.5	105.4	19.3	145.2	104.4	20.0	153.4	104.1	20.9				
		5.0	4.0	127.9	118.9	19.8	136.0	118.0	20.7	140.9	117.5	21.2	142.5	117.3	21.4	145.5	117.0	21.7	154.3	116.3	22.7				
		7.0	6.0	129.4	124.0	20.6	137.1	122.7	21.5	142.5	122.7	22.1	144.2	122.6	22.4	146.6	121.9	22.4	155.6	121.4	23.4				
		10.0	9.0	131.5	131.5	21.9	139.1	130.1	22.9	144.5	130.1	23.6	145.9	129.7	23.8	147.6	129.6	24.0	155.2	128.2	25.1				
12.2	20900	15.0	13.0	-	-	-	144.0	144.0	25.6	148.7	143.3	26.3	151.0	143.8	26.5	152.1	143.1	26.8	159.7	141.7	28.0				
		-10.0	-10.3	134.3	92.0	16.7	145.6	90.8	17.6	154.4	92.0	18.4	157.5	91.7	18.5	163.6	91.0	19.1	172.0	89.9	20.1				
		-5.0	-6.0	136.0	104.8	18.2	146.2	103.9	19.2	154.4	104.0	19.9	156.6	104.0	20.1	161.9	103.3	20.8	170.7	102.6	21.7				
		0.0	-1.0	137.5	117.5	20.2	147.7	116.5	21.0	154.1	116.0	21.5	155.8	115.6	21.7	160.3	114.9	22.4	168.8	114.0	23.4				
		5.0	4.0	141.0	131.0	22.3	150.0	130.0	23.3	155.3	129.3	23.9	157.0	129.0	24.1	160.3	128.6	24.4	170.0	127.7	25.4				
		7.0	6.0	142.6	136.6	23.3	151.1	135.1	24.3	157.0	135.0	24.9	158.5	134.5	25.1	161.7	134.2	25.2	171.0	132.9	26.2				
		10.0	9.0	144.8	144.8	24.7	153.4	143.4	25.8	158.4	142.4	26.4	160.1	142.1	26.7	162.2	142.2	26.9	170.8	140.8	28.2				
		15.0	13.0	-	-	-	158.1	158.1	28.7	163.3	157.3	29.5	164.9	156.9	29.8	167.0	157.0	30.1	175.3	155.3	31.5				
		-10.0	-10.3	151.9	107.1	18.8	163.6	105.5	19.9	172.0	104.7	20.7	174.1	104.4	21.0	180.8	103.8	21.7	190.0	103.0	22.9				
		-5.0	-6.0	152.6	119.6	20.7	162.9	118.1	21.8	171.2	117.8	22.6	173.4	117.7	23.0	178.9	116.8	23.8	189.5	117.4	25.0				
13.2	23650	0.0	-1.0	156.3	135.1	23.3	167.0	134.0	24.2	173.4	133.1	24.8	175.3	132.7	25.2	180.5	132.4	26.0	189.2	131.1	27.3				
		5.0	4.0	161.6	151.0	26.0	170.9	149.7	27.2	176.7	149.1	28.0	178.5	148.8	28.2	182.3	148.7	28.6	192.3	147.5	29.8				
		7.0	6.0	164.1	157.7	27.2	172.9	155.9	28.4	178.5	155.2	29.2	180.7	155.2	29.5	184.4	155.3	29.6	194.2	153.9	30.9				
		10.0	9.0	166.5	166.5	28.9	175.5	164.9	30.3	181.2	164.2	31.1	182.9	163.8	31.4	184.7	163.5	31.7	193.7	161.9	33.2				
		15.0	13.0	-	-	-	182.1	182.1	34.1	188.0	181.6	35.0	189.4	180.9	35.3	191.0	180.4	35.6	200.4	179.2	37.3				
		-10.0	-10.3	168.7	120.6	20.8	181.6	119.2	22.3	190.7	118.4	23.2	193.1	118.2	23.5	200.3	117.6	24.4	210.2	116.8	25.8				
		-5.0	-6.0	171.4	135.9	23.2	183.0	134.9	24.6	191.5	134.1	25.6	193.6	133.7	26.0	200.0	133.3	26.9	209.7	132.3	28.3				
		0.0	-1.0	176.1	153.3	26.2	187.8	152.3	27.4	195.1	151.8	28.2	197.4	151.7	28.6	202.4	150.8	29.6	212.5	150.1	31.1				
		5.0	4.0	181.8	170.4	29.4	191.7	168.9	30.8	197.9	168.3	31.7	200.0	168.1	32.0	203.7	167.6	32.4	214.6	166.5	33.9				
		7.0	6.0	183.0	176.2	30.6	193.7	175.5	32.2	199.3	174.3	33.1	201.0	173.7	33.3	205.5	174.2	33.5	215.8	172.5	35.0				
16.2	27500	10.0	9.0	186.6	186.6	32.7	196.9	185.5	34.3	202.4	184.2	35.3	204.3	183.8	35.6	206.7	183.9	36.0	217.3	183.1	37.7				
		15.0	13.0	-	-	-	204.3	204.3	38.5	210.1	203.3	39.5	213.0	203.9	40.0	215.4	204.0	40.4	224.7	201.9	42.1				

- : free heating conditions

kWt+r: heating capacity + recovery [kW]

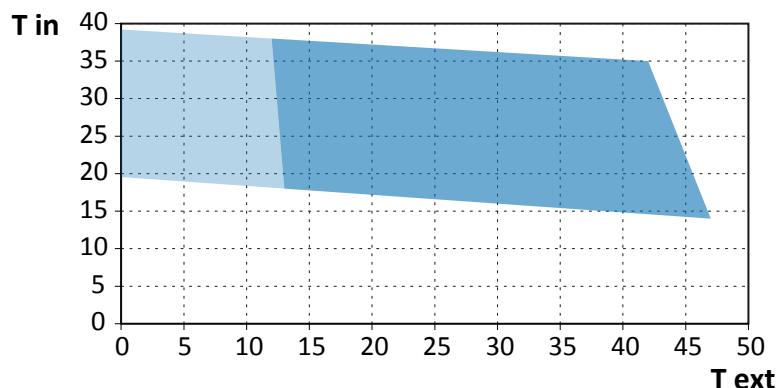
kWt: heating capacity [kW]

kWe: electrical power absorbed by the compressors [kW]

The performance values are related to operation with 50% external air, 50% recirculation air and with static recovery

OPERATING LIMITS - LAMBDA ECHOS MEDIUM

COOLING



T_{ext} : Temperature of the external air that strikes the condensing coil (dry bulb)

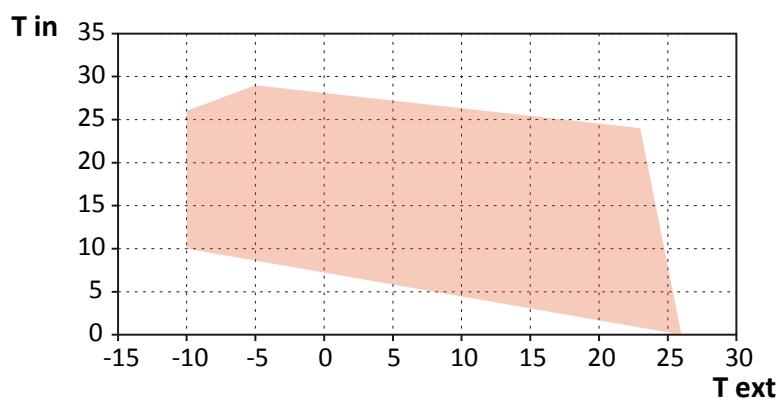
T_{in} : Temperature of the internal air that strikes the evaporating coil (dry bulb)

■ : operating range of the standard unit

■ : wide operating range of the unit with accessories with axial fan speed controller

The operating limits should be understood as average quantities for the line and therefore not generically extensible to each individual unit. They are calculated for standard air flow rates and consider that the units are positioned as per instructions.

HEATING



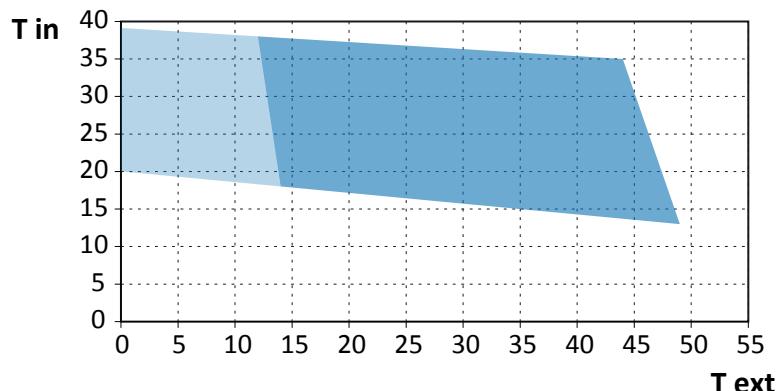
T_{ext} : Temperature of the external air that strikes the evaporating coil (dry bulb)

T_{in} : Temperature of the internal air that strikes the condensing coil (dry bulb)

The operating limits should be understood as average quantities for the line and therefore not generically extensible to each individual unit. They are calculated for standard air flow rates and consider that the units are positioned as per instructions.

OPERATING LIMITS - LAMBDA ECHOS MEDIUM HE

COOLING



T_{ext} : Temperature of the external air that strikes the condensing coil (dry bulb)

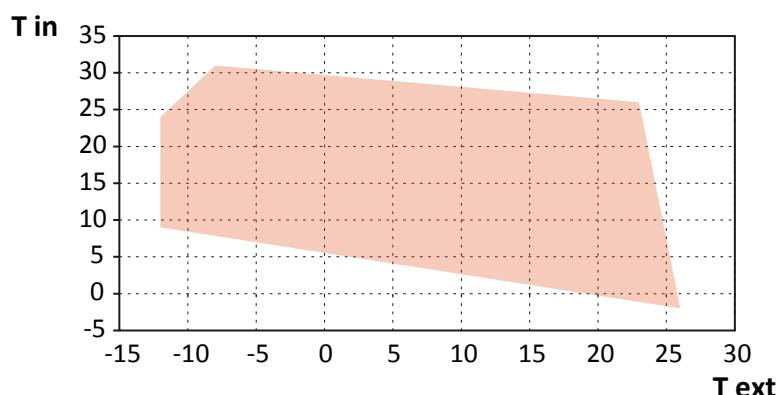
T_{in} : Temperature of the internal air that strikes the evaporating coil (dry bulb)

■ : operating range of the standard unit

■ : wide operating range of the unit with accessories with axial fan speed controller

The operating limits should be understood as average quantities for the line and therefore not generically extensible to each individual unit. They are calculated for standard air flow rates and consider that the units are positioned as per instructions.

HEATING



T_{ext} : Temperature of the external air that strikes the evaporating coil (dry bulb)

T_{in} : Temperature of the internal air that strikes the condensing coil (dry bulb)

The operating limits should be understood as average quantities for the line and therefore not generically extensible to each individual unit. They are calculated for standard air flow rates and consider that the units are positioned as per instructions.

NOISE LEVELS - LAMBDA ECHOS MEDIUM

MODEL		Octave bands [Hz]								Total [dB(A)]
		63 [dB]	125 [dB]	250 [dB]	500 [dB]	1000 [dB]	2000 [dB]	4000 [dB]	8000 [dB]	
		Lp	Lp	Lp	Lp	Lp	Lp	Lp	Lp	Lp
9.2	SPL_bc	80	80	70	66	64	61	54	48	70
	SPL_qe	75	71	58	61	57	50	46	34	64
10.2	SPL_bc	80	80	70	66	64	61	54	48	70
	SPL_qe	75	71	58	61	57	50	46	34	64
12.2	SPL_bc	77	75	73	69	68	65	60	53	73
	SPL_qe	73	69	69	61	57	52	59	43	65
13.2	SPL_bc	77	75	73	69	68	65	60	53	73
	SPL_qe	73	69	69	61	57	52	59	43	65
14.2	SPL_bc	77	75	73	69	68	65	60	53	73
	SPL_qe	73	69	69	61	57	52	59	43	65
16.2	SPL_bc	77	75	73	69	68	65	60	53	73
	SPL_qe	73	69	69	61	57	52	59	43	65

Lp: sound pressure values

SPL_bc: sound pressure level measured in free field at 1m from the machine, at 1.5m from the ground on the condensing coil side

SPL_qe: sound pressure level measured in free field at 1m from the machine, at 1.5m from the ground on the electrical control panel side

For noise level values regarding the supply and return fans, please consult the relevant technical specifications table.

NOISE LEVELS - LAMBDA ECHOS MEDIUM (LN)

MODEL		Octave bands [Hz]								Total [dB(A)]
		63 [dB]	125 [dB]	250 [dB]	500 [dB]	1000 [dB]	2000 [dB]	4000 [dB]	8000 [dB]	
		Lp	Lp	Lp	Lp	Lp	Lp	Lp	Lp	Lp
9.2	SPL_bc	78	78	67	63	61	58	51	45	67
	SPL_qe	73	70	56	59	54	49	44	32	60
10.2	SPL_bc	78	78	67	63	61	58	51	45	67
	SPL_qe	73	70	56	59	54	49	44	32	60
12.2	SPL_bc	75	73	70	67	66	62	57	50	70
	SPL_qe	71	67	65	60	55	50	57	42	63
13.2	SPL_bc	75	73	70	67	66	62	57	50	70
	SPL_qe	71	67	65	60	55	50	57	42	63
14.2	SPL_bc	75	73	70	67	66	62	57	50	70
	SPL_qe	71	67	65	60	55	50	57	42	63
16.2	SPL_bc	75	73	70	67	66	62	57	50	70
	SPL_qe	71	67	65	60	55	50	57	42	63

Lp: sound pressure values

SPL_bc: sound pressure level measured in free field at 1m from the machine, at 1.5m from the ground on the condensing coil side

SPL_qe: sound pressure level measured in free field at 1m from the machine, at 1.5m from the ground on the electrical control panel side

For noise level values regarding the supply and return fans, please consult the relevant technical specifications table.

The indicated values are calculated at full load and under standard working conditions.

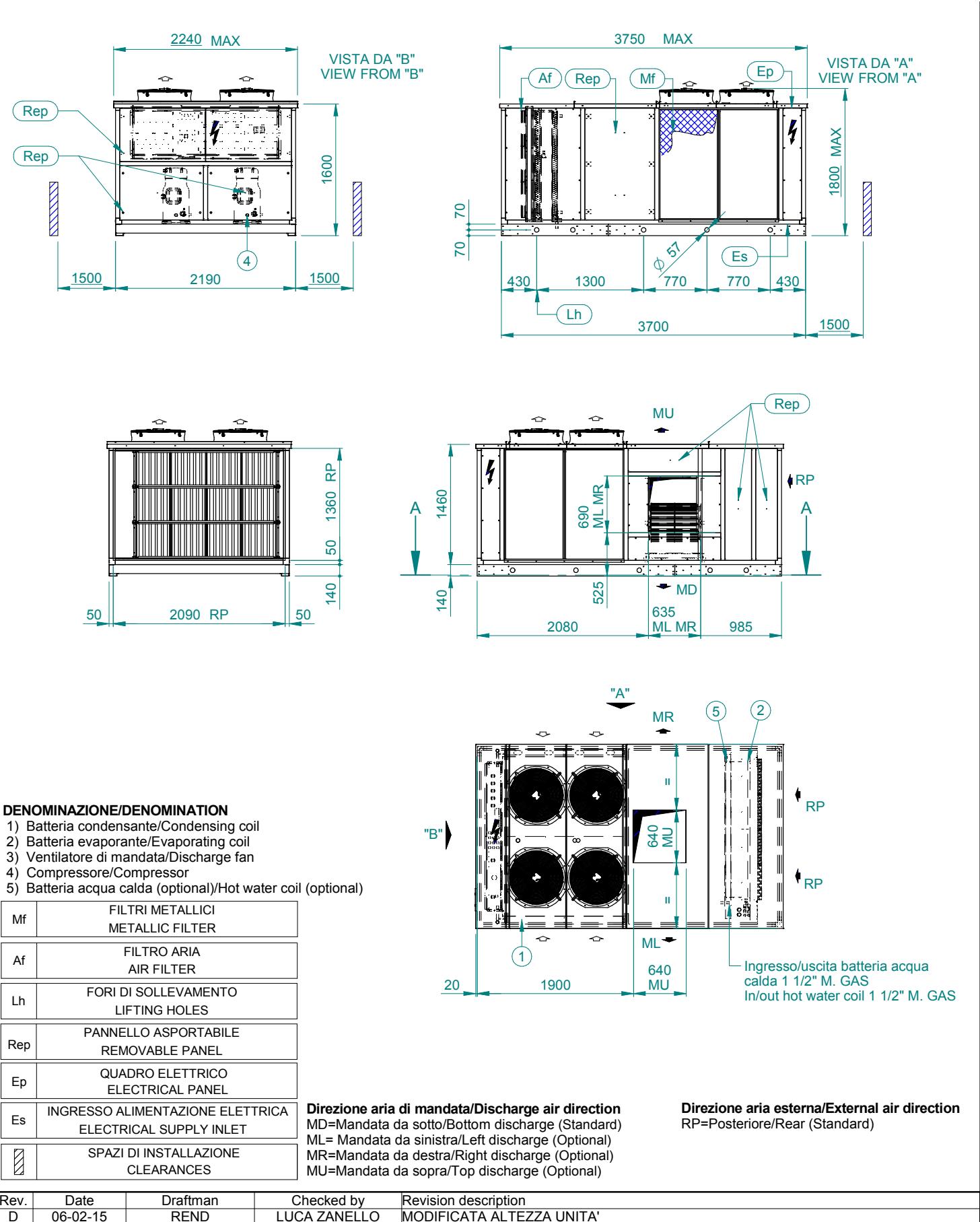
THEORETICAL NOISE ATTENUATION VALUES BASED ON DISTANCE
IN FREE FIELD

Distance	(m)	1	2	3	4	5	6	7	8	9	10
Attenuation	(dB)	0	6	9.5	12	14	15.5	17	18	19	20

DIMENSIONAL DIAGRAMS

LAMBDA ECHOS 9.2 - 10.2

C411539-D

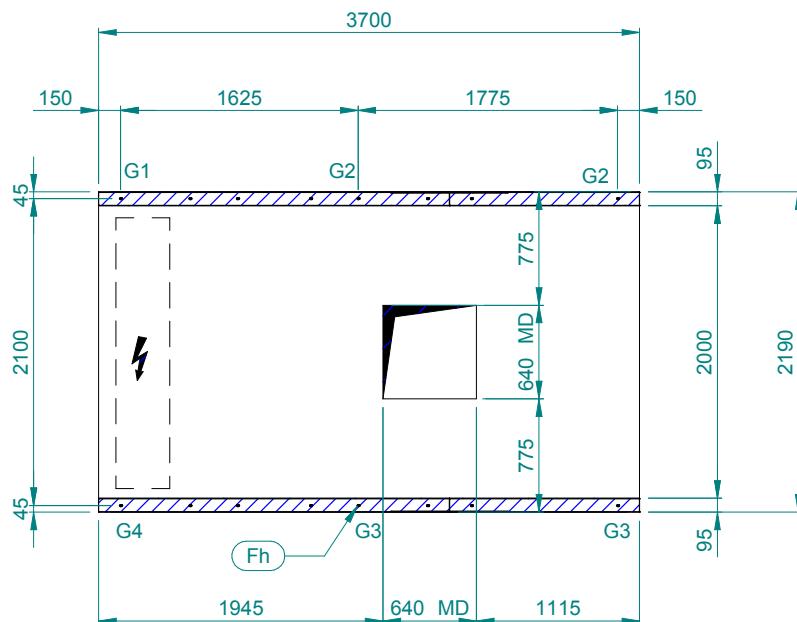


Valid only for the version with centrifugal fans and without bag filters. For the other versions, the dimensional drawing must be identified by selection software.

DIMENSIONAL DIAGRAMS

LAMBDA ECHOS 9.2 - 10.2

C411539-D



Fh	FORI DI FISSAGGIO FIXING HOLES	M10
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G..	PUNTI DI APPOGGIO ANTIVIBRANTI VIBRATION DAMPER FOOT HOLDS
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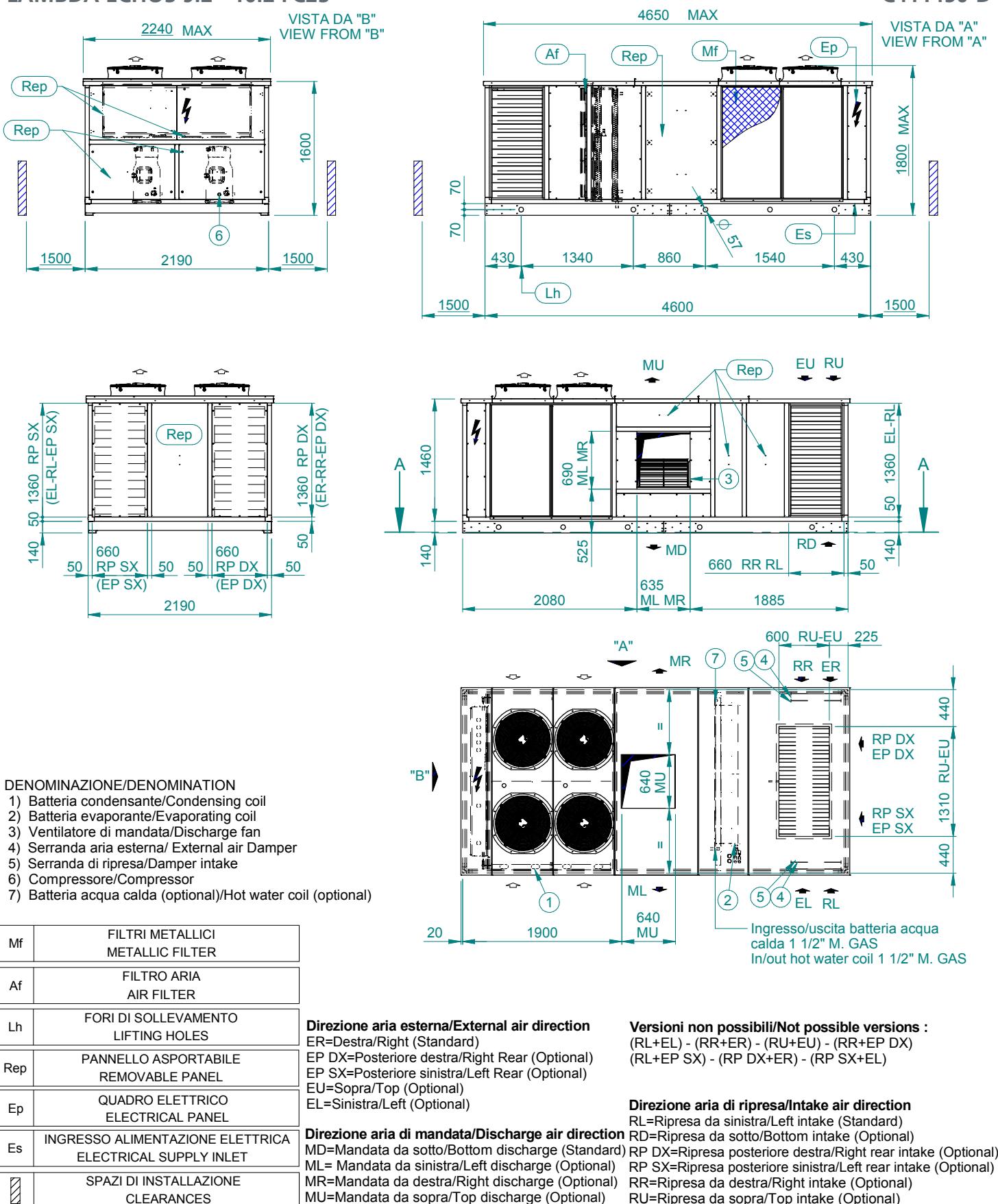
MODELLO MODEL	PESO(Kg) WEIGHT(Kg)	G1(Kg)	G2(Kg)	G3(Kg)	G4(Kg)	CODICE ANTIVIBRANTI-ANTIVIBRATION MOUNTS CODE			
						G1	G2	G3	G4
LAMBDA ECHOS CO BASE-P25 9.4	1485	297	200	226	336				MAVA0690
LAMBDA ECHOS CO BASE-P50 9.4	1503	297	204	231	336				MAVA0690
LAMBDA ECHOS HP BASE-P25 9.4	1553	303	209	241	350				MAVA0690
LAMBDA ECHOS HP BASE-P50 9.4	1574	304	214	246	350				MAVA0690
LAMBDA ECHOS CO BASE-P25-BT 9.4	1544	292	215	245	332				MAVA0690
LAMBDA ECHOS CO BASE-P50-BT 9.4	1565	293	220	250	332				MAVA0690
LAMBDA ECHOS HP BASE-P25-BT 9.4	1613	298	225	260	345				MAVA0690
LAMBDA ECHOS HP BASE-P50-BT 9.4	1634	299	230	265	345				MAVA0690
LAMBDA ECHOS CO BASE-P25 10.2	1510	301	199	231	349				MAVA0690
LAMBDA ECHOS CO BASE-P50 10.2	1531	302	204	236	349				MAVA0690
LAMBDA ECHOS HP BASE-P25 10.2	1581	308	209	246	363	MAVA0690			MAVA0700
LAMBDA ECHOS HP BASE-P50 10.2	1601	308	214	251	363	MAVA0690			MAVA0700
LAMBDA ECHOS CO BASE-P25-BT 10.2	1570	296	215	250	344				MAVA0690
LAMBDA ECHOS CO BASE-P50-BT 10.2	1591	297	220	255	344				MAVA0690
LAMBDA ECHOS HP BASE-P25-BT 10.2	1641	303	225	265	358	MAVA0690			MAVA0700
LAMBDA ECHOS HP BASE-P50-BT 10.2	1660	304	229	270	358	MAVA0690			MAVA0700

Rev.	Date	Draftman	Checked by	Revision description
D	06-02-15	REND	LUCA ZANELLO	MODIFICATA ALTEZZA UNITA'

Valid only for the version with centrifugal fans and without bag filters. For the other versions, the dimensional drawing must be identified by selection software.

DIMENSIONAL DIAGRAMS

LAMBDA ECHOS 9.2 - 10.2 FC2S

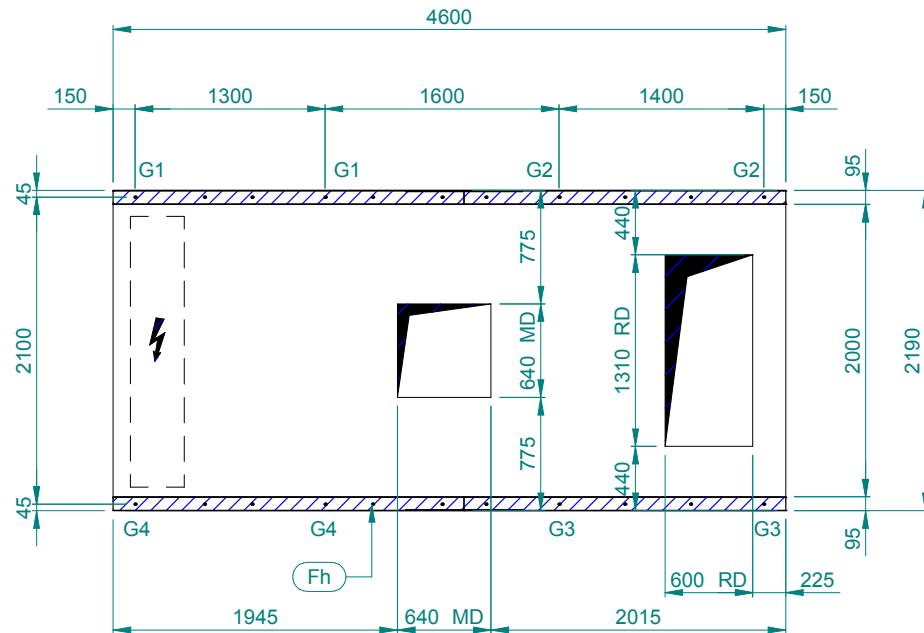


Valid only for the version with centrifugal fans and without bag filters. For the other versions, the dimensional drawing must be identified by selection software.

DIMENSIONAL DIAGRAMS

LAMBDA ECHOS 9.2 - 10.2 FC2S

C411450-D



Fh	FORI DI FISSAGGIO FIXING HOLES	M10
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G..	PUNTI DI APPOGGIO ANTVIBRANTI VIBRATION DAMPER FOOT HOLDS
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MODELLO MODEL	PESO(Kg) WEIGHT(Kg)	G1(Kg)	G2(Kg)	G3(Kg)	G4(Kg)	CODICE ANTVIBRANTI-ANTIVIBRATION MOUNTS CODE			
						G1	G2	G3	G4
LAMBDA ECHOS CO FC2S-P25 9.4	1630	246	138	155	276				MAVA0690
LAMBDA ECHOS CO FC2S-P50 9.4	1660	248	144	161	277				MAVA0690
LAMBDA ECHOS HP FC2S-P25 9.4	1698	254	143	163	289				MAVA0690
LAMBDA ECHOS HP FC2S-P50 9.4	1730	255	149	170	291				MAVA0690
LAMBDA ECHOS CO FC2S-P25-BT 9.4	1690	249	149	167	280				MAVA0690
LAMBDA ECHOS CO FC2S-P50-BT 9.4	1724	251	155	174	282				MAVA0690
LAMBDA ECHOS HP FC2S-P25-BT 9.4	1758	256	154	176	293				MAVA0690
LAMBDA ECHOS HP FC2S-P50-BT 9.4	1790	258	160	182	295				MAVA0690
LAMBDA ECHOS CO FC2S-P25 10.2	1658	249	137	157	286				MAVA0690
LAMBDA ECHOS CO FC2S-P50 10.2	1688	251	143	163	287				MAVA0690
LAMBDA ECHOS HP FC2S-P25 10.2	1726	257	142	165	299				MAVA0690
LAMBDA ECHOS HP FC2S-P50 10.2	1756	258	148	172	300				MAVA0690
LAMBDA ECHOS CO FC2S-P25-BT 10.2	1716	251	148	170	289				MAVA0690
LAMBDA ECHOS CO FC2S-P50-BT 10.2	1748	254	153	176	291				MAVA0690
LAMBDA ECHOS HP FC2S-P25-BT 10.2	1786	259	153	178	303				MAVA0690
LAMBDA ECHOS HP FC2S-P50-BT 10.2	1818	262	158	184	305				MAVA0690

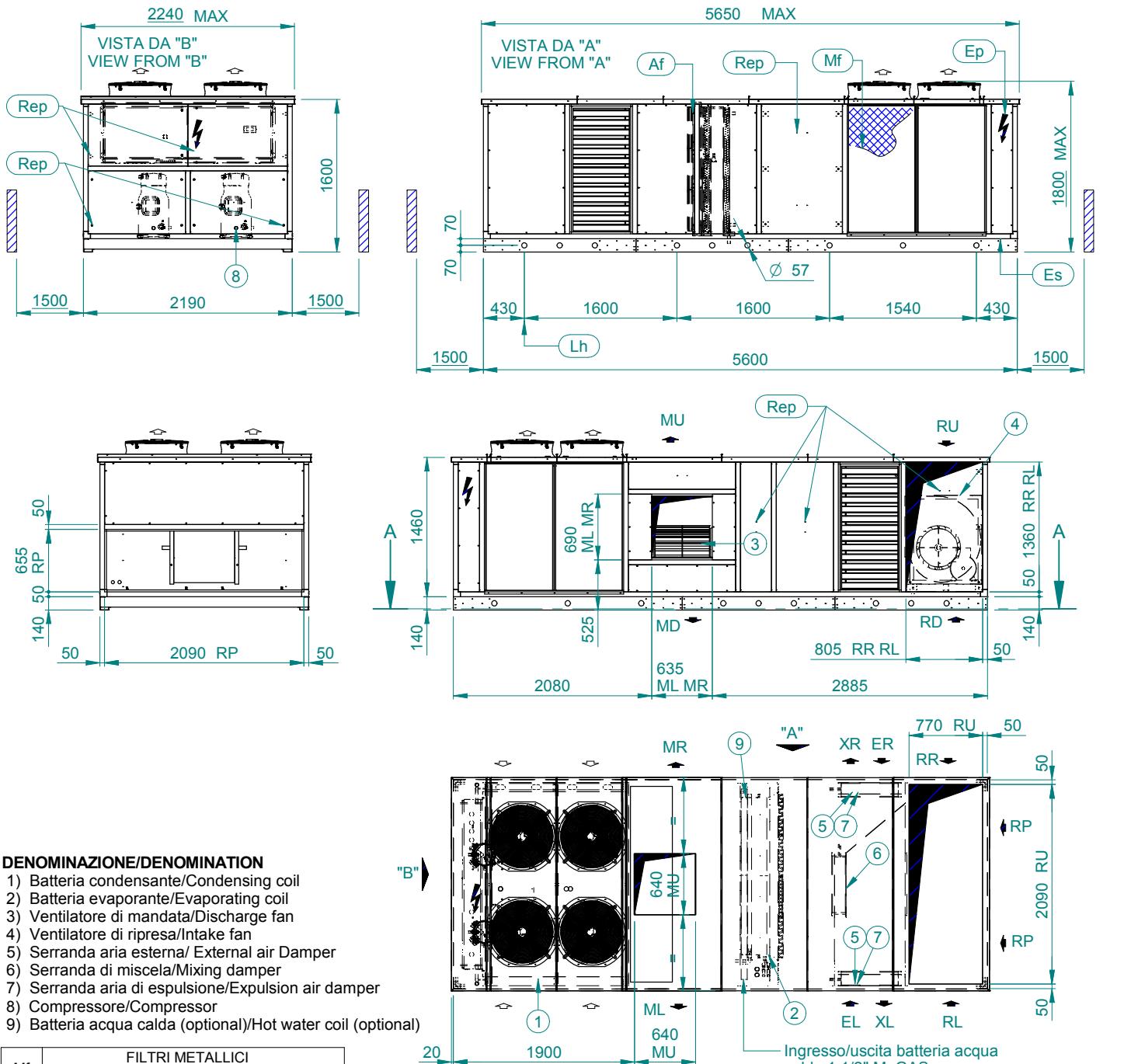
Rev.	Date	Draftman	Checked by	Revision description
D	05-02-15	REND	LUCA ZANELLO	MODIFICATA ALTEZZA UNITA'

Valid only for the version with centrifugal fans and without bag filters. For the other versions, the dimensional drawing must be identified by selection software.

DIMENSIONAL DIAGRAMS

LAMBDA ECHOS 9.2 - 10.2 FC3S

C411457-E



Mf	FILTRI METALLICI METALLIC FILTER
Af	FILTRO ARIA AIR FILTER
Lh	FORI DI SOLLEVAMENTO LIFTING HOLES
Rep	PANNELLO ASPORTABILE REMOVABLE PANEL
Ep	QUADRO ELETTRICO ELECTRICAL PANEL
Es	INGRESSO ALIMENTAZIONE ELETTRICA ELECTRICAL SUPPLY INLET
	SPAZI DI INSTALLAZIONE CLEARANCES

Direzione aria esterna/External air direction
ER=Destra/Right (Standard) EL=Sinistra/Left(Optional)

Aria di espulsione/Exhaust air
XL=Sinistra/left (Standard) XR=Destra/Right (Optional)

Direzione aria di mandata/Discharge air direction

MD=Mandata da sotto/Bottom discharge (Standard)
MI=Mandata da sinistra/Left Discharge (Optional)

ML=Mandata da sinistra/LettDischarge (Optional)
MR=Mandata da destra/Right discharge (Optional)
MU=Mandata da sopra/Top discharge (Optional)

Versioni non possibili/Not possible versions :
(XR+ER) - (XL+EL)

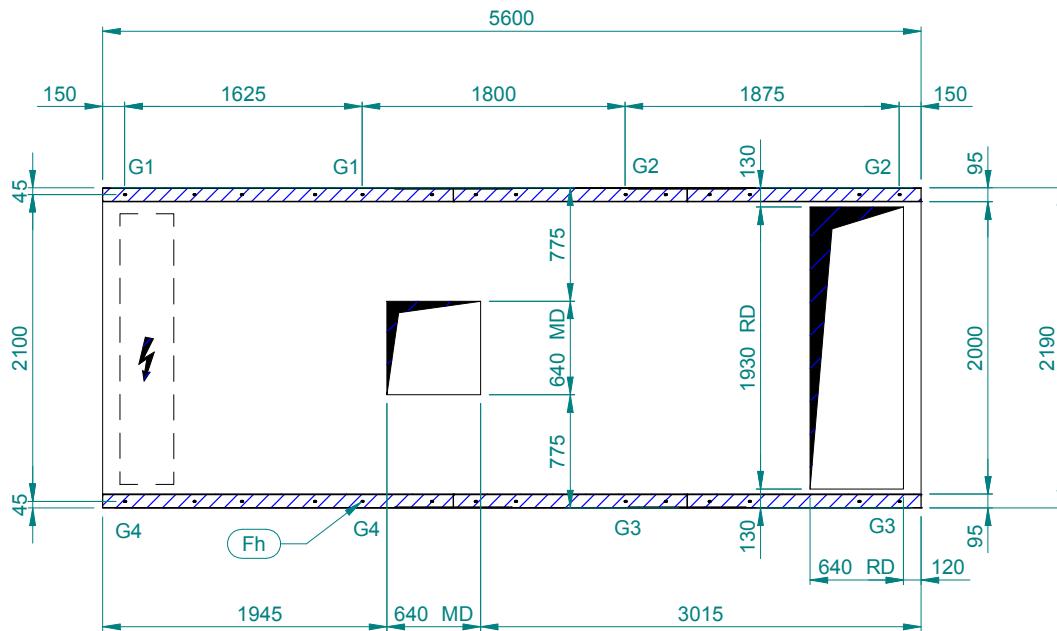
Direzione aria di ripresa/Intake air direction
RP=Ripresa posteriore/Rear intake (Standard)
RR=Ripresa da destra/Right intake (Optional)
RD=Ripresa da sotto/Bottom intake(Optional)
RU=Ripresa da sopra/Top intake (Optional)
RL=Ripresa da sinistra/Left intake (Optional)

Valid only for the version with the entire B2B functions and without any filters. For more information about the B2B functions, please refer to the B2B section.

DIMENSIONAL DIAGRAMS

LAMBDA ECHOS 9.2 - 10.2 FC3S

C411457-E



Fh	FORI DI FISSAGGIO FIXING HOLES	M10
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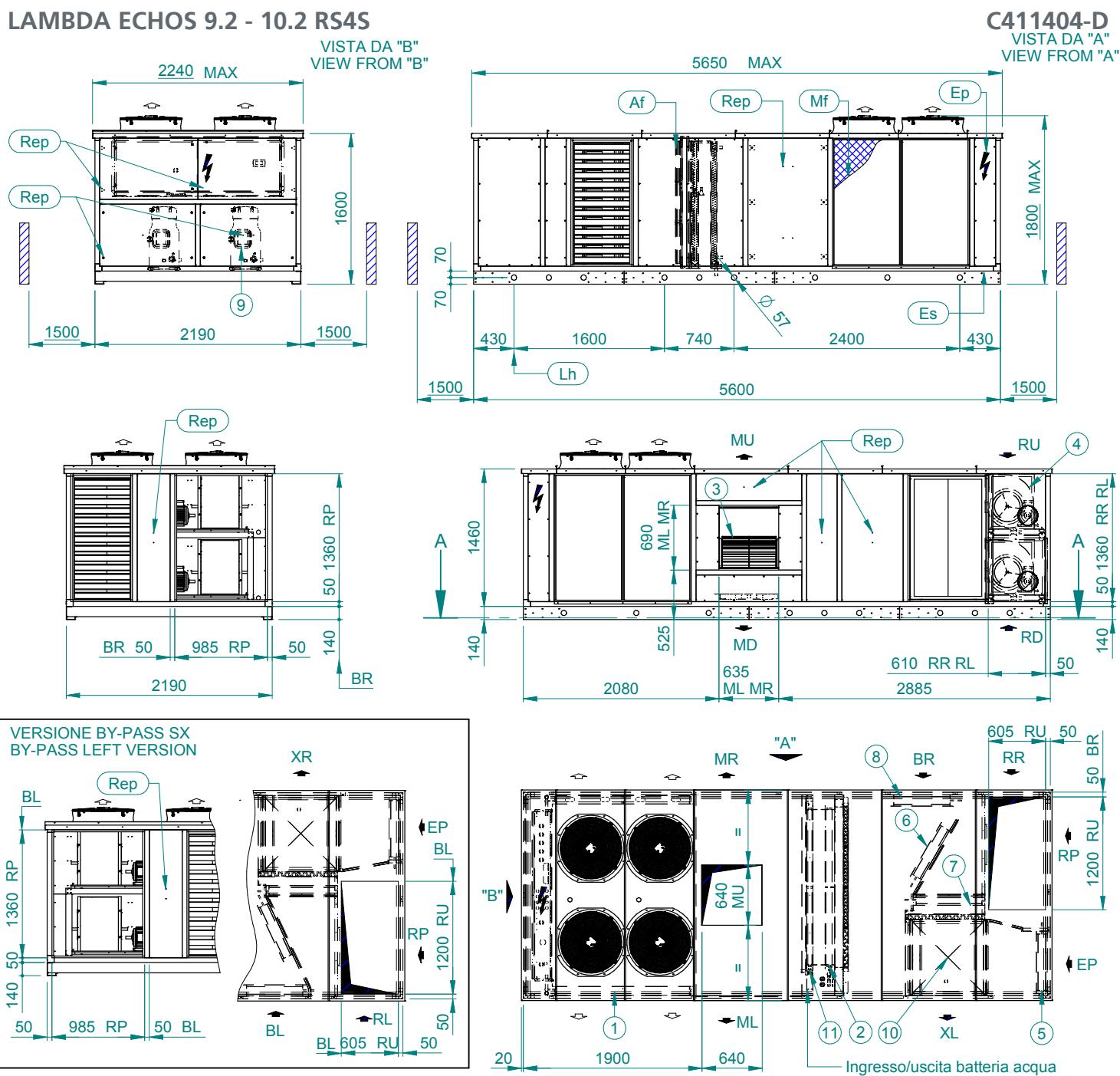
G..	PUNTI DI APPOGGIO ANTIVIBRANTI VIBRATION DAMPER FOOT HOLDS
-----	---

MODELLO MODEL	PESO(Kg) WEIGHT(Kg)	G1(Kg)	G2(Kg)	G3(Kg)	G4(Kg)	CODICE ANTIVIBRANTI-ANTIVIBRATION MOUNTS CODE			
						G1	G2	G3	G4
LAMBDA ECHOS CO FC3S-P25 9.4	2070	258	212	255	310				MAVA0690
LAMBDA ECHOS CO FC3S-P50 9.4	2110	260	220	263	312				MAVA0690
LAMBDA ECHOS HP FC3S-P25 9.4	2142	268	215	262	326				MAVA0690
LAMBDA ECHOS HP FC3S-P50 9.4	2180	270	223	270	327				MAVA0690
LAMBDA ECHOS CO FC3S-P25-BT 9.4	2128	263	220	265	316				MAVA0690
LAMBDA ECHOS CO FC3S-P50-BT 9.4	2172	266	228	273	319				MAVA0690
LAMBDA ECHOS HP FC3S-P25-BT 9.4	2198	272	224	272	331				MAVA0690
LAMBDA ECHOS HP FC3S-P50-BT 9.4	2242	276	231	280	334				MAVA0690
LAMBDA ECHOS CO FC3S-P25 10.2	2096	261	211	257	319				MAVA0690
LAMBDA ECHOS CO FC3S-P50 10.2	2136	264	218	265	321				MAVA0690
LAMBDA ECHOS HP FC3S-P25 10.2	2166	271	214	264	334				MAVA0690
LAMBDA ECHOS HP FC3S-P50 10.2	2208	274	221	272	337				MAVA0690
LAMBDA ECHOS CO FC3S-P25-BT 10.2	2154	266	219	267	325				MAVA0690
LAMBDA ECHOS CO FC3S-P50-BT 10.2	2196	269	226	275	328				MAVA0690
LAMBDA ECHOS HP FC3S-P25-BT 10.2	2226	276	221	274	342				MAVA0690
LAMBDA ECHOS HP FC3S-P50-BT 10.2	2266	279	229	282	343				MAVA0690

Valid only for the version with centrifugal fans and without bag filters. For the other versions, the dimensional drawing must be identified by selection software.

DIMENSIONAL DIAGRAMS

LAMBDA ECHOS 9.2 - 10.2 RS4S



DENOMINAZIONE/DENOMINATION

- 1) Batteria condensante/Condensing coil
 - 2) Batteria evaporante/Evaporating coil
 - 3) Ventilatore di mandata/Discharge fan
 - 4) Ventilatore di ripresa/Intake fan
 - 5) Serranda aria esterna/ External air Damper
 - 6) Serranda di miscela/Mixing damper
 - 7) Serranda aria di espulsione/Expulsion air damper
 - 8) Serranda by-pass/Damper by-pass
 - 9) Compressore/Compressor
 - 10) Recuperatore/Recuperator
 - 11) Batteria acqua calda (optional)/Hot water coil (optional)

Versioni non possibili/Not possible versions :

$$(BR+XR) - (BL+XL) - (RR+XR) - (RL+XL) \\ (RR+BL) - (RL+BR)$$

Direzione aria esterna/External air direction

EP=Posteriore/Rear (Standard)

Aria di espulsione/Exhaust air

XL=Sinistra/left (Standard) XR=Destra/Right (Optional)

Direzione aria di mandata/Discharge air direction

MD=Mandata da sotto/Bottom discharge (Standard)

ML= Mandata da sinistra/Left discharge (Optional)
MR=Mandata da destra/Right discharge (Optional)

Aria bv-pass/Bv-pass air

Ala by-pass/By-pass all
BR=Destra/Right (Standard)

BL=Destra/Right (Standard)

Direzione aria di ripresa/Intake air direction

RP=Ripresa posteriore/Rear intake (Standard)

RR=Ripresa da destra/Right intake (Optional)

RL=Ripresa da sinistra/Left intake (Optional)

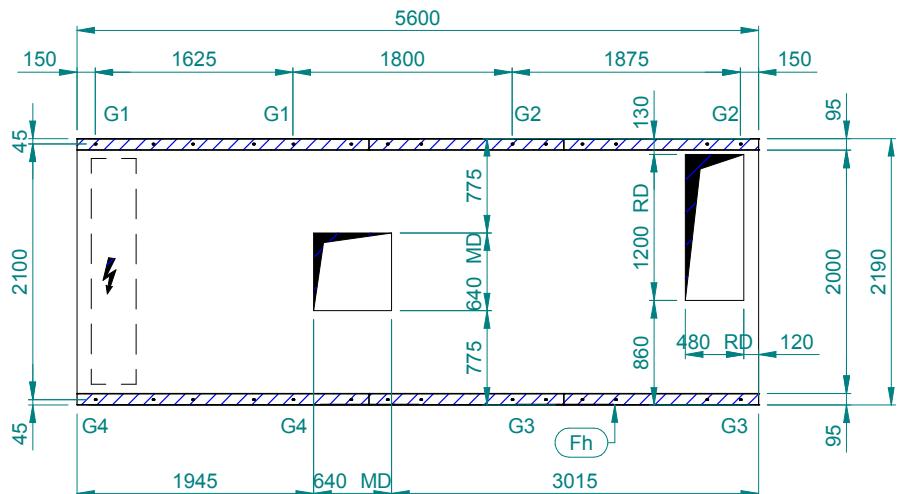
Rev.	Date	Draftman	Checked by	Revision description
D	05-02-15	RFND	LUCA ZANFI O	MODIFICATA AI TEF77A UNITA'

Valid only for the version with centrifugal fans and without bag filters. For the other versions, the dimensional drawing must be identified by selection software.

DIMENSIONAL DIAGRAMS

LAMBDA ECHOS 9.2 - 10.2 RS4S

C411404-D

VERSIONE BY-PASS SX
BY-PASS LEFT VERSION

Fh	FORI DI FISSAGGIO FIXING HOLES	M10	G..	PUNTI DI APPOGGIO ANTIVIBRANTI VIBRATION DAMPER FOOT HOLDS
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Ep	QUADRO ELETTRICO ELECTRICAL PANEL	Mf	FILTRI METALLICI METALLIC FILTER
Es	INGRESSO ALIMENTAZIONE ELETTRICA ELECTRICAL SUPPLY INLET	Af	FILTRO ARIA AIR FILTER
	SPAZI DI INSTALLAZIONE CLEARANCES	Lh	FORI DI SOLLEVAMENTO LIFTING HOLES

Rep PANNELLO ASPORTABILE
REMOVABLE PANEL

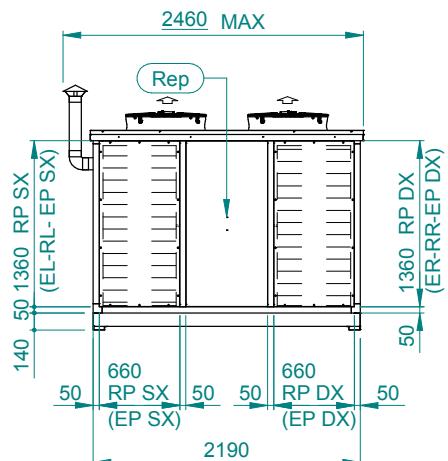
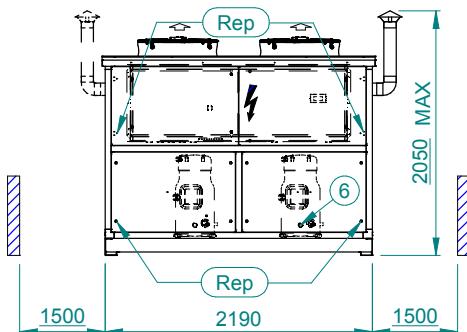
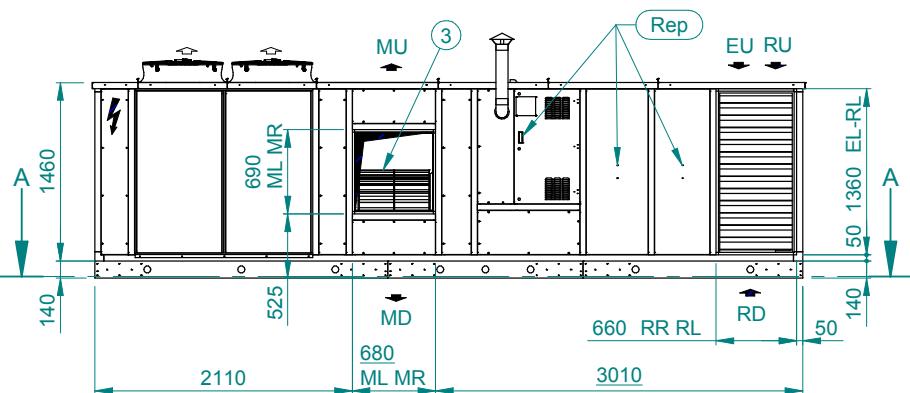
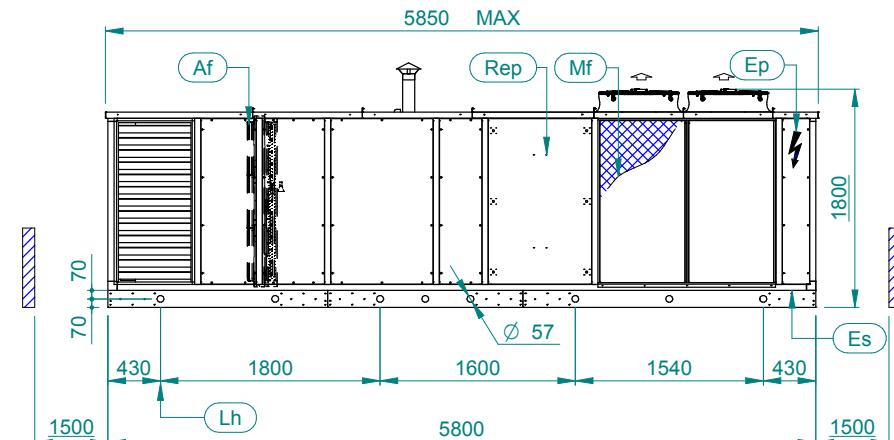
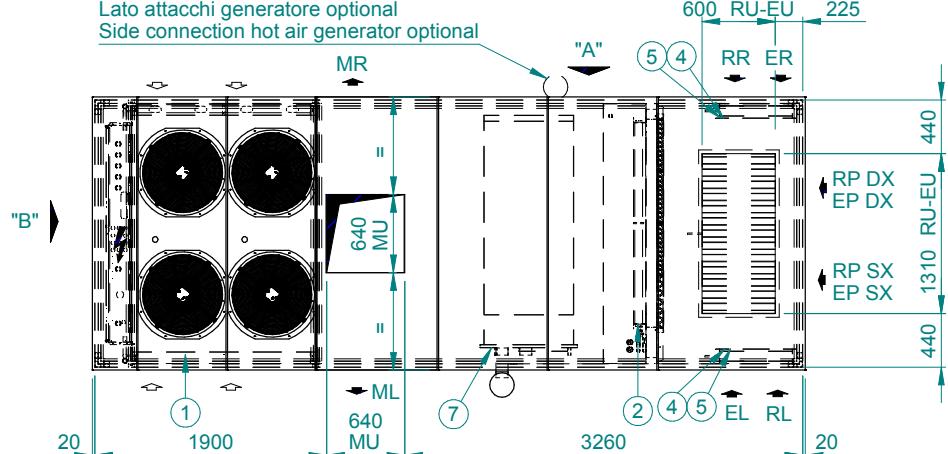
MODELLO MODEL	PESO(Kg) WEIGHT(Kg)	G1(Kg)	G2(Kg)	G3(Kg)	G4(Kg)	CODICE ANTIVIBRANTI-ANTIVIBRATION MOUNTS CODE			
						G1	G2	G3	G4
LAMBDA ECHOS CO RS4S-P25 9.4	2162	270	242	269	300				MAVA0690
LAMBDA ECHOS CO RS4S-P50 9.4	2198	273	248	275	303				MAVA0690
LAMBDA ECHOS HP RS4S-P25 9.4	2230	280	245	275	315				MAVA0690
LAMBDA ECHOS HP RS4S-P50 9.4	2268	283	251	282	318				MAVA0690
LAMBDA ECHOS CO RS4S-P25-BT 9.4	2220	275	250	278	307				MAVA0690
LAMBDA ECHOS CO RS4S-P50-BT 9.4	2258	278	256	285	310				MAVA0690
LAMBDA ECHOS HP RS4S-P25-BT 9.4	2290	285	253	285	322				MAVA0690
LAMBDA ECHOS HP RS4S-P50-BT 9.4	2330	288	260	293	324				MAVA0690
LAMBDA ECHOS CO RS4S-P25 10.2	2188	274	240	271	309				MAVA0690
LAMBDA ECHOS CO RS4S-P50 10.2	2226	277	246	278	312				MAVA0690
LAMBDA ECHOS HP RS4S-P25 10.2	2260	284	242	278	326				MAVA0690
LAMBDA ECHOS HP RS4S-P50 10.2	2294	287	249	284	327				MAVA0690
LAMBDA ECHOS CO RS4S-P25-BT 10.2	2248	279	248	281	316				MAVA0690
LAMBDA ECHOS CO RS4S-P50-BT 10.2	2284	282	255	287	318				MAVA0690
LAMBDA ECHOS HP RS4S-P25-BT 10.2	2318	289	251	287	332				MAVA0690
LAMBDA ECHOS HP RS4S-P50-BT 10.2	2354	292	257	294	334				MAVA0690

Rev.	Date	Draftman	Checked by	Revision description
D	05-02-15	REND	LUCA ZANELLO	MODIFICATA ALTEZZA UNITA'

Valid only for the version with centrifugal fans and without bag filters. For the other versions, the dimensional drawing must be identified by selection software.

DIMENSIONAL DIAGRAMS

LAMBDA ECHOS 9.2 - 10.2 GC2S

VISTA DA "B"
VIEW FROM "B"C411548-E
VISTA DA "A"
VIEW FROM "A"Lato attacchi generatore optional
Side connection hot air generator optional

DENOMINAZIONE/DENOMINATION

- 1) Batteria condensante/Condensing coil
- 2) Batteria evaporante/Evaporating coil
- 3) Ventilatore di manda/Discharge fan
- 4) Serranda aria esterna/ External air Damper
- 5) Serranda di ripresa/Damper intake
- 6) Compressore/Compressor
- 7) Generatore aria calda/Hot air generator

Mf	FILTRI METALLICI METALLIC FILTER
----	-------------------------------------

Af	FILTRO ARIA AIR FILTER
----	---------------------------

Lh	FORI DI SOLLEVAMENTO LIFTING HOLES
----	---------------------------------------

Rep	PANNELLO ASPORTABILE REMOVABLE PANEL
-----	---

Ep	QUADRO ELETTRICO ELECTRICAL PANEL
----	--------------------------------------

Es	INGRESSO ALIMENTAZIONE ELETTRICA ELECTRICAL SUPPLY INLET
----	---

	SPAZI DI INSTALLAZIONE CLEARANCES
--	--------------------------------------

Direzione aria esterna/External air direction

ER=Destra/Right (Standard)
EP DX=Posteriore destra/Right Rear (Optional)
EP SX=Posteriore sinistra/Left Rear (Optional)

EU=Sopra/Top (Optional)
EL=Sinistra/Left (Optional)

Direzione aria di manda/Discharge air direction

MD=Manda da sotto/Bottom discharge (Standard)

ML=Manda da sinistra/Left discharge (Optional)

MR=Manda da destra/Right discharge (Optional)

MU=Manda da sopra/Top discharge (Optional)

Versioni non possibili/Not possible versions :

(RL+EL) - (RR+ER) - (RU+EU) - (RR+EP DX)
(RL+EP SX) - (RP DX+ER) - (RP SX+EL)

Direzione aria di ripresa/Intake air direction

RL=Ripresa da sinistra/Left intake (Standard)

RD=Ripresa da sotto/Bottom intake (Optional)

RP DX=Ripresa posteriore destra/Right rear intake (Optional)

RP SX=Ripresa posteriore sinistra/Left rear intake (Optional)

RR=Ripresa da destra/Right intake (Optional)

RU=Ripresa da sopra/Top intake (Optional)

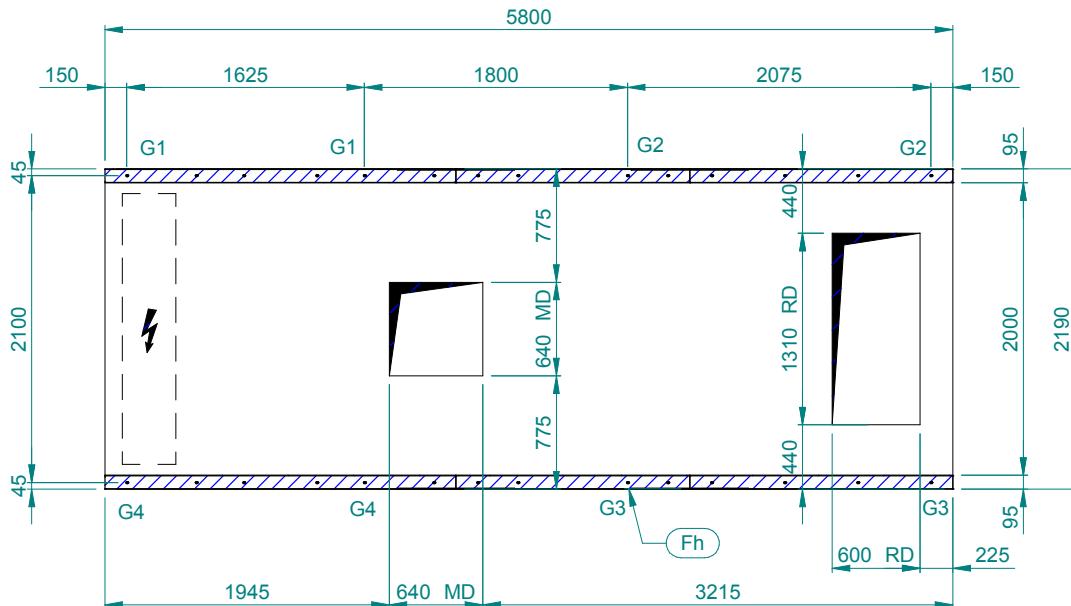
Rev.	Date	Draftman	Checked by	Revision description
E	05-02-15	REND	LUCA ZANELLO	MODIFICATA ALTEZZA UNITÀ'
n	03 01 10	REND	LUCA ZANELLO	AGGIUNTE COMBINAZIONI DIDEESE ADIA ECTEDNA

Valid only for the version with centrifugal fans and without bag filters. For the other versions, the dimensional drawing must be identified by selection software.

DIMENSIONAL DIAGRAMS

LAMBDA ECHOS 9.2 - 10.2 GC2S

C411548-E



Fh	FORI DI FISSAGGIO FIXING HOLES	M10	G..	PUNTI DI APPOGGIO ANTIVIBRANTI VIBRATION DAMPER FOOT HOLDS
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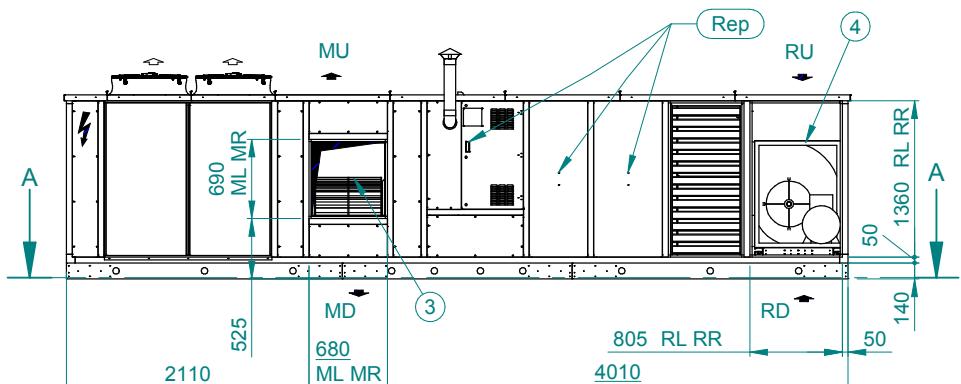
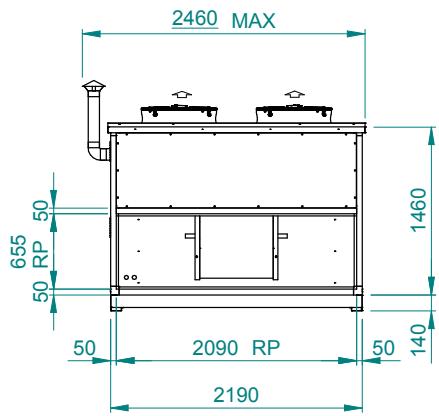
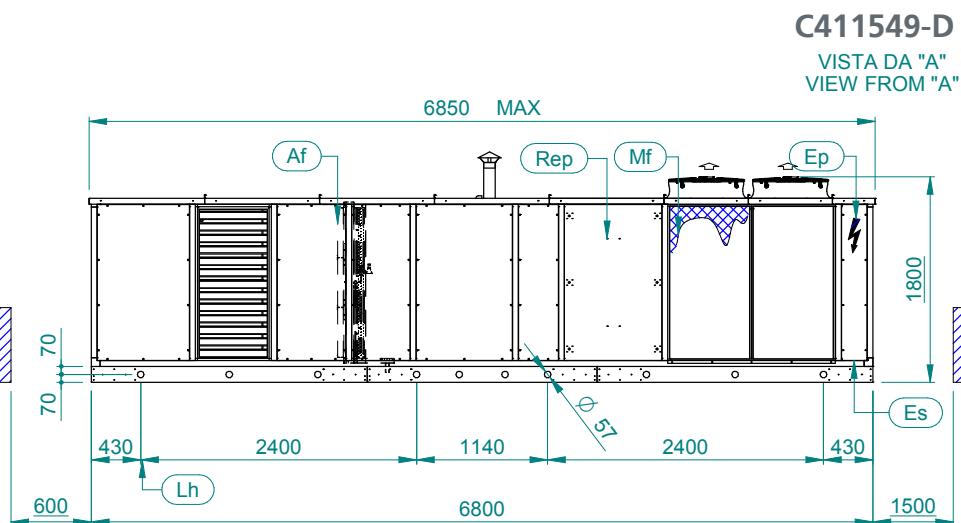
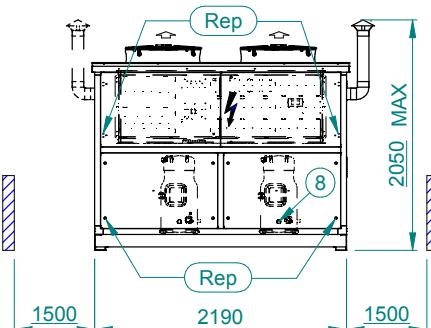
MODELLO MODEL	PESO(Kg) WEIGHT(Kg)	G1(Kg)	G2(Kg)	G3(Kg)	G4(Kg)	CODICE ANTIVIBRANTI-ANTIVIBRATION MOUNTS CODE			
						G1	G2	G3	G4
LAMBDA ECHOS CO GC2S-P25 9.4	1998	285	177	206	331				MAVA0690
LAMBDA ECHOS CO GC2S-P50 9.4	2038	287	186	214	332				MAVA0690
LAMBDA ECHOS HP GC2S-P25 9.4	2066	294	181	212	346				MAVA0690
LAMBDA ECHOS HP GC2S-P50 9.4	2110	298	189	221	347				MAVA0690
LAMBDA ECHOS CO GC2S-P25 10.2	2022	288	176	208	339				MAVA0690
LAMBDA ECHOS CO GC2S-P50 10.2	2068	291	184	216	343				MAVA0690
LAMBDA ECHOS HP GC2S-P25 10.2	2090	297	179	214	355	MAVA0690			MAVA0700
LAMBDA ECHOS HP GC2S-P50 10.2	2134	301	187	222	357	MAVA0690			MAVA0700

Rev.	Date	Draftman	Checked by	Revision description
E	05-02-15	REND	LUCA ZANELLO	MODIFICATA ALTEZZA UNITA'

Valid only for the version with centrifugal fans and without bag filters. For the other versions, the dimensional drawing must be identified by selection software.

DIMENSIONAL DIAGRAMS

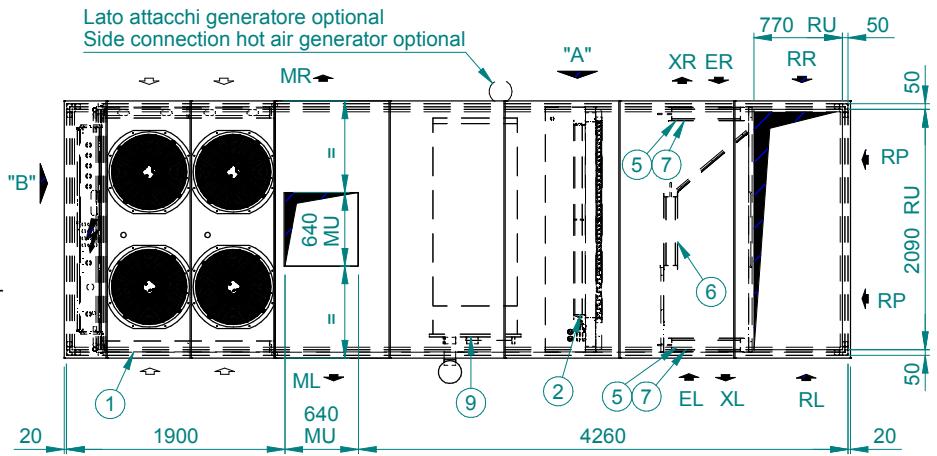
LAMBDA ECHOS 9.2 - 10.2 GC3S

VISTA DA "B"
VIEW FROM "B"

DENOMINAZIONE/DENOMINATION

- 1) Batteria condensante/Condensing coil
- 2) Batteria evaporante/Evaporating coil
- 3) Ventilatore di mandata/Discharge fan
- 4) Ventilatore di ripresa/Intake fan
- 5) Serranda aria esterna/ External air Damper
- 6) Serranda di miscela/Mixing damper
- 7) Serranda aria di espulsione/Exhaust air damper
- 8) Compressore/Compressor
- 9) Generatore aria calda/Hot air generator

Mf	FILTRI METALLICI METALLIC FILTER
Af	FILTRO ARIA AIR FILTER
Lh	FORI DI SOLLEVAMENTO LIFTING HOLES
Rep	PANNELLO ASPORTABILE REMOVABLE PANEL
Ep	QUADRO ELETTRICO ELECTRICAL PANEL
Es	INGRESSO ALIMENTAZIONE ELETTRICA ELECTRICAL SUPPLY INLET
	SPAZI DI INSTALLAZIONE CLEARANCES



Direzione aria esterna/External air direction
ER=Destra/Right (Standard) EL=Sinistra/Left(Optional)

Versioni non possibili/Not possible versions :
(XR+ER) - (XL+EL)

Aria di espulsione/Exhaust air
XL=Sinistra/left (Standard) XR=Destra/Right (Optional)

Direzione aria di ripresa/Intake air direction

RP=Ripresa posteriore/Rear intake (Standard)

RR=Ripresa da destra/Right intake (Optional)

RD=Ripresa da sotto/Bottom intake(Optional)

RU=Ripresa da sopra/Top intake (Optional)

RL=Ripresa da sinistra/Left intake (Optional)

MU=Mandata da sopra/Top discharge (Optional)

ML=Mandata da sinistra/Left Discharge (Optional)

MR=Mandata da destra/Right discharge (Optional)

MD=Mandata da sotto/Bottom discharge (Standard)

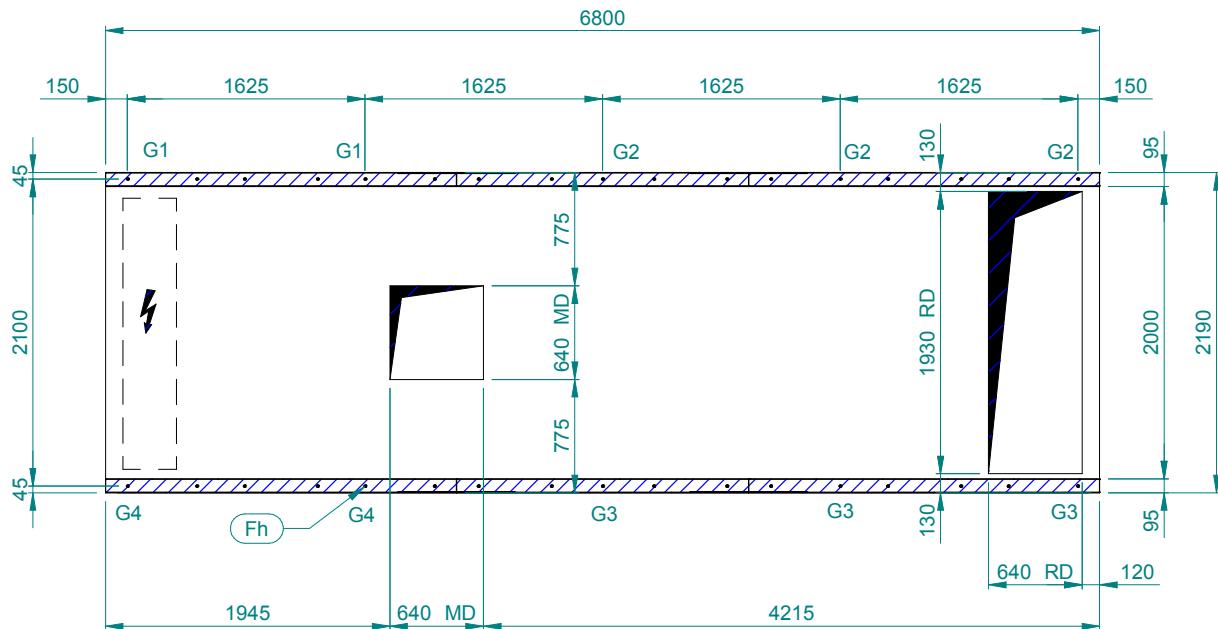
Rev.	Date	Draftman	Checked by	Revision description
D	05-02-15	REND	LUCA ZANELLO	MODIFICATA ALTEZZA UNITA'

Valid only for the version with centrifugal fans and without bag filters. For the other versions, the dimensional drawing must be identified by selection software.

DIMENSIONAL DIAGRAMS

LAMBDA ECHOS 9.2 - 10.2 GC3S

C411549-D



Fh	FORI DI FISSAGGIO FIXING HOLES	M10	G..	PUNTI DI APPOGGIO ANTIVIBRANTI VIBRATION DAMPER FOOT HOLDS
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MODELLO MODEL	PESO(Kg) WEIGHT(Kg)	G1(Kg)	G2(Kg)	G3(Kg)	G4(Kg)	CODICE ANTIVIBRANTI-ANTIVIBRATION MOUNTS CODE			
						G1	G2	G3	G4
LAMBDA ECHOS CO GC3S-P25 9.4	2447	262	192	235	321				MAVA0690
LAMBDA ECHOS CO GC3S-P50 9.4	2496	265	198	242	323				MAVA0690
LAMBDA ECHOS HP GC3S-P25 9.4	2518	273	193	239	338				MAVA0690
LAMBDA ECHOS HP GC3S-P50 9.4	2568	276	200	246	339				MAVA0690
LAMBDA ECHOS CO GC3S-P25 10.2	2470	266	190	236	330				MAVA0690
LAMBDA ECHOS CO GC3S-P50 10.2	2524	269	197	243	333				MAVA0690
LAMBDA ECHOS HP GC3S-P25 10.2	2540	276	192	240	346				MAVA0690
LAMBDA ECHOS HP GC3S-P50 10.2	2592	279	199	247	348				MAVA0690

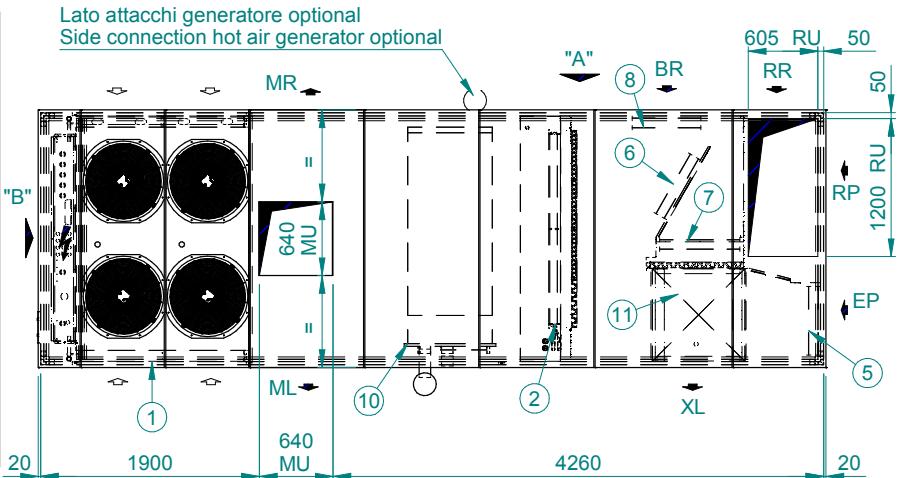
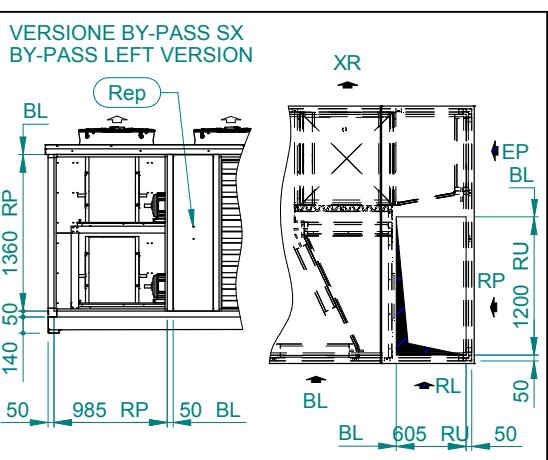
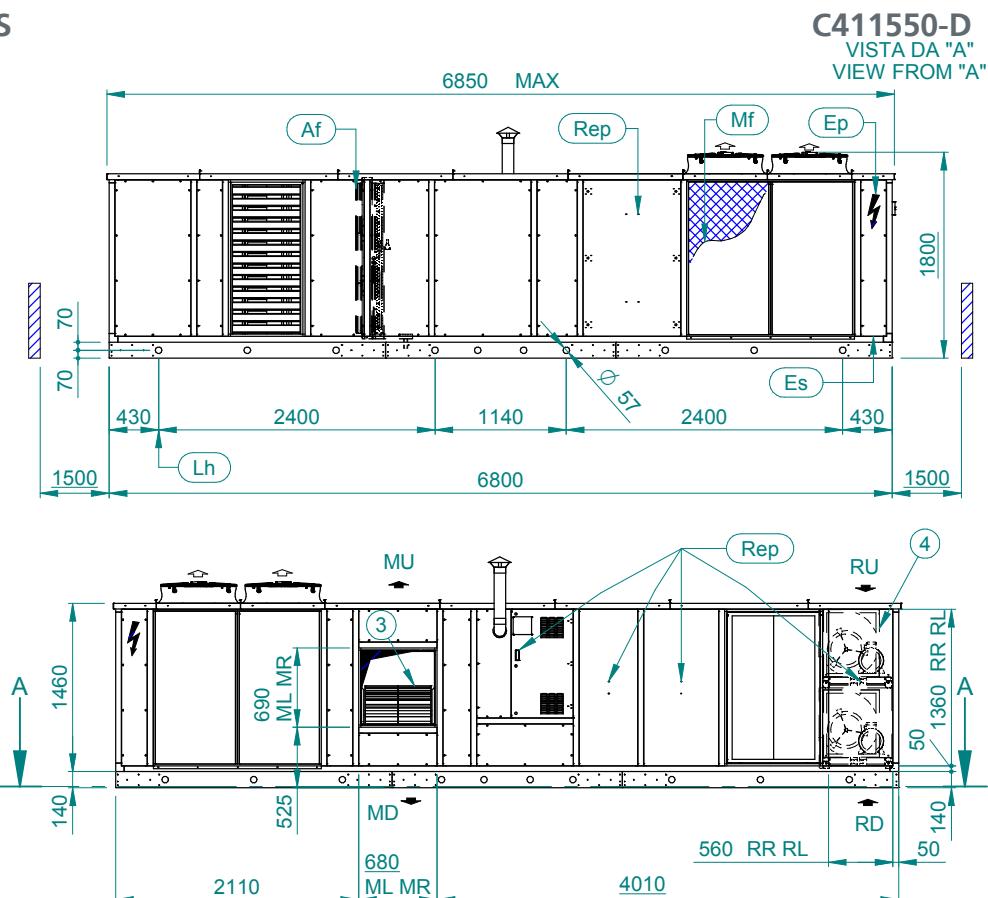
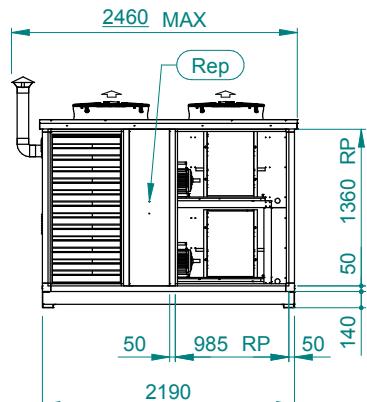
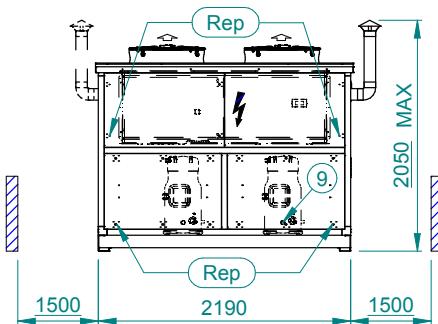
Rev.	Date	Draftman	Checked by	Revision description
D	05-02-15	REND	LUCA ZANELLO	MODIFICATA ALTEZZA UNITA'

Valid only for the version with centrifugal fans and without bag filters. For the other versions, the dimensional drawing must be identified by selection software.

DIMENSIONAL DIAGRAMS

LAMBDA ECHOS 9.2 - 10.2 GS4S

VISTA DA "B" VIEW FROM "B"



DENOMINAZIONE/DENOMINATION

- DEFINIZIONE DEI VARI ARTICOLI

 - 1) Batteria condensante/Condensing coil
 - 2) Batteria evaporante/Evaporating coil
 - 3) Ventilatore di mandata/Discharge fan
 - 4) Ventilatore di ripresa/Intake fan
 - 5) Serranda aria esterna/ External air Damper
 - 6) Serranda di miscela/Mixing damper
 - 7) Serranda aria di espulsione/Expulsion air damper
 - 8) Serranda di by-pass/Damper by-pass
 - 9) Compressore/Compressor
 - 10) Generatore aria calda/Hot air generator
 - 11) Recuperatore/Recuperator

Versioni non possibili/Not possible versions :

(BR+XR) - (BL+XL) - (RR+XR) - (RL+XL) - (RR+BL) - (RL+BR)

Direzione aria esterna/External air direction
EP=Posteriore/Rear (Standard)

Aria di espulsione/Exhaust air
XL=Sinistra/left (Standard) XR=Destra/Right (Optional)

Direzione aria di mandata/Discharge air direction

MD=Mandata da sotto/Bottom discharge (Standard)
MI=Mandata da sinistra/Left discharge (Optional)

ME=Mandata da sinistra/Left discharge (Optional)
MR=Mandata da destra/Right discharge (Optional)

Aria by-pass/By-pass air
BR=Destra/Right (Standard)

BL=Sinistra/Left (Optional)

Direzione aria di ripresa/Intake air direction
RP-Ripresa posteriore/Rear intake (Standard)

RR=Ripresa posteriore/Right intake (Standard)
RR=Ripresa da destra/Right intake (Optional)

RL=Ripresa da sinistra/Left intake (Optional)
RR=Ripresa da sotto/Bottom intake (Optional)

RU=Ripresa da sopra/Top intake (Optional)

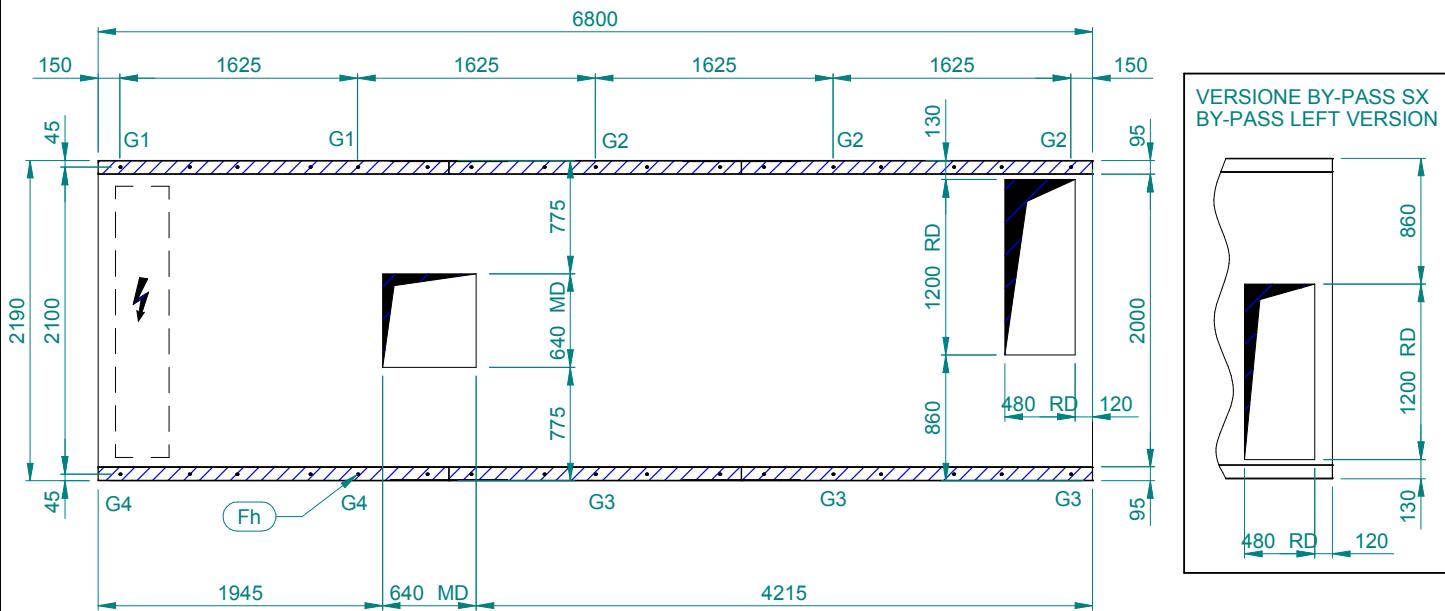
Rev.	Date	Draftman	Checked by	Revision description
D	05-02-15	REND	LUCA ZANELLO	MODIFICATA ALTEZZA UNITA'

Valid only for the version with centrifugal fans and without bag filters. For the other versions, the dimensional drawing must be identified by selection software.

DIMENSIONAL DIAGRAMS

LAMBDA ECHOS 9.2 - 10.2 GS4S

C411550-D



Fh	FORI DI FISSAGGIO FIXING HOLES	M10
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G..	PUNTI DI APPOGGIO ANTIVIBRANTI VIBRATION DAMPER FOOT HOLDS
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Ep	QUADRO ELETTRICO ELECTRICAL PANEL	Af	FILTRO ARIA AIR FILTER
Es	INGRESSO ALIMENTAZIONE ELETTRICA ELECTRICAL SUPPLY INLET	Lh	FORI DI SOLLEVAMENTO LIFTING HOLES
 SPAZI DI INSTALLAZIONE CLEARANCES		Rep	PANNELLO ASPORTABILE REMOVABLE PANEL

Mf	FILTRI METALLICI METALLIC FILTER
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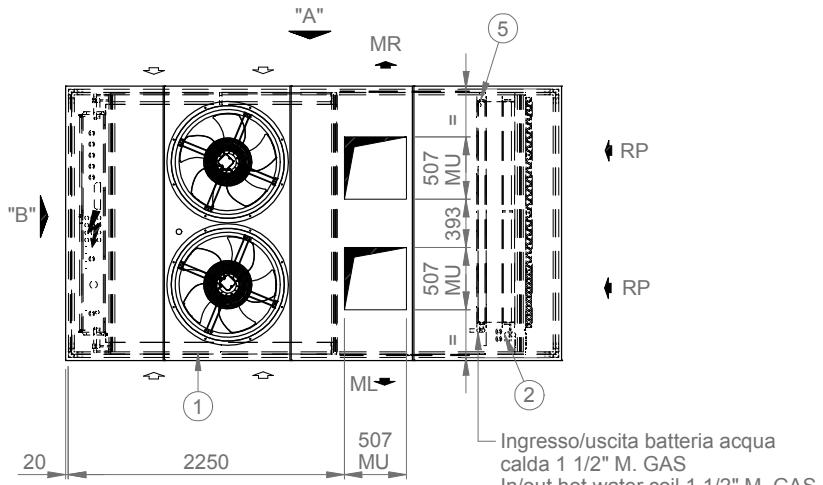
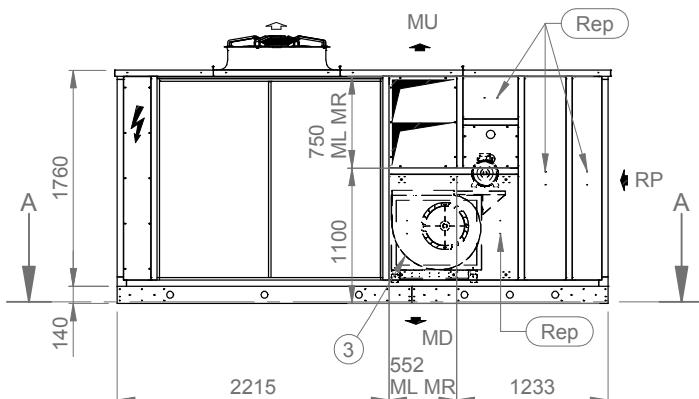
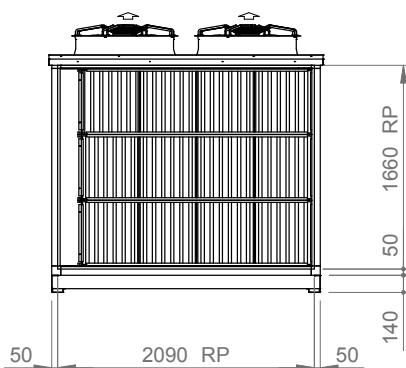
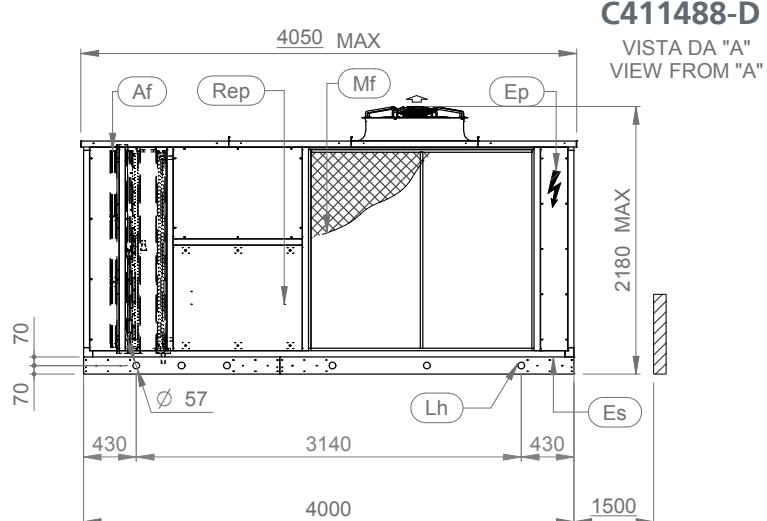
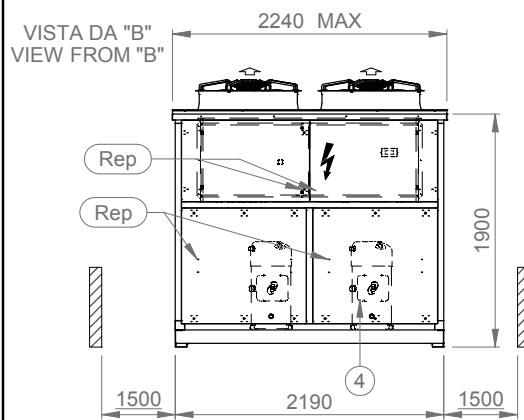
MODELLO MODEL	PESO(Kg) WEIGHT(Kg)	G1(Kg)	G2(Kg)	G3(Kg)	G4(Kg)	CODICE ANTIVIBRANTI-ANTIVIBRATION MOUNTS CODE			
						G1	G2	G3	G4
LAMBDA ECHOS CO GS4S-P25 9.4	2539	271	214	245	310				MAVA0690
LAMBDA ECHOS CO GS4S-P50 9.4	2584	273	221	251	311				MAVA0690
LAMBDA ECHOS HP GS4S-P25 9.4	2604	281	215	249	325				MAVA0690
LAMBDA ECHOS HP GS4S-P50 9.4	2653	284	222	255	327				MAVA0690
LAMBDA ECHOS CO GS4S-P25 10.2	2559	274	213	246	317				MAVA0690
LAMBDA ECHOS CO GS4S-P50 10.2	2614	278	219	253	321				MAVA0690
LAMBDA ECHOS HP GS4S-P25 10.2	2628	285	214	250	333				MAVA0690
LAMBDA ECHOS HP GS4S-P50 10.2	2679	288	220	257	336				MAVA0690

Rev.	Date	Draftman	Checked by	Revision description
D	05-02-15	REND	LUCA ZANELLO	MODIFICATA ALTEZZA UNITA'

Valid only for the version with centrifugal fans and without bag filters. For the other versions, the dimensional drawing must be identified by selection software.

DIMENSIONAL DIAGRAMS

LAMBDA ECHOS 12.2 - 13.2 - 14.2 - 16.2



DENOMINAZIONE/DENOMINATION

- DENOMINAZIONE/DENOMINATION**

 - 1) Batteria condensante/Condensing coil
 - 2) Batteria evaporante/Evaporating coil
 - 3) Ventilatore di mandata/Discharge fan
 - 4) Compressore/Compressor
 - 5) Batteria acqua calda (optional)/Hot water coil (optional)

Mf	FILTRI METALLICI METALLIC FILTER
Af	FILTRO ARIA AIR FILTER
Lh	FORI DI SOLLEVAMENTO LIFTING HOLES
Rep	PANNELLO ASPORTABILE REMOVABLE PANEL
Ep	QUADRO ELETTRICO ELECTRICAL PANEL
Es	INGRESSO ALIMENTAZIONE ELETTRICA ELECTRICAL SUPPLY INLET
	SPAZI DI INSTALLAZIONE CLEARANCES

Direzione aria di mandata/Discharge air direction
MD=Mandata da sotto/Bottom discharge (Standard)
ML= Mandata da sinistra/Left discharge (Optional)
MR=Mandata da destra/Right discharge (Optional)
MU=Mandata da sopra/Top discharge (Optional)

Direzione aria esterna/External air direction
RP=Posteriore/Rear (Standard)

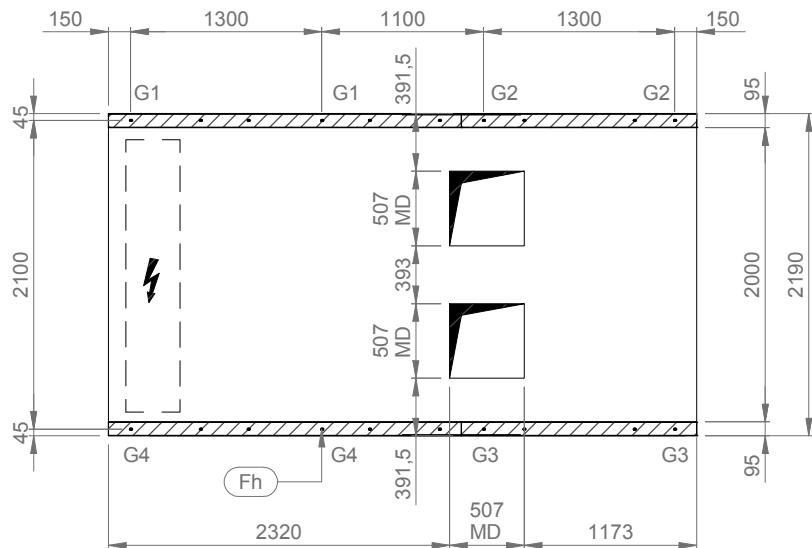
Rev.	Date	Draftman	Checked by	Revision description
D	05-02-15	REND	LUCA ZANELLO	MODIFICATA ALTEZZA UNITA'

Valid only for the version with centrifugal fans and without bag filters. For the other versions, the dimensional drawing must be identified by selection software.

DIMENSIONAL DIAGRAMS

LAMBDA ECHOS 12.2 - 13.2 - 14.2 - 16.2

C411488-D



Fh	FORI DI FISSAGGIO FIXING HOLES	M10	G..	PUNTI DI APPOGGIO ANTIVIBRANTI VIBRATION DAMPER FOOT HOLDS
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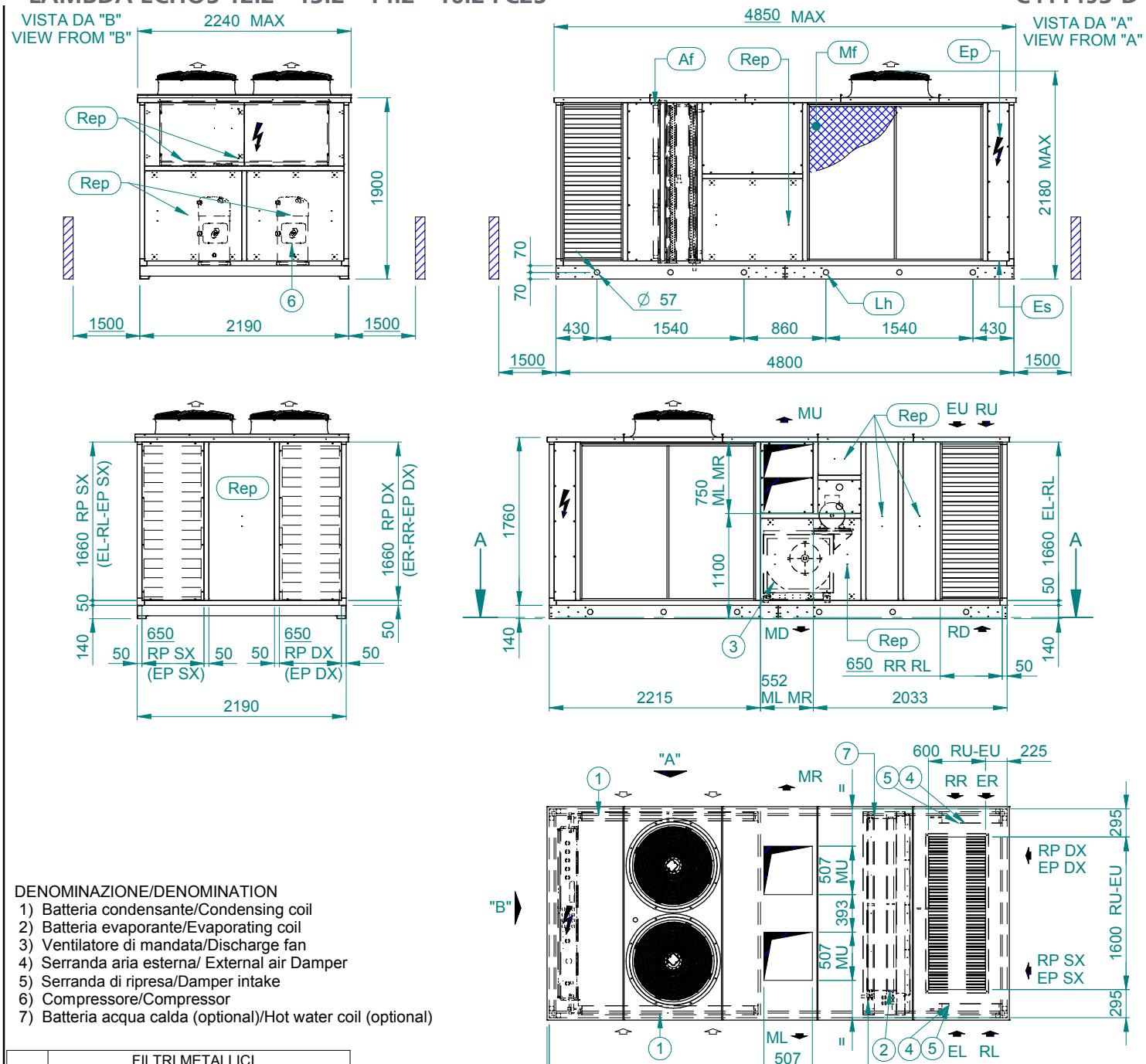
MODELLO MODEL	PESO(Kg) WEIGHT(Kg)	G1(Kg)	G2(Kg)	G3(Kg)	G4(Kg)	CODICE ANTIVIBRANTI-ANTIVIBRATION MOUNTS CODE			
						G1	G2	G3	G4
LAMBDA ECHOS CO BASE-P25 12.2	1666	244	168	172	249				MAVA0690
LAMBDA ECHOS CO BASE-P50 12.2	1688	245	173	176	250				MAVA0690
LAMBDA ECHOS HP BASE-P25 12.2	1738	250	175	183	261				MAVA0690
LAMBDA ECHOS HP BASE-P50 12.2	1760	251	180	187	262				MAVA0690
LAMBDA ECHOS CO BASE-P25-BT 12.2	1750	244	191	193	247				MAVA0690
LAMBDA ECHOS CO BASE-P50-BT 12.2	1772	245	195	198	248				MAVA0690
LAMBDA ECHOS HP BASE-P25-BT 12.2	1820	250	197	204	259				MAVA0690
LAMBDA ECHOS HP BASE-P50-BT 12.2	1842	251	202	209	259				MAVA0690
LAMBDA ECHOS CO BASE-P25 13.2	1672	245	167	172	252				MAVA0690
LAMBDA ECHOS CO BASE-P50 13.2	1694	246	172	176	253				MAVA0690
LAMBDA ECHOS HP BASE-P25 13.2	1742	251	174	183	263				MAVA0690
LAMBDA ECHOS HP BASE-P50 13.2	1768	253	179	187	265				MAVA0690
LAMBDA ECHOS CO BASE-P25-BT 13.2	1756	245	190	193	250				MAVA0690
LAMBDA ECHOS CO BASE-P50-BT 13.2	1776	246	194	198	250				MAVA0690
LAMBDA ECHOS HP BASE-P25-BT 13.2	1828	252	197	204	261				MAVA0690
LAMBDA ECHOS HP BASE-P50-BT 13.2	1848	252	201	209	262				MAVA0690
LAMBDA ECHOS CO BASE-P25 14.2	1722	258	166	171	266				MAVA0690
LAMBDA ECHOS CO BASE-P50 14.2	1746	259	171	176	267				MAVA0690
LAMBDA ECHOS HP BASE-P25 14.2	1794	264	173	182	278				MAVA0690
LAMBDA ECHOS HP BASE-P50 14.2	1818	265	178	187	279				MAVA0690
LAMBDA ECHOS CO BASE-P25-BT 14.2	1808	258	189	193	264				MAVA0690
LAMBDA ECHOS CO BASE-P50-BT 14.2	1830	259	193	197	266				MAVA0690
LAMBDA ECHOS HP BASE-P25-BT 14.2	1882	265	196	204	276				MAVA0690
LAMBDA ECHOS HP BASE-P50-BT 14.2	1898	265	200	208	276				MAVA0690
LAMBDA ECHOS CO BASE-P25 16.2	1778	272	165	171	281				MAVA0690
LAMBDA ECHOS CO BASE-P50 16.2	1798	273	170	175	281				MAVA0690
LAMBDA ECHOS HP BASE-P25 16.2	1846	278	173	181	291				MAVA0690
LAMBDA ECHOS HP BASE-P50 16.2	1866	278	177	186	292				MAVA0690
LAMBDA ECHOS CO BASE-P25-BT 16.2	1858	272	188	192	277				MAVA0690
LAMBDA ECHOS CO BASE-P50-BT 16.2	1878	273	192	196	278				MAVA0690
LAMBDA ECHOS HP BASE-P25-BT 16.2	1930	278	195	203	289				MAVA0690
LAMBDA ECHOS HP BASE-P50-BT 16.2	1950	279	199	207	290				MAVA0690

Rev.	Date	Draftman	Checked by	Revision description
D	05-02-15	REND	LUCA ZANELLO	MODIFICATA ALTEZZA UNITA'

Valid only for the version with centrifugal fans and without bag filters. For the other versions, the dimensional drawing must be identified by selection software.

DIMENSIONAL DIAGRAMS

LAMBDA ECHOS 12.2 - 13.2 - 14.2 - 16.2 FC2S

**Direzione aria esterna/External air direction**

ER=Destra/Right (Standard)

EP DX=Posteriore destra/Right Rear (Optional)

EP SX=Posteriore sinistra/Left Rear (Optional)

EU=Sopra/Top (Optional)

EL=Sinistra/Left (Optional)

Direzione aria di mandata/Discharge air direction

MD=Mandata da sotto/Bottom discharge (Standard)

ML=Mandata da sinistra/Left discharge (Optional)

MR=Mandata da destra/Right discharge (Optional)

MU=Mandata da sopra/Top discharge (Optional)

Versioni non possibili/Not possible versions :

(RL+EL) - (RR+ER) - (RU+EU) - (RR+EP DX)

(RL+EP SX) - (RP DX+ER) - (RP SX+EL)

Direzione aria di ripresa/Intake air direction

RL=Ripresa da sinistra/Left intake (Standard)

RD=Ripresa da sotto/Bottom intake (Optional)

RP DX=Ripresa posteriore destra/Right rear intake (Optional)

RP SX=Ripresa posteriore sinistra/Left rear intake (Optional)

RR=Ripresa da destra/Right intake (Optional)

RU=Ripresa da sopra/Top intake (Optional)

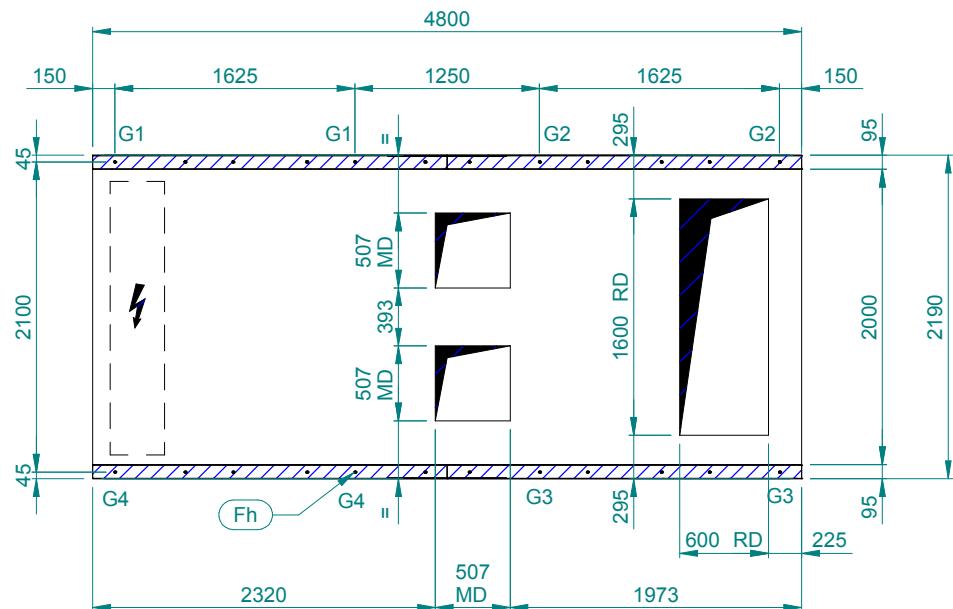
Rev.	Date	Draftman	Checked by	Revision description
0	03.02.15	Zanella	Turi	Modificata altezza unità per ventilatori esterni

Valid only for the version with centrifugal fans and without bag filters. For the other versions, the dimensional drawing must be identified by selection software.

DIMENSIONAL DIAGRAMS

LAMBDA ECHOS 12.2 - 13.2 - 14.2 - 16.2 FC2S

C411493-D



Fh FORI DI FISSAGGIO
FIXING HOLES M10 G.. PUNTI DI APPOGGIO ANTIVIBRANTI
VIBRATION DAMPER FOOT HOLDS

MODELLO MODEL	PESO(Kg) WEIGHT(Kg)	G1(Kg)	G2(Kg)	G3(Kg)	G4(Kg)	CODICE ANTIVIBRANTI-ANTIVIBRATION MOUNTS CODE			
						G1	G2	G3	G4
LAMBDA ECHOS CO FC2S-P25 12.2	1846	291	166	169	297			MAVA0690	
LAMBDA ECHOS CO FC2S-P50 12.2	1874	292	172	175	298			MAVA0690	
LAMBDA ECHOS HP FC2S-P25 12.2	1906	298	169	176	310			MAVA0690	
LAMBDA ECHOS HP FC2S-P50 12.2	1936	300	175	182	311			MAVA0690	
LAMBDA ECHOS CO FC2S-P25-BT 12.2	1928	296	183	186	299			MAVA0690	
LAMBDA ECHOS CO FC2S-P50-BT 12.2	1958	297	190	192	300			MAVA0690	
LAMBDA ECHOS HP FC2S-P25-BT 12.2	1990	303	187	192	313			MAVA0690	
LAMBDA ECHOS HP FC2S-P50-BT 12.2	2022	305	193	199	314			MAVA0690	
LAMBDA ECHOS CO FC2S-P25 13.2	1850	292	165	169	299			MAVA0690	
LAMBDA ECHOS CO FC2S-P50 13.2	1880	294	171	175	300			MAVA0690	
LAMBDA ECHOS HP FC2S-P25 13.2	1914	300	168	176	313			MAVA0690	
LAMBDA ECHOS HP FC2S-P50 13.2	1946	302	174	182	315			MAVA0690	
LAMBDA ECHOS CO FC2S-P25-BT 13.2	1934	297	183	185	302			MAVA0690	
LAMBDA ECHOS CO FC2S-P50-BT 13.2	1964	298	189	192	303			MAVA0690	
LAMBDA ECHOS HP FC2S-P25-BT 13.2	1996	305	186	192	315			MAVA0690	
LAMBDA ECHOS HP FC2S-P50-BT 13.2	2028	306	192	199	317			MAVA0690	
LAMBDA ECHOS CO FC2S-P25 14.2	1902	306	163	168	314			MAVA0690	
LAMBDA ECHOS CO FC2S-P50 14.2	1932	307	170	174	315			MAVA0690	
LAMBDA ECHOS HP FC2S-P25 14.2	1966	313	167	175	328			MAVA0690	
LAMBDA ECHOS HP FC2S-P50 14.2	1998	315	173	181	330			MAVA0690	
LAMBDA ECHOS CO FC2S-P25-BT 14.2	1986	311	181	184	317			MAVA0690	
LAMBDA ECHOS CO FC2S-P50-BT 14.2	2016	312	187	191	318			MAVA0690	
LAMBDA ECHOS HP FC2S-P25-BT 14.2	2046	318	184	191	330			MAVA0690	
LAMBDA ECHOS HP FC2S-P50-BT 14.2	2080	320	190	198	332			MAVA0690	
LAMBDA ECHOS CO FC2S-P25 16.2	1952	320	162	166	328			MAVA0690	
LAMBDA ECHOS CO FC2S-P50 16.2	1984	321	168	173	330			MAVA0690	
LAMBDA ECHOS HP FC2S-P25 16.2	2014	327	165	173	342			MAVA0690	
LAMBDA ECHOS HP FC2S-P50 16.2	2048	329	171	179	345			MAVA0690	
LAMBDA ECHOS CO FC2S-P25-BT 16.2	2038	325	180	183	331			MAVA0690	
LAMBDA ECHOS CO FC2S-P50-BT 16.2	2066	326	186	189	332			MAVA0690	
LAMBDA ECHOS HP FC2S-P25-BT 16.2	2100	332	183	190	345			MAVA0690	
LAMBDA ECHOS HP FC2S-P50-BT 16.2	2130	334	189	196	346			MAVA0690	

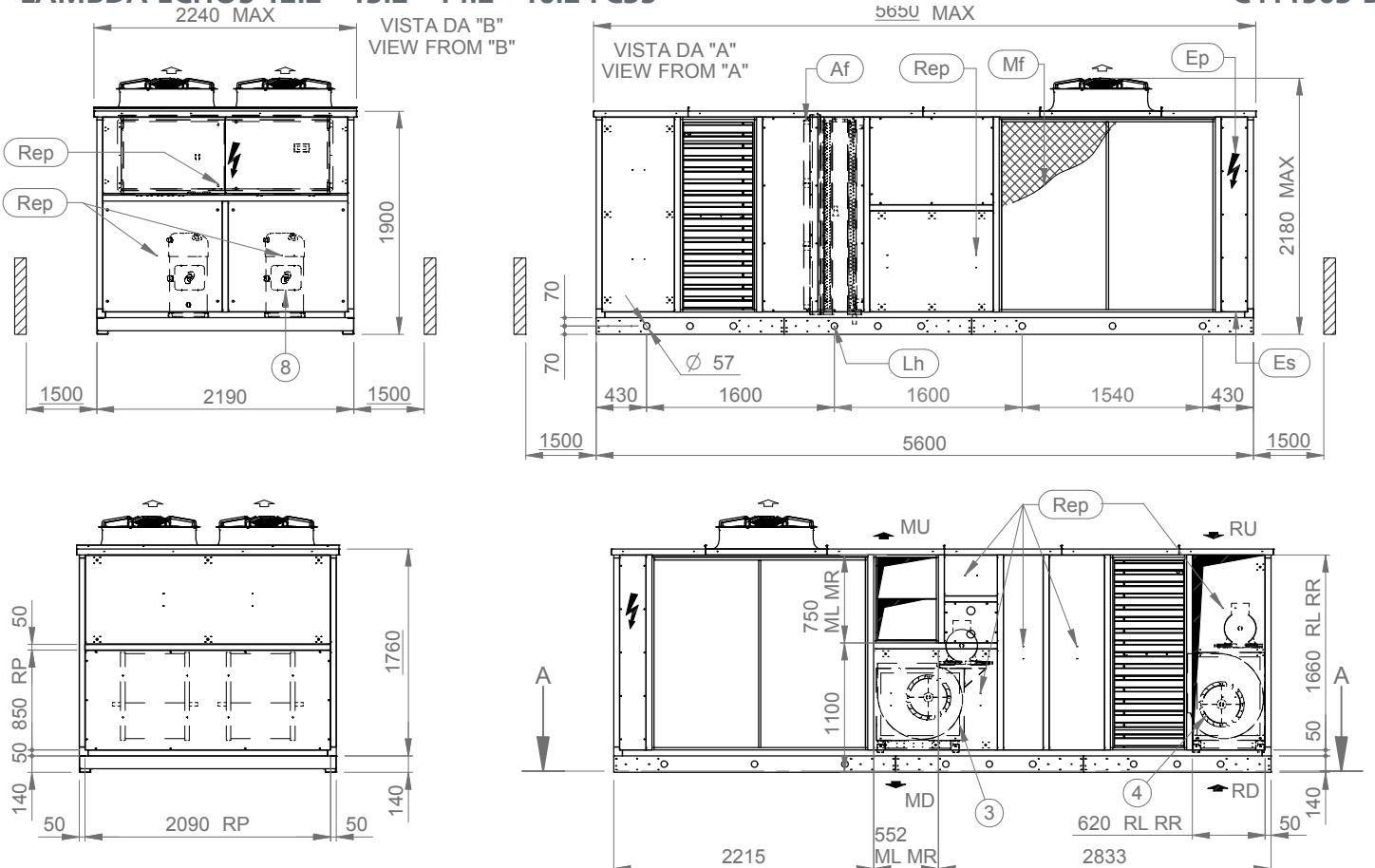
Rev.	Date	Draftman	Checked by	Revision description
R	03-02-15	Zanollo	Turri	Modificata altezza unità per ventilatori esterni

Valid only for the version with centrifugal fans and without bag filters. For the other versions, the dimensional drawing must be identified by selection software.

DIMENSIONAL DIAGRAMS

LAMBDA ECHOS 12.2 - 13.2 - 14.2 - 16.2 FC3S

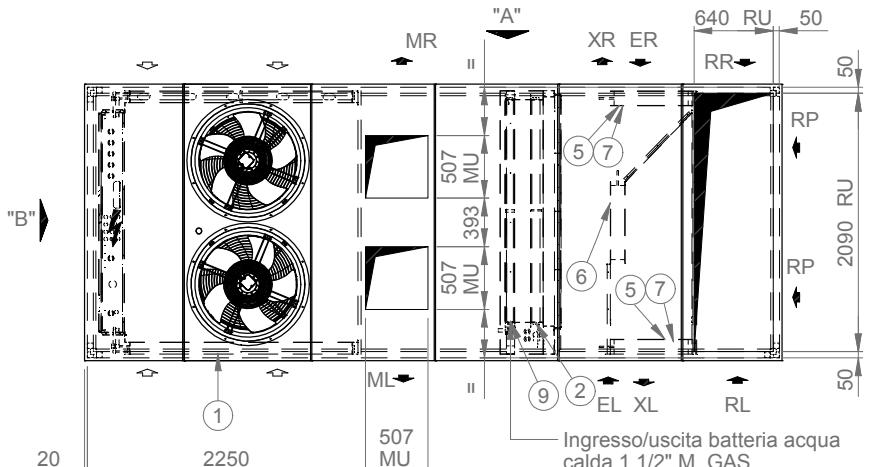
C411503-D



DENOMINAZIONE/DENOMINATION

- 1) Batteria condensante/Condensing coil
 - 2) Batteria evaporante/Evaporating coil
 - 3) Ventilatore di manda/Discharge fan
 - 4) Ventilatore di ripresa/Intake fan
 - 5) Serranda aria esterna/ External air Damper
 - 6) Serranda di miscela/Mixing damper
 - 7) Serranda aria di espulsione/Expulsion air damper
 - 8) Compressore/Compressor
 - 9) Batteria acqua calda (optional)/Hot water coil (optional)

Mf	FILTRI METALLICI METALLIC FILTER
Af	FILTRO ARIA AIR FILTER
Lh	FORI DI SOLLEVAMENTO LIFTING HOLES
Rep	PANNELLO ASPORTABILE REMOVABLE PANEL
Ep	QUADRO ELETTRICO ELECTRICAL PANEL
Es	INGRESSO ALIMENTAZIONE ELETTRICA ELECTRICAL SUPPLY INLET
	SPAZI DI INSTALLAZIONE CLEARANCES



Direzione aria esterna/External air direction
ER=Destra/Right (Standard) EL=Sinistra/Left(Optional)

Aria di espulsione/Exhaust air
XL=Sinistra/left (Standard) XR=Destra/Right (Optional)

Direzione aria di mandata/Discharge air direction
MD=Mandata da sotto/Bottom discharge (Standard)
M= Manda aria in alto/Up discharge (Optional)

ME=Mandata da sinistra/Left discharge (Optional)
MR=Mandata da destra/Right discharge (Optional)
MU=Mandata da sopra/Top discharge (Optional)

Versioni non possibili/Not possible versions :
(XR+ER) - (XL+EL)

Direzione aria di ripresa/Intake air direction
RP=Ripresa posteriore/Rear intake (Standard)
RR=Ripresa da destra/Right intake (Optional)
RD=Ripresa da sotto/Bottom intake(Optional)
RU=Ripresa da sopra/Top intake (Optional)
RL=Ripresa da sinistra/Left intake (Optional)

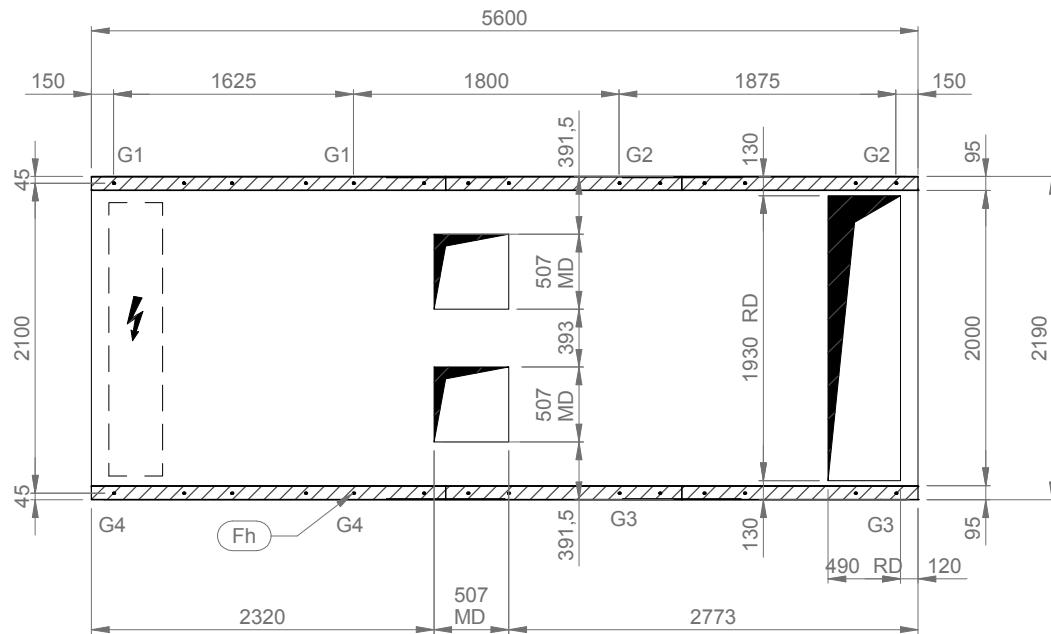
Rev.	Date	Draftman	Checked by	Revision description
R	06.02.15	PEND	LUCA ZANELLO	MODIFICATA ALTEZZA UNITÀ

Valid only for the version with centrifugal fans and without bag filters. For the other versions, the dimensional drawing must be identified by selection software.

DIMENSIONAL DIAGRAMS

LAMBDA ECHOS 12.2 - 13.2 - 14.2 - 16.2 FC3S

C411503-D



Fh	FORI DI FISSAGGIO FIXING HOLES	M10	G..	PUNTI DI APPOGGIO ANTIVIBRANTI VIBRATION DAMPER FOOT HOLDS
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MODELLO MODEL	PESO(Kg) WEIGHT(Kg)	G1(Kg)	G2(Kg)	G3(Kg)	G4(Kg)	CODICE ANTIVIBRANTI-ANTIMBRATION MOUNTS CODE			
						G1	G2	G3	G4
LAMBDA ECHOS CO FC3S-P25 12.2	2268	300	259	266	309				MAVA0690
LAMBDA ECHOS CO FC3S-P50 12.2	2304	302	266	273	311				MAVA0690
LAMBDA ECHOS HP FC3S-P25 12.2	2338	310	262	273	324				MAVA0690
LAMBDA ECHOS HP FC3S-P50 12.2	2380	313	269	281	327				MAVA0690
LAMBDA ECHOS CO FC3S-P25-BT 12.2	2350	308	273	279	315				MAVA0690
LAMBDA ECHOS CO FC3S-P50-BT 12.2	2388	310	281	286	317				MAVA0690
LAMBDA ECHOS HP FC3S-P25-BT 12.2	2422	318	276	287	330				MAVA0690
LAMBDA ECHOS HP FC3S-P50-BT 12.2	2460	320	284	294	332				MAVA0690
LAMBDA ECHOS CO FC3S-P25 13.2	2274	302	258	266	311				MAVA0690
LAMBDA ECHOS CO FC3S-P50 13.2	2310	304	265	273	313				MAVA0690
LAMBDA ECHOS HP FC3S-P25 13.2	2346	312	261	274	326				MAVA0690
LAMBDA ECHOS HP FC3S-P50 13.2	2384	314	268	281	329				MAVA0690
LAMBDA ECHOS CO FC3S-P25-BT 13.2	2358	310	273	279	317				MAVA0690
LAMBDA ECHOS CO FC3S-P50-BT 13.2	2394	312	280	286	319				MAVA0690
LAMBDA ECHOS HP FC3S-P25-BT 13.2	2430	320	276	287	332				MAVA0690
LAMBDA ECHOS HP FC3S-P50-BT 13.2	2466	322	283	294	334				MAVA0690
LAMBDA ECHOS CO FC3S-P25 14.2	2326	315	257	265	326				MAVA0690
LAMBDA ECHOS CO FC3S-P50 14.2	2364	317	264	273	328				MAVA0690
LAMBDA ECHOS HP FC3S-P25 14.2	2398	325	260	273	341				MAVA0690
LAMBDA ECHOS HP FC3S-P50 14.2	2434	327	267	280	343				MAVA0690
LAMBDA ECHOS CO FC3S-P25-BT 14.2	2410	323	271	279	332				MAVA0690
LAMBDA ECHOS CO FC3S-P50-BT 14.2	2446	325	278	286	334				MAVA0690
LAMBDA ECHOS HP FC3S-P25-BT 14.2	2480	333	274	286	347				MAVA0690
LAMBDA ECHOS HP FC3S-P50-BT 14.2	2516	335	281	293	349				MAVA0690
LAMBDA ECHOS CO FC3S-P25 16.2	2378	329	255	264	341				MAVA0690
LAMBDA ECHOS CO FC3S-P50 16.2	2414	331	263	271	342				MAVA0690
LAMBDA ECHOS HP FC3S-P25 16.2	2448	339	259	271	355	MAVA0690			MAVA0700
LAMBDA ECHOS HP FC3S-P50 16.2	2486	341	266	279	357	MAVA0690			MAVA0700
LAMBDA ECHOS CO FC3S-P25-BT 16.2	2462	337	270	278	346				MAVA0690
LAMBDA ECHOS CO FC3S-P50-BT 16.2	2498	339	277	285	348				MAVA0690
LAMBDA ECHOS HP FC3S-P25-BT 16.2	2532	347	273	285	361	MAVA0690			MAVA0700
LAMBDA ECHOS HP FC3S-P50-BT 16.2	2568	349	280	292	363	MAVA0690			MAVA0700

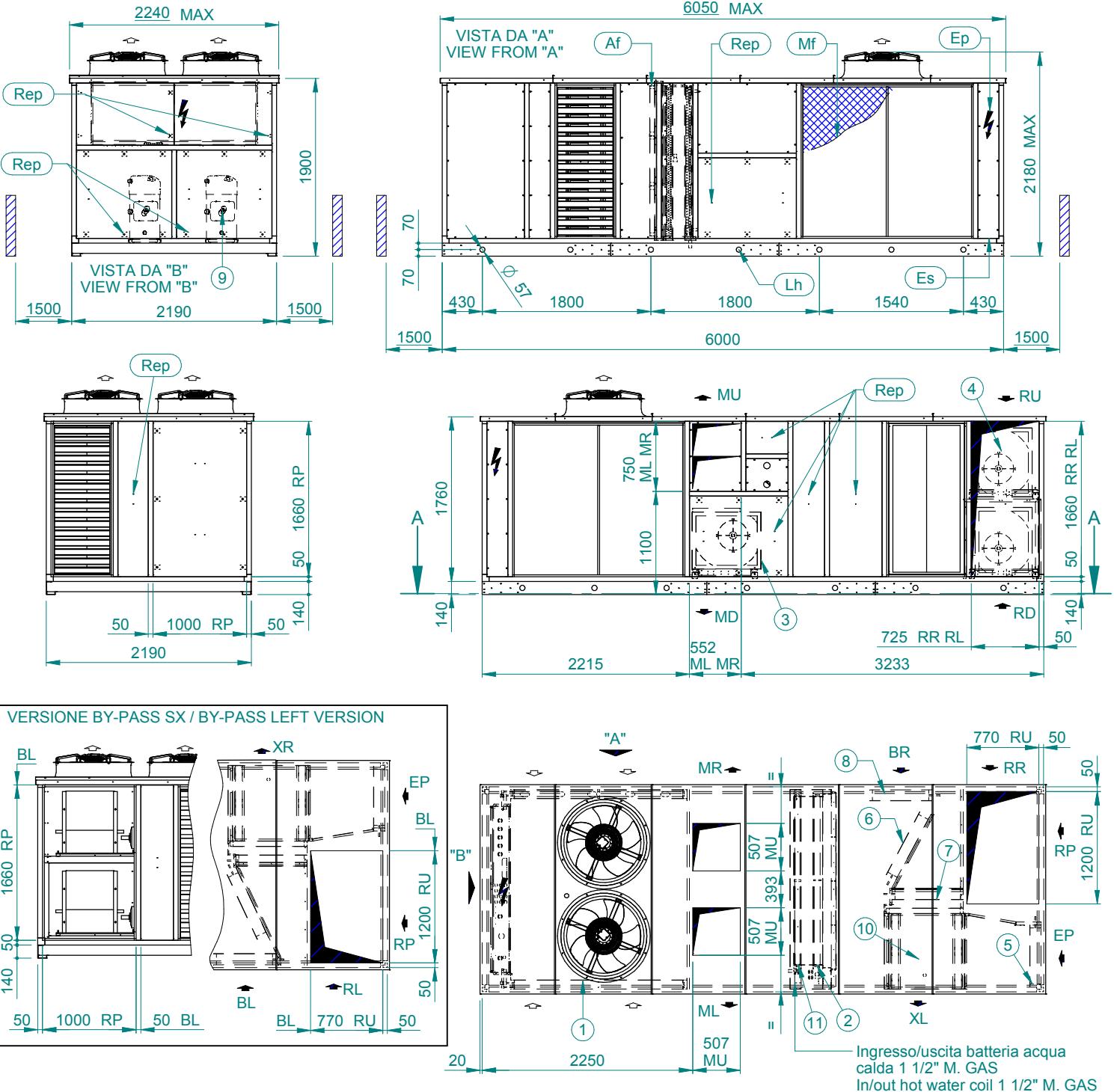
Rev.	Date	Draftman	Checked by	Revision description
N	06.02.15	REND	ILICA ZANETTO	MODIFICATA AI TEZZI I INITIA'

Valid only for the version with centrifugal fans and without bag filters. For the other versions, the dimensional drawing must be identified by selection software.

DIMENSIONAL DIAGRAMS

LAMBDA ECHOS 12.2 - 13.2 - 14.2 - 16.2 RS4S

C411354-E



DENOMINAZIONE/DENOMINATION

- 1) Batteria condensante/Condensing coil
 - 2) Batteria evaporante/Evaporating coil
 - 3) Ventilatore di manda/Discharge fan
 - 4) Ventilatore di ripresa/Intake fan
 - 5) Serranda aria esterna/ External air Damper
 - 6) Serranda di miscela/Mixing damper
 - 7) Serranda aria di espulsione/Expulsion air damper
 - 8) Serranda by-pass/Damper by-pass
 - 9) Compressore/Compressor
 - 10) Recuperatore/Recuperator
 - 11) Batteria acqua calda (optional)/
Hot water coil (optional)

Versioni non possibili/Not possible versions :

(BR+XR) - (BL+XL) - (RR+AR) - (RL+XL) - (RR+BL) - (RL+BR)

Direzione aria esterna/External air direction

Aria di espulsione/Exhaust air

XI=Sinistra/left (Standard) XR=Destra/Right (Optional)

Direzione aria di mandata/Discharge air direction

Direzione aria di mandata/Discharge air direction
MD=Mandata da sotto/Bottom discharge (Standard)

MD=Mandata da sotto/Bottom discharge (Standard)
MI = Mandata da sinistra/left discharge (Optional)

Aria hv-pass/Bv-pass air

Aria by-pass/By-pass air
BR=Destra/Right (Standard)
BL =Sinistra/Left (Optional)

Direzione aria di ripresa/Intake air direction

RP=Ripresa posteriore/Rear intake (Standard)

RR=Ripresa posteriore/Rear intake (Standard)
RR=Ripresa da destra/Right intake (Optional)

RL=Ripresa da sinistra/Left intake (Optional)

RD=Ripresa da sotto/Bottom intake (Optional)

Rev Date Draftman

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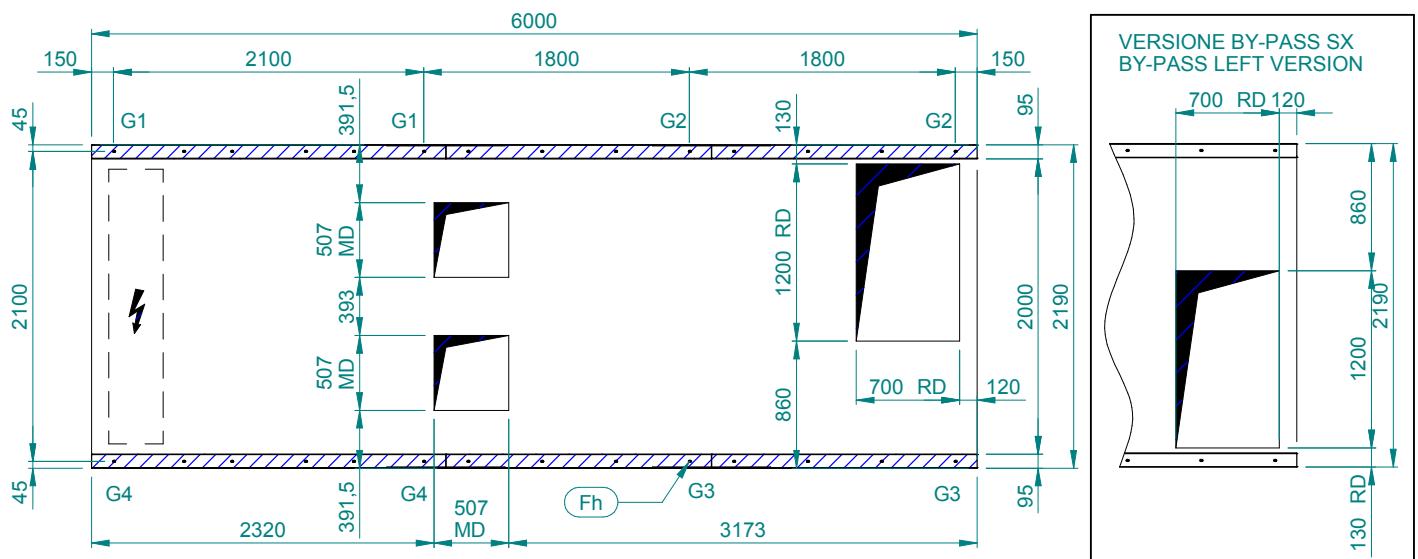
Revision description

Valid only for the version with centrifugal fans and without bag filters. For the other versions, the dimensional drawing must be identified by selection software.

DIMENSIONAL DIAGRAMS

LAMBDA ECHOS 12.2 - 13.2 - 14.2 - 16.2 RS4S

C411354-E



Lh	FORI DI SOLLEVAMENTO LIFTING HOLES		Mf	FILTRI METALLICI METALLIC FILTER		Ep	QUADRO ELETTRICO ELECTRICAL PANEL	
Rep	PANNELLO ASPORTABILE REMOVABLE PANEL		Af	FILTO ARIA AIR FILTER		Es	INGRESSO ALIMENTAZIONE ELETTRICA ELECTRICAL SUPPLY INLET	
G..	PUNTI DI APPOGGIO ANTIVIBRANTI VIBRATION DAMPER FOOT HOLDS		Fh	FORI DI FISSAGGIO FIXING HOLES		M10	SPAZI DI INSTALLAZIONE CLEARANCES	

MODELLO MODEL	PESO(Kg) WEIGHT(Kg)	G1(Kg)	G2(Kg)	G3(Kg)	G4(Kg)	CODICE ANTM/BRANT/ANTM/VIBRATION MOUNTS CODE			
						G1	G2	G3	G4
LAMBDA ECHOS CO RS4S-P25 12.2	2480	339	272	280	349				MAVA0690
LAMBDA ECHOS CO RS4S-P50 12.2	2514	342	278	286	351				MAVA0690
LAMBDA ECHOS HP RS4S-P25 12.2	2552	350	274	286	366				MAVA0690
LAMBDA ECHOS HP RS4S-P50 12.2	2586	353	280	292	368	MAVA0700			MAVA0700
LAMBDA ECHOS CO RS4S-P25-BT 12.2	2562	349	284	291	357				MAVA0690
LAMBDA ECHOS CO RS4S-P50-BT 12.2	2598	352	291	297	359	MAVA0700			MAVA0700
LAMBDA ECHOS HP RS4S-P25-BT 12.2	2634	360	286	297	374	MAVA0700			MAVA0700
LAMBDA ECHOS HP RS4S-P50-BT 12.2	2668	363	292	303	376	MAVA0700			MAVA0700
LAMBDA ECHOS CO RS4S-P25 13.2	2488	341	271	280	352				MAVA0690
LAMBDA ECHOS CO RS4S-P50 13.2	2520	343	277	286	354				MAVA0690
LAMBDA ECHOS HP RS4S-P25 13.2	2558	352	273	286	368	MAVA0700			MAVA0700
LAMBDA ECHOS HP RS4S-P50 13.2	2594	355	279	292	371	MAVA0700			MAVA0700
LAMBDA ECHOS CO RS4S-P25-BT 13.2	2572	351	284	291	360	MAVA0700			MAVA0700
LAMBDA ECHOS CO RS4S-P50-BT 13.2	2604	353	290	297	362	MAVA0700			MAVA0700
LAMBDA ECHOS HP RS4S-P25-BT 13.2	2642	362	286	297	376	MAVA0700			MAVA0700
LAMBDA ECHOS HP RS4S-P50-BT 13.2	2678	365	292	303	379	MAVA0700			MAVA0700
LAMBDA ECHOS CO RS4S-P25 14.2	2538	355	269	278	367	MAVA0700			MAVA0700
LAMBDA ECHOS CO RS4S-P50 14.2	2574	357	275	285	370	MAVA0700			MAVA0700
LAMBDA ECHOS HP RS4S-P25 14.2	2610	366	271	284	384	MAVA0700			MAVA0700
LAMBDA ECHOS HP RS4S-P50 14.2	2646	369	277	291	386	MAVA0700			MAVA0700
LAMBDA ECHOS CO RS4S-P25-BT 14.2	2622	365	281	289	376	MAVA0700			MAVA0700
LAMBDA ECHOS CO RS4S-P50-BT 14.2	2656	367	288	296	377	MAVA0700			MAVA0700
LAMBDA ECHOS HP RS4S-P25-BT 14.2	2692	376	283	295	392	MAVA0700			MAVA0700
LAMBDA ECHOS HP RS4S-P50-BT 14.2	2730	379	289	302	395	MAVA0700			MAVA0700
LAMBDA ECHOS CO RS4S-P25 16.2	2592	370	267	276	383	MAVA0700			MAVA0700
LAMBDA ECHOS CO RS4S-P50 16.2	2626	372	273	283	385	MAVA0700			MAVA0700
LAMBDA ECHOS HP RS4S-P25 16.2	2660	380	269	282	399	MAVA0700			MAVA0700
LAMBDA ECHOS HP RS4S-P50 16.2	2694	383	275	288	401	MAVA0700			MAVA0700
LAMBDA ECHOS CO RS4S-P25-BT 16.2	2672	379	280	287	390	MAVA0700			MAVA0700
LAMBDA ECHOS CO RS4S-P50-BT 16.2	2708	382	286	294	392	MAVA0700			MAVA0700
LAMBDA ECHOS HP RS4S-P25-BT 16.2	2742	390	282	293	406	MAVA0700			MAVA0700
LAMBDA ECHOS HP RS4S-P50-BT 16.2	2778	393	288	299	409	MAVA0700			MAVA0700

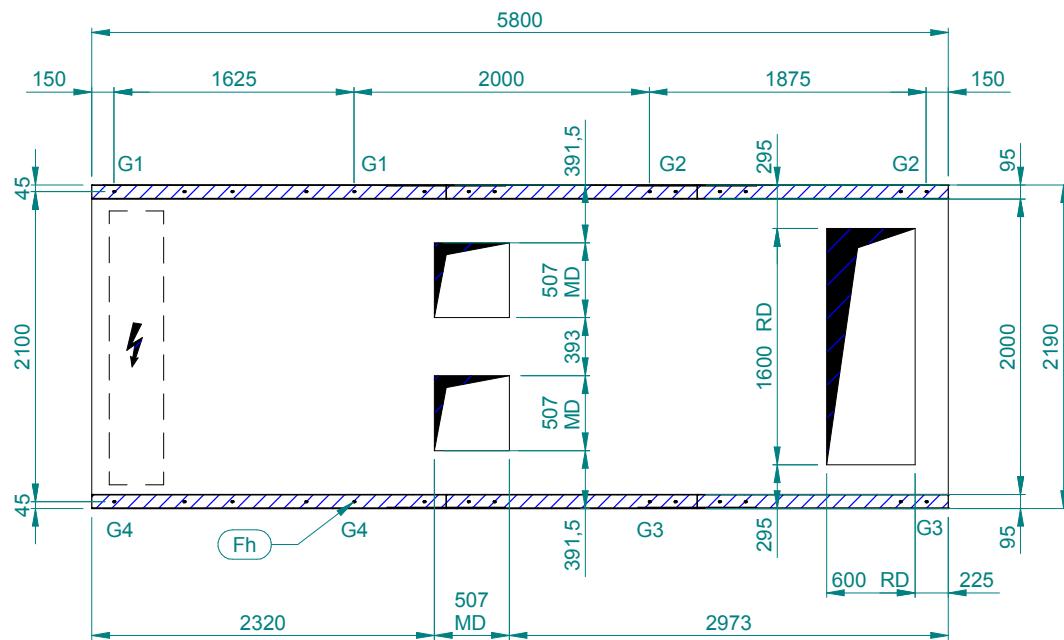
Rev.	Date	Draftman	Checked by	Revision description
	00-00-15	REND	LUCAS ZAMPIOLI	MODIFICATA AL TEGLIA D'USCITA

Valid only for the version with centrifugal fans and without bag filters. For the other versions, the dimensional drawing must be identified by selection software.

DIMENSIONAL DIAGRAMS

LAMBDA ECHOS 12.2 - 13.2 - 14.2 - 16.2 GC2S

C411513-D



Fh	FORI DI FISSAGGIO FIXING HOLES	M10	G..	PUNTI DI APPOGGIO ANTIVIBRANTI VIBRATION DAMPER FOOT HOLDS
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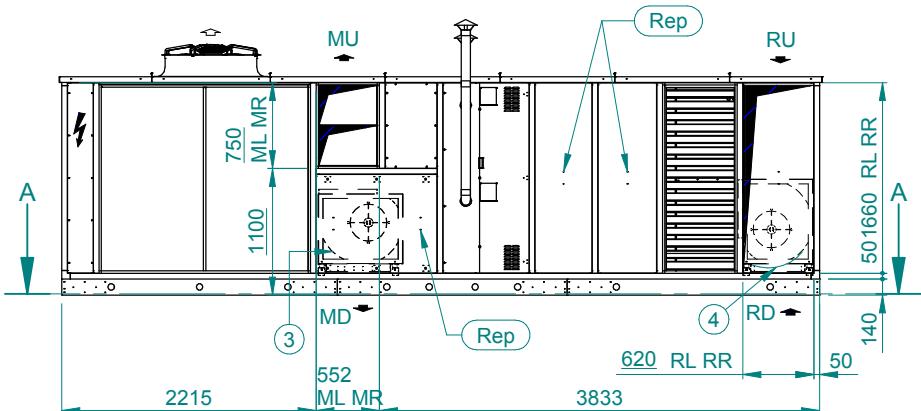
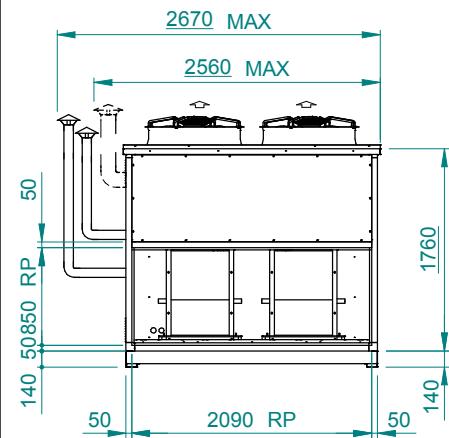
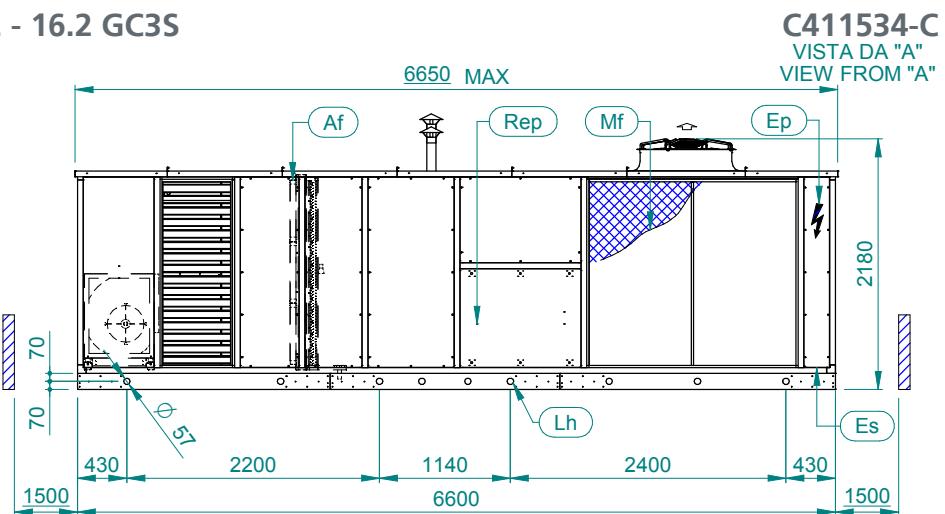
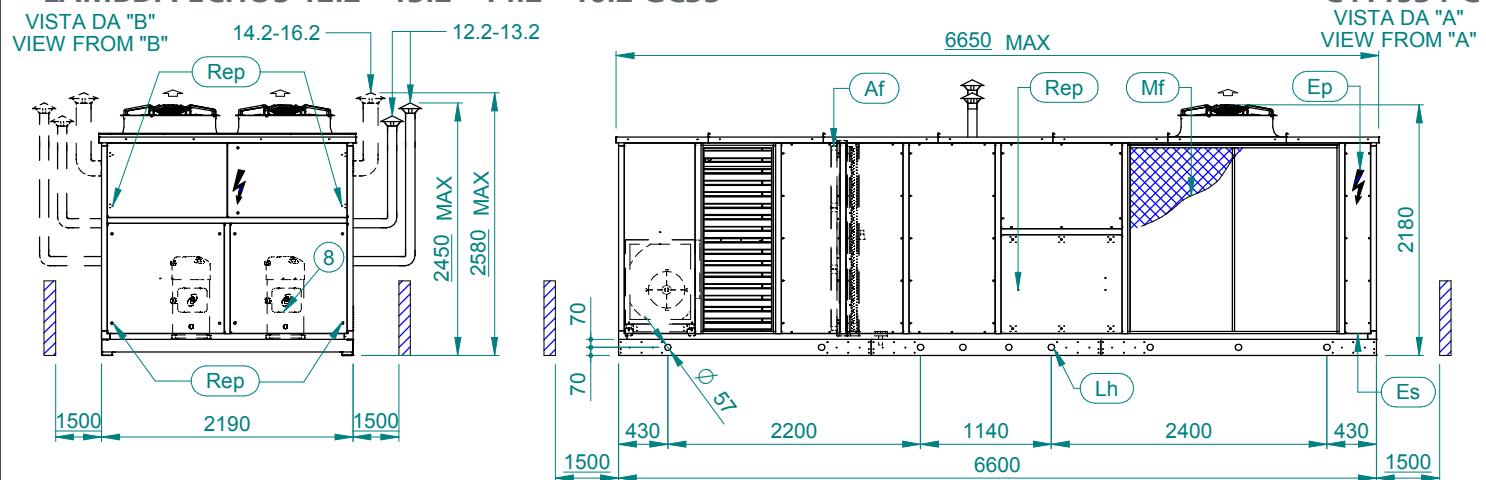
MODELLO MODEL	PESO(Kg) WEIGHT(Kg)	G1(Kg)	G2(Kg)	G3(Kg)	G4(Kg)	CODICE ANTIVIBRANTI-ANTIMBRATION MOUNTS CODE			
						G1	G2	G3	G4
LAMBDA ECHOS CO GC2S-P25 12.2	2248	312	218	244	350				MAVA0690
LAMBDA ECHOS CO GC2S-P50 12.2	2290	315	226	253	351				MAVA0690
LAMBDA ECHOS HP GC2S-P25 12.2	2318	322	221	251	365				MAVA0690
LAMBDA ECHOS HP GC2S-P50 12.2	2360	325	229	259	367				MAVA0690
LAMBDA ECHOS CO GC2S-P25 13.2	2256	314	218	244	352				MAVA0690
LAMBDA ECHOS CO GC2S-P50 13.2	2298	316	226	253	354				MAVA0690
LAMBDA ECHOS HP GC2S-P25 13.2	2326	323	221	251	368				MAVA0690
LAMBDA ECHOS HP GC2S-P50 13.2	2368	326	228	259	371				MAVA0690
LAMBDA ECHOS CO GC2S-P25 14.2	2308	326	217	244	367				MAVA0690
LAMBDA ECHOS CO GC2S-P50 14.2	2348	329	224	252	369				MAVA0690
LAMBDA ECHOS HP GC2S-P25 14.2	2380	337	219	250	384				MAVA0690
LAMBDA ECHOS HP GC2S-P50 14.2	2420	339	228	258	385				MAVA0690
LAMBDA ECHOS CO GC2S-P25 16.2	2358	340	216	242	381				MAVA0700
LAMBDA ECHOS CO GC2S-P50 16.2	2398	342	224	250	383				MAVA0690
LAMBDA ECHOS HP GC2S-P25 16.2	2430	350	219	249	397	MAVA0700			MAVA0690
LAMBDA ECHOS HP GC2S-P50 16.2	2470	352	227	257	399	MAVA0700			MAVA0690

Rev.	Date	Draftman	Checked by	Revision description
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Valid only for the version with centrifugal fans and without bag filters. For the other versions, the dimensional drawing must be identified by selection software.

DIMENSIONAL DIAGRAMS

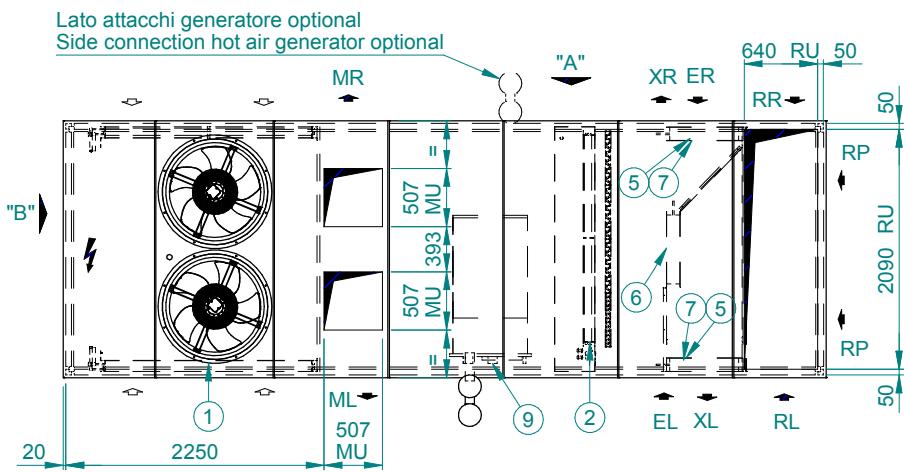
LAMBDA ECHOS 12.2 - 13.2 - 14.2 - 16.2 GC3S



DENOMINAZIONE/DENOMINATION

- 1) Batteria condensante/Condensing coil
- 2) Batteria evaporante/Evaporating coil
- 3) Ventilatore di mandata/Discharge fan
- 4) Ventilatore di ripresa/Intake fan
- 5) Serranda aria esterna/ External air Damper
- 6) Serranda di miscela/Mixing damper
- 7) Serranda aria di espulsione/Expulsion air damper
- 8) Compressore/Compressor
- 9) Generatore aria calda/Hot air generator

Mf	FILTRI METALLICI METALLIC FILTER
Af	FILTRO ARIA AIR FILTER
Lh	FORI DI SOLLEVAMENTO LIFTING HOLES
Rep	PANNELLO ASPORTABILE REMOVABLE PANEL
Ep	QUADRO ELETTRICO ELECTRICAL PANEL
Es	INGRESSO ALIMENTAZIONE ELETTRICA ELECTRICAL SUPPLY INLET
	SPAZI DI INSTALLAZIONE CLEARANCES



Direzione aria esterna/External air direction
ER=Destra/Right (Standard) EL=Sinistra/Left(Optional)

Aria di espulsione/Exhaust air
XL=Sinistra/left (Standard) XR=Destra/Right (Optional)

Direzione aria di mandata/Discharge air direction

MD=Mandata da sotto/Bottom discharge (Standard)
ML= Mandata da sinistra/Left Discharge (Optional)
MR=Mandata da destra/Right discharge (Optional)
MU=Mandata da sopra/Top discharge (Optional)

Versioni non possibili/Not possible versions :
(XR+ER) - (XL+EL)

Direzione aria di ripresa/Intake air direction

RP=Ripresa posteriore/Rear intake (Standard)
RR=Ripresa da destra/Right intake (Optional)
RD=Ripresa da sotto/Bottom intake(Optional)
RU=Ripresa da sopra/Top intake (Optional)
RL=Ripresa da sinistra/Left intake (Optional)

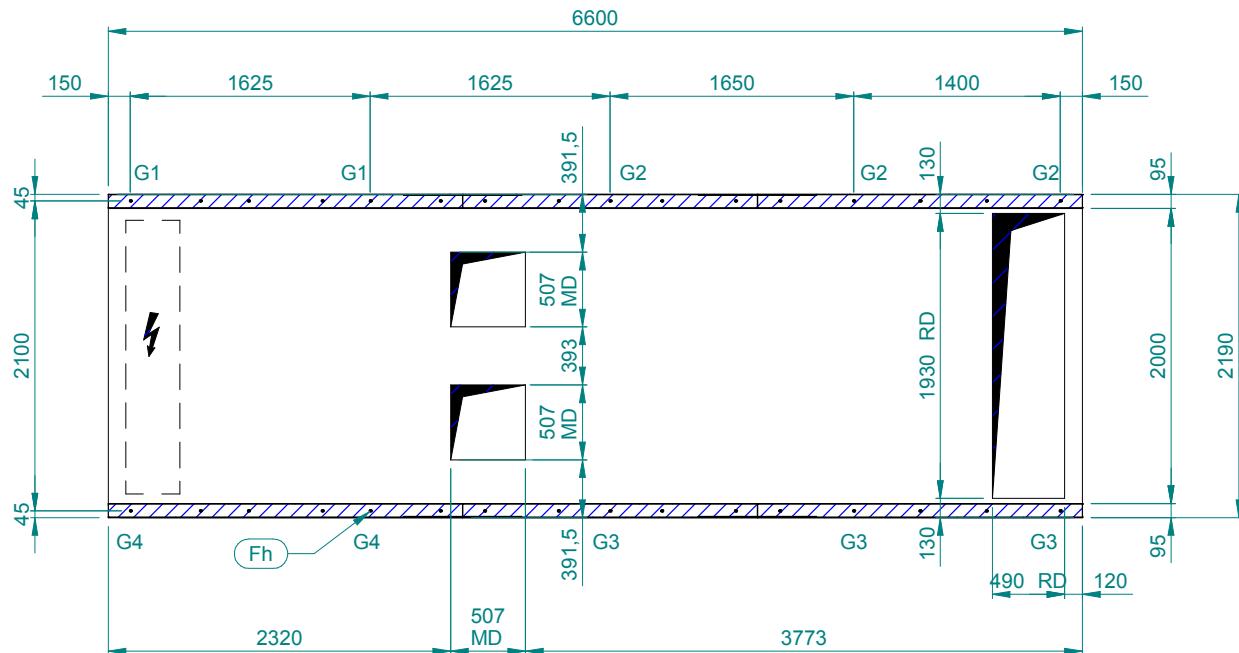
Rev.	Date	Draftman	Checked by	Revision description

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DIMENSIONAL DIAGRAMS

LAMBDA ECHOS 12.2 - 13.2 - 14.2 - 16.2 GC3S

C411534-C



Fh	FORI DI FISSAGGIO FIXING HOLES	M12	G..	PUNTI DI APPOGGIO ANTIVIBRANTI VIBRATION DAMPER FOOT HOLDS
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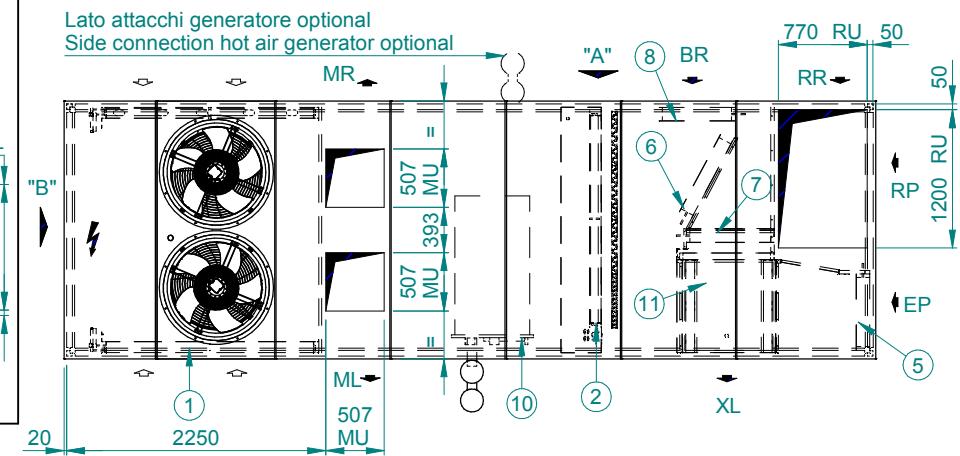
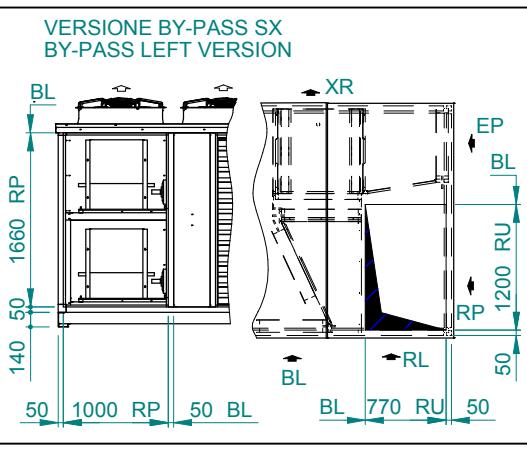
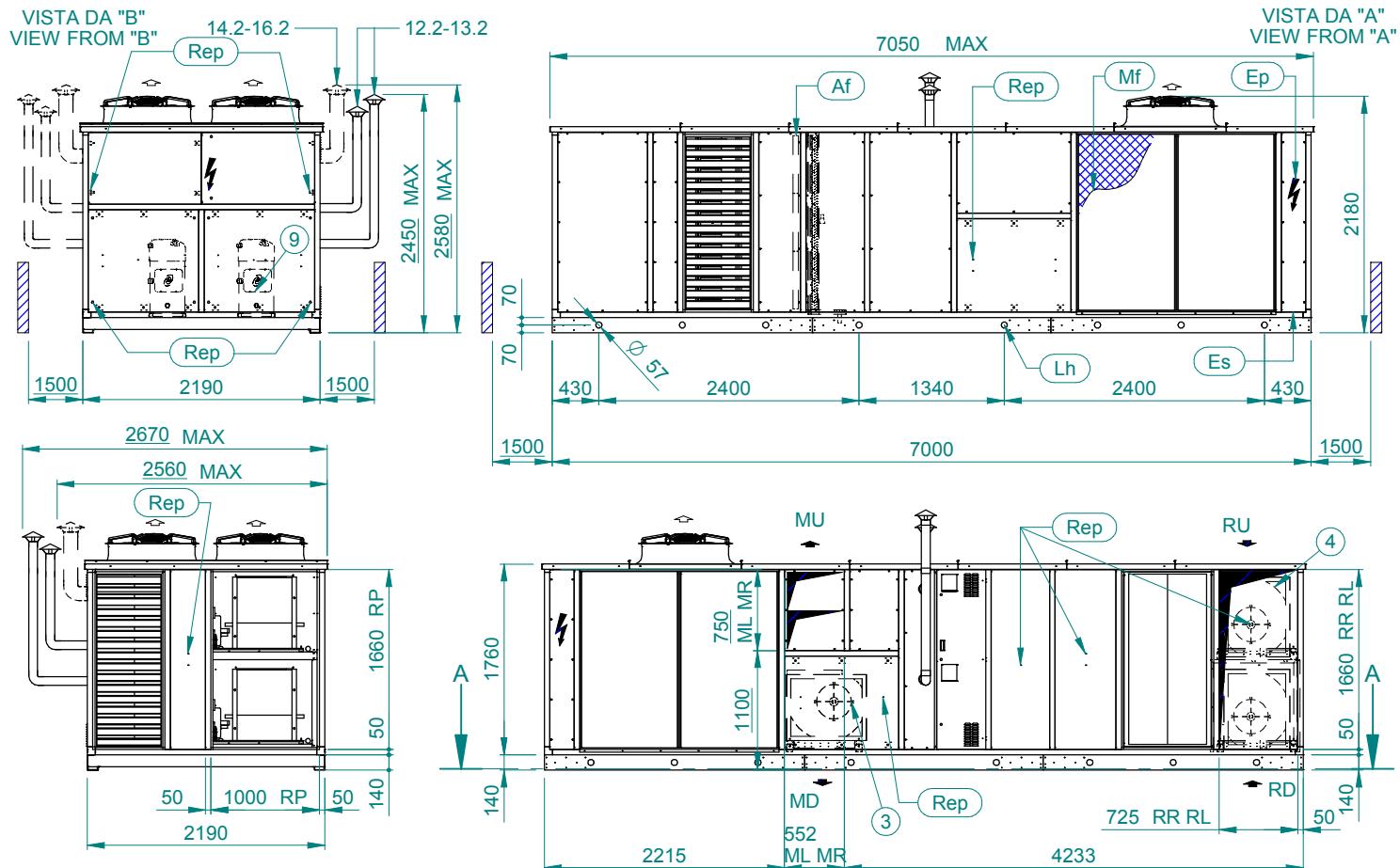
MODELLO MODEL	PESO(Kg) WEIGHT(Kg)	G1(Kg)	G2(Kg)	G3(Kg)	G4(Kg)	CODICE ANTIVIBRANTI-ANTIVIBRATION MOUNTS CODE			
						G1	G2	G3	G4
LAMBDA ECHOS CO GC3S-P25 12.2	2674	296	224	250	330			MAVA0690	
LAMBDA ECHOS CO GC3S-P50 12.2	2723	299	231	256	332			MAVA0690	
LAMBDA ECHOS HP GC3S-P25 12.2	2746	307	226	254	346			MAVA0690	
LAMBDA ECHOS HP GC3S-P50 12.2	2793	309	232	261	348			MAVA0690	
LAMBDA ECHOS CO GC3S-P25 13.2	2684	298	224	250	333			MAVA0690	
LAMBDA ECHOS CO GC3S-P50 13.2	2730	301	230	256	335			MAVA0690	
LAMBDA ECHOS HP GC3S-P25 13.2	2749	308	225	254	348			MAVA0690	
LAMBDA ECHOS HP GC3S-P50 13.2	2803	311	232	261	351			MAVA0690	
LAMBDA ECHOS CO GC3S-P25 14.2	2732	311	223	249	347			MAVA0690	
LAMBDA ECHOS CO GC3S-P50 14.2	2779	313	229	256	349			MAVA0690	
LAMBDA ECHOS HP GC3S-P25 14.2	2802	321	224	254	363			MAVA0690	MAVA0700
LAMBDA ECHOS HP GC3S-P50 14.2	2851	324	231	260	365			MAVA0690	MAVA0700
LAMBDA ECHOS CO GC3S-P25 16.2	2782	324	222	248	362			MAVA0690	MAVA0700
LAMBDA ECHOS CO GC3S-P50 16.2	2832	327	229	255	363			MAVA0690	MAVA0700
LAMBDA ECHOS HP GC3S-P25 16.2	2855	335	224	253	377			MAVA0690	MAVA0700
LAMBDA ECHOS HP GC3S-P50 16.2	2902	337	231	259	379			MAVA0690	MAVA0700

Rev.	Date	Draftman	Checked by	Revision description

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DIMENSIONAL DIAGRAMS

LAMBDA ECHOS 12.2 - 13.2 - 14.2 - 16.2 GS4S

**Versioni non possibili/Not possible versions :**

(BR+XR) - (BL+XL) - (RR+XR) - (RL+XL) - (RR+BL) - (RL+BR)

Direzione aria esterna/External air direction
EP=Posteriore/Rear (Standard)**Aria di espulsione/Exhaust air**
XL=Sinistra/left (Standard) XR=Destra/Right (Optional)**Direzione aria di mandata/Discharge air direction**
MD=Mandata da sotto/Bottom discharge (Standard)
ML= Mandata da sinistra/Left discharge (Optional)
MR=Mandata da destra/Right discharge (Optional)
MU=Mandata da sopra/Top discharge (Optional)**Aria by-pass/By-pass air**
BR=Destra/Right (Standard)
BL=Sinistra/Left (Optional)**Direzione aria di ripresa/Intake air direction**
RP=Ripresa posteriore/Rear intake (Standard)
RR=Ripresa da destra/Right intake (Optional)
RL=Ripresa da sinistra/Left intake (Optional)
RD=Ripresa da sotto/Bottom intake (Optional)
RU=Ripresa da sopra/Top intake (Optional)**DENOMINAZIONE/DENOMINATION**

- 1) Batteria condensante/Condensing coil
- 2) Batteria evaporatore/Evaporating coil
- 3) Ventilatore di mandata/Discharge fan
- 4) Ventilatore di ripresa/Intake fan
- 5) Serranda aria esterna/ External air Damper
- 6) Serranda di miscela/Mixing damper
- 7) Serranda aria di espulsione/Expulsion air damper
- 8) Serranda di by-pass/Damper by-pass
- 9) Compressore/Compressor
- 10) Generatore aria calda/Hot air generator
- 11) Recuperatore/Recuperator

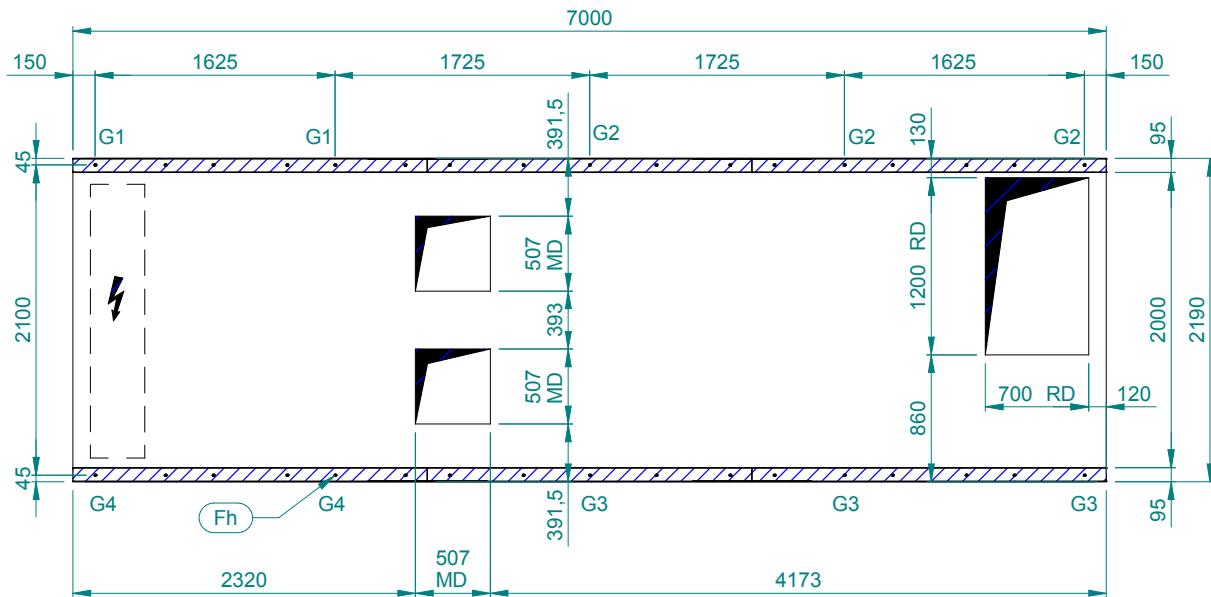
Rev. | Date | Draftman | Checked by | Revision description

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DIMENSIONAL DIAGRAMS

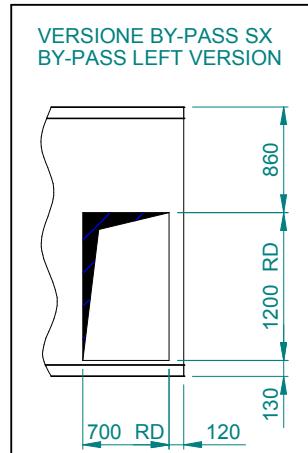
LAMBDA ECHOS 12.2 - 13.2 - 14.2 - 16.2 GS4S

C411542-C

VERSIONE BY-PASS SX
BY-PASS LEFT VERSION

Mf	FILTRI METALLICI METALLIC FILTER	
Af	FILTRO ARIA AIR FILTER	
G..	PUNTI DI APPOGGIO ANTIVIBRANTI VIBRATION DAMPER FOOT HOLDS	
Fh	FORI DI FISSAGGIO FIXING HOLES	M12

Lh	FORI DI SOLLEVAMENTO LIFTING HOLES			
	Rep	Ep	Es	Fh
	PANNELLO ASPORTABILE REMOVABLE PANEL			
		QUADRO ELETTRICO ELECTRICAL PANEL		
			INGRESSO ALIMENTAZIONE ELETTRICA ELECTRICAL SUPPLY INLET	
				SPAZI DI INSTALLAZIONE CLEARANCES



MODELLO MODEL	PESO(Kg) WEIGHT(Kg)	G1(Kg)	G2(Kg)	G3(Kg)	G4(Kg)	CODICE ANTIVIBRANTI-ANTIMBRAZION MOUNTS CODE			
						G1	G2	G3	G4
LAMBDA ECHOS CO GS4S-P25 12.2	2883	298	258	285	329				MAVA0690
LAMBDA ECHOS CO GS4S-P50 12.2	2935	301	265	292	331				MAVA0690
LAMBDA ECHOS HP GS4S-P25 12.2	2952	309	259	289	345				MAVA0690
LAMBDA ECHOS HP GS4S-P50 12.2	3004	312	266	296	347				MAVA0690
LAMBDA ECHOS CO GS4S-P25 13.2	2893	300	258	285	332				MAVA0690
LAMBDA ECHOS CO GS4S-P50 13.2	2942	303	264	292	334				MAVA0690
LAMBDA ECHOS HP GS4S-P25 13.2	2962	311	259	289	348				MAVA0690
LAMBDA ECHOS HP GS4S-P50 13.2	3011	314	265	296	350				MAVA0690
LAMBDA ECHOS CO GS4S-P25 14.2	2941	313	257	284	346				MAVA0690
LAMBDA ECHOS CO GS4S-P50 14.2	2991	315	264	291	348				MAVA0690
LAMBDA ECHOS HP GS4S-P25 14.2	3013	324	258	289	362				MAVA0690
LAMBDA ECHOS HP GS4S-P50 14.2	3063	326	265	296	364				MAVA0700
LAMBDA ECHOS CO GS4S-P25 16.2	2994	326	256	284	361				MAVA0690
LAMBDA ECHOS CO GS4S-P50 16.2	3043	329	263	290	363				MAVA0700
LAMBDA ECHOS HP GS4S-P25 16.2	3064	337	258	288	376				MAVA0690
LAMBDA ECHOS HP GS4S-P50 16.2	3116	340	265	295	378				MAVA0700

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