



Door Curtains MELTEMI

TECHNICAL MANUAL



The descriptions and illustrations provided in this publication are not binding: **Sabiana** reserves the right, whilst maintaining the essential characteristics of the types described and illustrated, to make, at any time, without the requirement to promptly update this piece of literature, any changes that it considers useful for the purpose of improvement or for any other manufacturing or commercial requirements.

TABLE OF CONTENTS

Introduction

Introduction	p. 4
Main components and versions	p. 5
Selecting the correct door curtain	p. 6

Meltemi LU / LU-ECM

Main components	p. 8
Dimension and weight	p. 9
Meltemi LU Technical specifications	p. 11
Meltemi LU-ECM Technical specifications	p. 12
Thermal emissions	p. 13
Water side pressure drop and installation notes	p. 14
Controls	p. 15

Meltemi LC / LC-ECM

Main components	p. 16
Dimension and weight	p. 17
Meltemi LC Technical specifications	p. 19
Meltemi LC-ECM Technical specifications	p. 20
Thermal emissions	p. 21
Water side pressure drop and installation notes	p. 22
Controls	p. 23
Plenums for concealed installation	p. 24

Meltemi LI

Main components	p. 27
-----------------	-------

Dimension and weight	p. 28
Meltemi LI Technical specifications	p. 30
Thermal emissions	p. 31
Water side pressure drop and installation notes	p. 32
Controls	p. 33

Accessories

Accessories	p. 34
-------------	-------

INTRODUCTION

The range of **Meltemi** SABIANA door curtains offers maximum flexibility in the protection of doors and open access compartments.

By connecting the door curtain modules, the openings can be protected with a continuous system and an un-interrupted door curtain.

Furthermore, the systems can also be used to protect the areas dedicated to refrigeration so as to reduce the loss of cold air.

The use of high speed fans allows the installation of the door curtains even in areas where food is prepared, to prevent the entrance of insects.

In essence, SABIANA offers a protection solution wherever there is the need to open a door.

LU / LU-ECM Model



LC / LC-ECM Model



LI Model



This range of high speed door curtains can protect against the entrance of cold air streams in the winter, the loss of cooled air in the summer and the effects of dust and pollution, maintaining the ambient air clean and in the desired conditions.

MAIN COMPONENTS AND VERSIONS

Cabinet

It consists of cold galvanised steel plate panels painted with oven-dried epoxy powders, colour RAL 9003. The side closures are made of plastic.

Fan assembly

LU / LU-ECM Models

Made up of plastic tangential fans installed on a rubber support with rolling bearing and coupled with the electric motor mounted on the structure side.

LC / LC-ECM / LI Models

It consists of double inlet centrifugal fans directly fitted on the motor shaft.

Motor

LU / LC / LI Models

Single-phase motor with capacitor inserted permanently, automatic reset internal thermal protection, class of protection IP 20. Power supply voltage 230 V - 50 Hz. Two speeds are available.

LU-ECM / LC-ECM Models

Electronic motor with three phase permanent magnet brushless electronic motor that is controlled with reconstructed current according to a BLAC sinusoidal wave. The inverter board that controls the motor operation is powered by 230 Volt, single-phase and, with a switching system, it generates a three-phase frequency modulated, wave form power supply.

The electric power supply required for the machine is therefore single-phase with voltage of 230 - 240 V and frequency of 50 - 60 Hz.

Coil (W versions with hot water)

The "W series" units are complete with a water coil (for heating only), made with copper pipes with aluminium fins bonded to the pipes by mechanical expansion.

LU / LU-ECM models are equipped with 1 row coil, LC / LC-ECM / LI models are equipped with 2 row coils.

Maximum water temperature 80 °C, maximum operating pressure 10 bar.

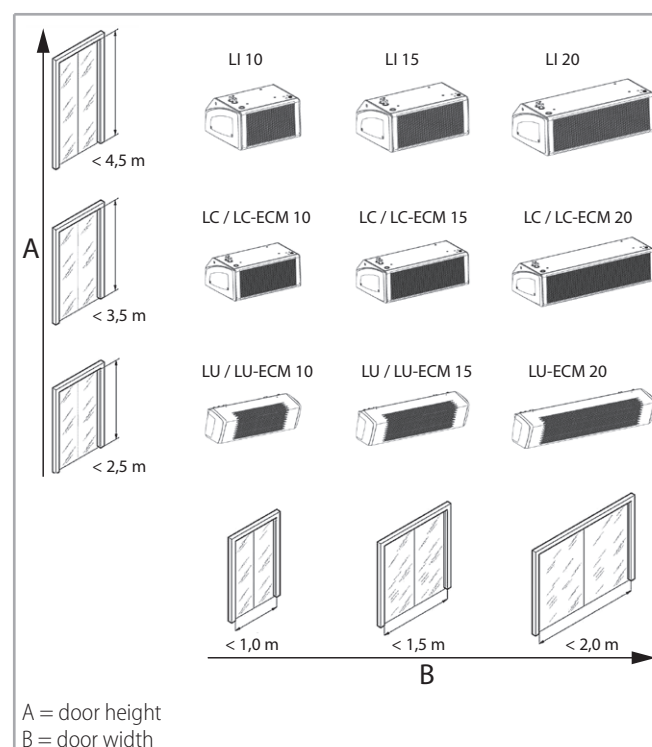
Electric heater (E versions)

The "E series" units come with filament electric heaters supported by mica spacers, with external bearing structure made of galvanised sheet.

Available versions

Versions	Maximum height installation height (m)	Models		
		Air	Water	Electric Heater
LU	2,5	LU - 10A	LU - 10W	LU - 10E
		LU - 15A	LU - 15W	LU - 15E
LU-ECM	2,5	LU-ECM - 10A	LU-ECM - 10W	LU-ECM - 10E
		LU-ECM - 15A	LU-ECM - 15W	LU-ECM - 15E
		LU-ECM - 20A	LU-ECM - 20W	LU-ECM - 20E
LC	3,5	LC - 10A	LC - 10W	LC - 10E
		LC - 15A	LC - 15W	LC - 15E
		LC - 20A	LC - 20W	LC - 20E
LC-ECM	3,5	LC-ECM - 10A	LC-ECM - 10W	LC-ECM - 10E
		LC-ECM - 15A	LC-ECM - 15W	LC-ECM - 15E
		LC-ECM - 20A	LC-ECM - 20W	LC-ECM - 20E
LI	4,5	LI - 10A	LI - 10W	LI - 10E
		LI - 15A	LI - 15W	LI - 15E
		LI - 20A	LI - 20W	LI - 20E

Tips for choosing the unit



SELECTING THE CORRECT DOOR CURTAIN

The quantity of air that passes through an open door depends on three main factors:

- the difference in pressure between the indoor environment and the outdoor
- the temperature difference
- the wind speed

Simplifying these phenomena, we can say that an air stream will pass through the door if the indoor conditions, in terms of temperature, pressure and air speed, are different from the outdoor conditions.

The air streams are therefore generated by the natural trend to make the pressure and temperature uniform between two joining environments.

In a heated environment, the hot air will leave the environment to be replaced by cold air.

In the presence of wind, the currents of air through opening will be increased.

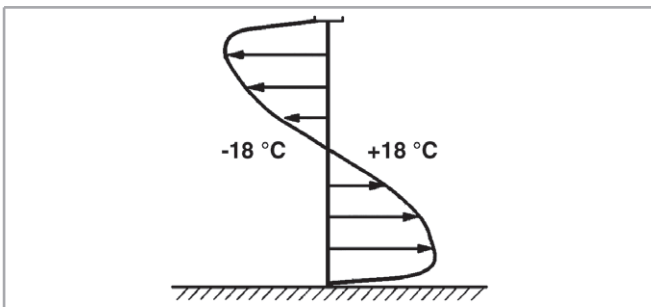
Indoor/Outdoor Pressure

The difference in pressure between the environment and the surrounding space can be eliminated by controlling the ventilation system that neutralises the difference between the indoor and outdoor pressure.

Air flow generated by differences in temperature (QT)

The hot air inside is less dense, and consequently lighter, than the cold outside air, and therefore a difference in pressure is created through an open door.

The cold outdoor air flows through the bottom of the opening and pushes the hot air from the indoor environment to the outdoor, through the top of the opening.



The air flow varies according to the temperature difference between the inside and the outside.

Air flow due to the force of the wind (QV)

When the wind blows against the door, air flows through the opening.

The flow of air is distributed uniformly across the entire opening.

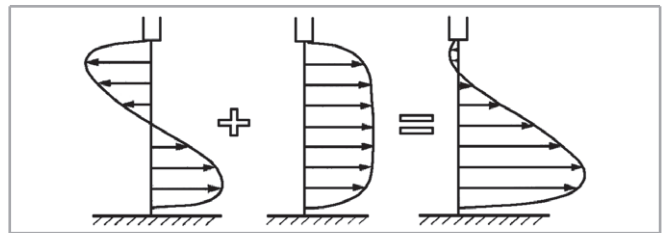
The quantity of air that flows is therefore proportional to the component of the wind speed that is perpendicular to the door.

(After a certain time, the environment will reach a value of overpressure such as to reduce the flow of air to just the level of the leakages from the room).

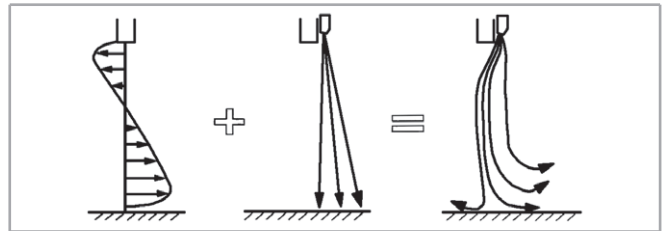
Total air flow (Qtot)

The total air flow through an opening is equal to the sum of the flows due to the temperature difference and the flow due to the force of the wind.

$$Q_{\text{tot}} = Q_T + Q_V$$



Operating principles of a door curtain



Door curtains are used to prevent cold air from entering an environment and the loss of hot air to the outside.

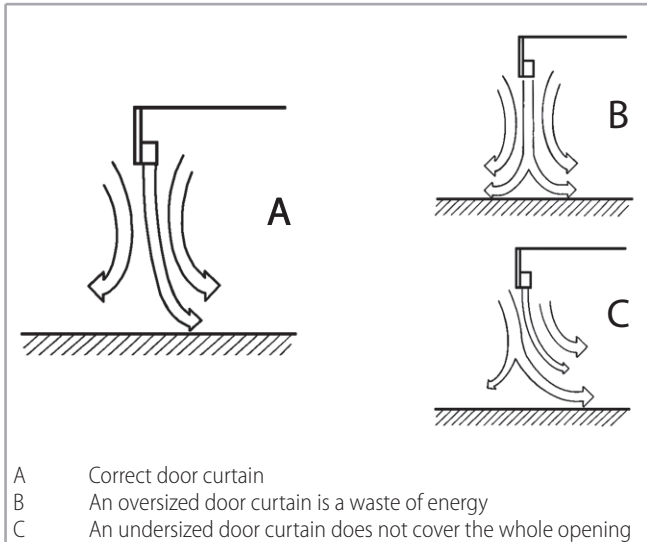
They are also used to protect air conditioned rooms and cold stores against the entrance of hot air and losses of cold air.

A door curtain creates a barrier across the open door, preventing unwanted currents of air.

The speed of the air created by the door curtain must be high enough to force the resulting flow downwards. The door curtain should be aimed so that only a small part of the air is lost to the outside, keeping the cold air on the outside, following the air barrier, while the hot air remains inside the environment.

Criteria for selecting a door curtain

It is important to choose the most appropriate model. The height of the door is a critical factor, as is the correct setting of the air speed.



If there is a negative pressure inside the environment, the performance of the door curtain will be substantially reduced: the ventilation should be balanced.

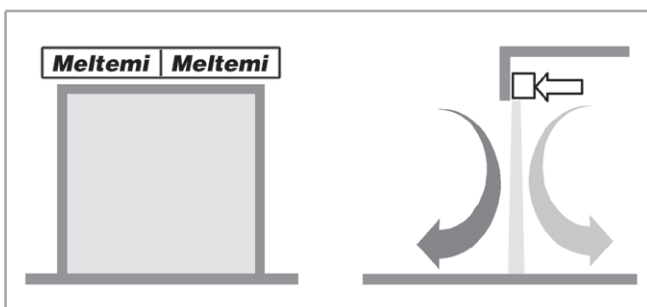
In most cases, the door curtains must be installed on the inside of the opening that is being protected. Nonetheless, when having to protect a cold room, the curtain must be located on the warmer side, that is, the outside of the opening.

For best performance, the door curtain should be located as near as possible to the opening, and cover the entire width of the door.

The direction and speed of the air barrier should be adjusted according to the characteristics of the door compartment.

The pressure generated by the wind tends to cancel the effect of the door curtain, forcing the curtain of air produced back inside the room.

In these situations, the door curtain should be inclined towards the outside.



MAIN COMPONENTS



The **LU / LU-ECM** door curtain series have been designed for installation near small entrances of offices and commercial environments.

The unit comes with integrated control system specifically designed for every type of operation:

LU-A: air operation only, it is equipped with a control located on board, which can be easily accessed from the bottom. This includes a step-by-step control button to switch the device on and off and select the air speed.

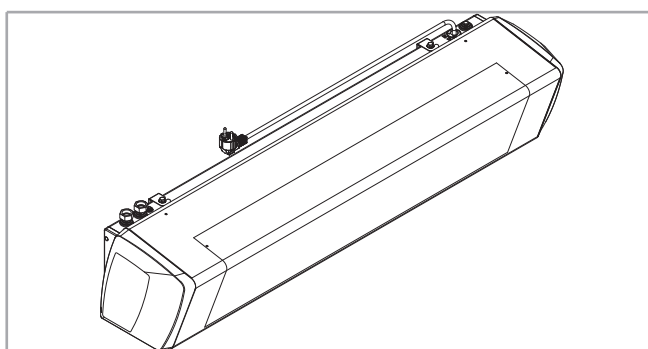
LU-ECM-A: air ventilation only. It is equipped with a remote control system (supplied with the unit) or it can be combined with a wall mounted T-MB2 control with display (accessory).

LU-W/E and LU-ECM-W/E: operation with hot water or electric coil. It is equipped with a remote control system (supplied with the unit) or it can be combined with a wall mounted T-MB2 control with display (accessory).

The boards are provided with door contact connection or with ON/OFF remote control.

Product specification

- Integrated control (LU-A).
- Remote control (LU-W/E and LU-ECM-A/W/E).
- 2 fan speeds.
- 2 stage electric coil.
- Wall brackets included.
- 230 V output to control an ON/OFF solenoid valve.
- The versions with electric heater are equipped with two safety thermostats; the first one with automatic reset, set at 45 °C, while the second one with manual reset, set at 80 °C.



Recommended installation height: 2.5 metres

Installation: horizontal

Available lengths: 1, 1.5 and 2 metres

Electric heater:

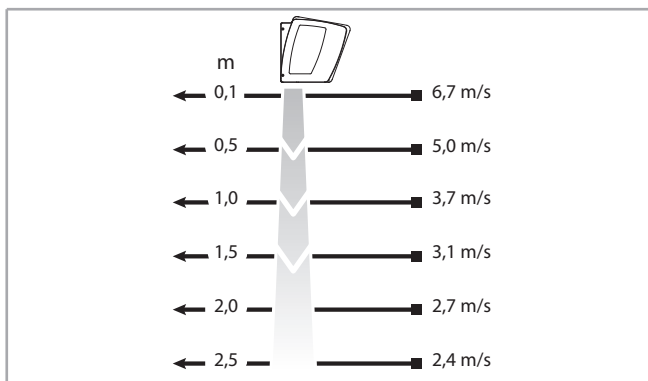
LU / LU-ECM-10E 3 kW 230V 1 Ph or 400V 3 Ph

LU / LU-ECM-15E 6 kW 400V 3Ph

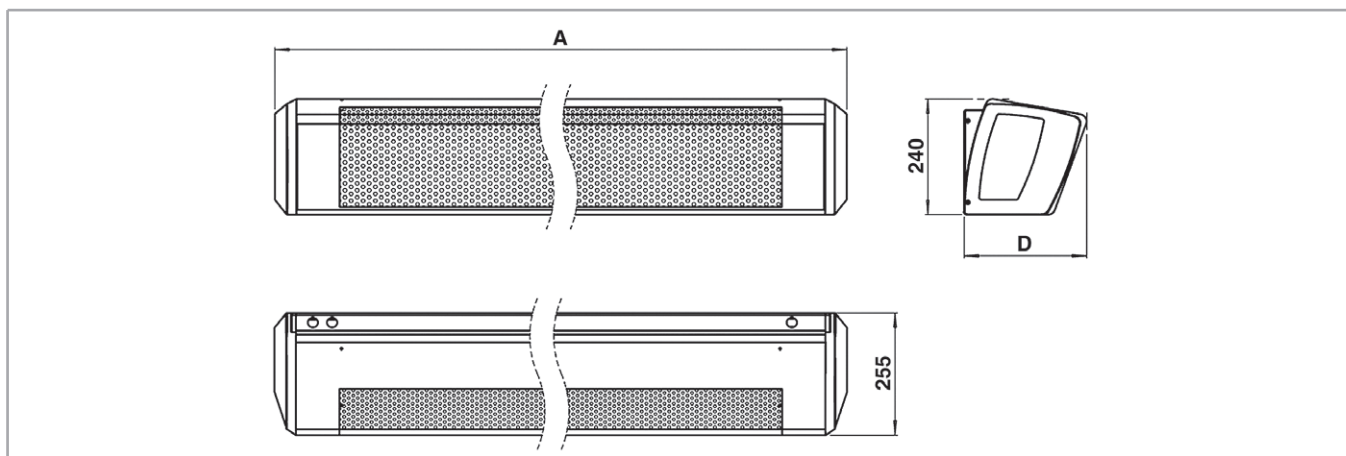
LU-ECM-20E 6 kW 400V 3Ph

1 row hot water coil

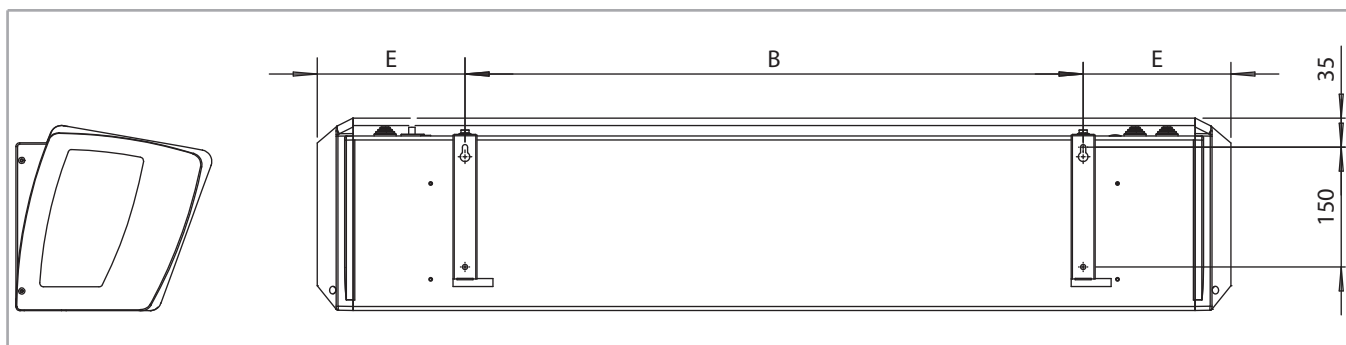
Complete with electrical connection cable
with Schuko CEE 7/7 plug



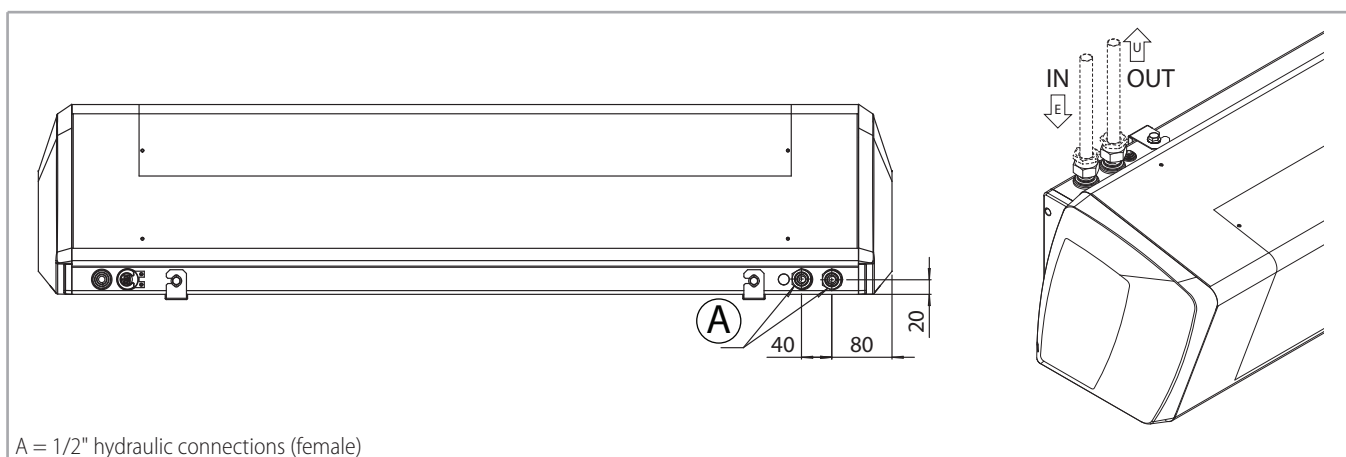
DIMENSION AND WEIGHT



Suspension brackets



Hydraulic connection position



A = 1/2" hydraulic connections (female)

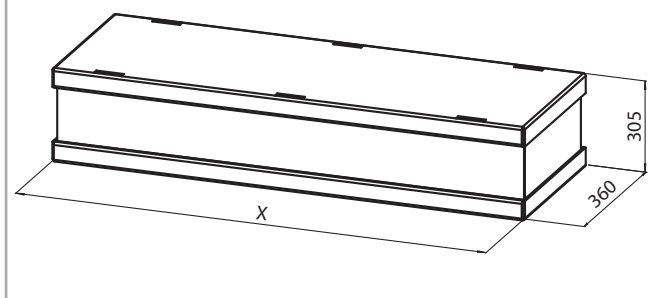
Dimensions (mm)

Model		LU 10	LU 15
A	mm	1144	1644
B	mm	774	1274
D	mm	255	255
E	mm	185	185

Model		LU-ECM 10	LU-ECM 15	LU-ECM 20
A	mm	1144	1644	2150
B	mm	774	1274	1274
D	mm	255	255	275
E	mm	185	185	438

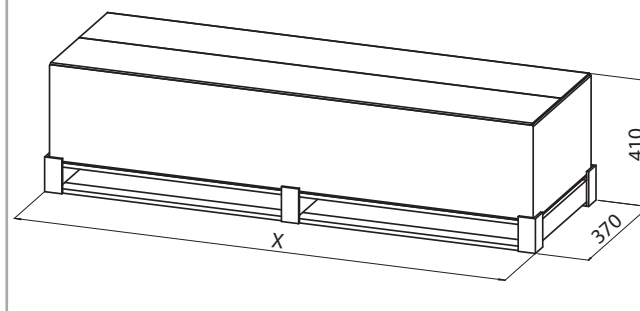
Packed unit

LU / LU-ECM -10/-15 Packed unit



Model		LU 10	LU 15
X	mm	1230	1730

LU-ECM -20 Packed unit



Model		LU-ECM 10	LU-ECM 15	LU-ECM 20
X	mm	1230	1730	2250

Weights (kg)

Ventilation only

Model		LU 10A	LU 15A
Weight with packaging	kg	16,4	23,1
Weight without packaging	kg	14,0	20,0

Model		LU-ECM 10A	LU-ECM 15A	LU-ECM 20A
Weight with packaging	kg	16,4	23,1	33,0
Weight without packaging	kg	14,0	20,0	29,0

with Water Coil

Model		LU 10W	LU 15W
Weight with packaging	kg	18,4	26,1
Weight without packaging	kg	16,0	23,0

Model		LU-ECM 10W	LU-ECM 15W	LU-ECM 20W
Weight with packaging	kg	18,4	26,1	36,0
Weight without packaging	kg	16,0	23,0	32,0

with Electric Heater

Model		LU 10E	LU 15E
Weight with packaging	kg	18,4	26,1
Weight without packaging	kg	16,0	23,0

Model		LU-ECM 10E	LU-ECM 15E	LU-ECM 20E
Weight with packaging	kg	18,4	26,1	37,0
Weight without packaging	kg	16,0	23,0	33,0

Water content (l)

Model		LU 10	LU 15
Water content	l	0,65	0,95

Model		LU-ECM 10	LU-ECM 15	LU-ECM 20
Water content	l	0,65	0,95	1,30

MELTEMI LU TECHNICAL SPECIFICATIONS

Ventilation only

MODEL		LU 10A		LU 15A	
Speed		1	2	1	2
		MIN	MAX	MIN	MAX
Maximum installation height	m	2,5	2,5	2,5	2,5
Length	mm	1144	1144	1644	1644
Air flow	m ³ /h	760	1260	1090	1900
Sound pressure (Lp) ⁽¹⁾	dB(A)	39	49	39	50
Motor voltage	V	230	230	230	230
Motor power input	W	63	86	86	134
Current absorbed	A	0,27	0,37	0,39	0,58

(1) The sound pressure levels dB(A) are measured at a distance of 3 m, directional factor Q = 2, according to EN 3744.

with Water Coil

MODEL		LU 10W		LU 15W	
Speed		1	2	1	2
		MIN	MAX	MIN	MAX
Maximum installation height	m	2,5	2,5	2,5	2,5
Length	mm	1144	1144	1644	1644
Air flow	m ³ /h	740	1150	1050	1750
Heating ⁽¹⁾	kW	4,56	5,87	6,65	8,94
Heating ⁽²⁾	kW	2,63	3,36	3,79	5,06
Sound pressure (Lp) ⁽³⁾	dB(A)	39	49	39	50
Motor voltage	V	230	230	230	230
Motor power input	W	63	86	86	134
Current absorbed	A	0,27	0,37	0,39	0,58

(1) Air temperature 18 °C – Water temperature 80/60 °C.

(2) Air temperature 18 °C – Water temperature 60/40 °C.

(3) The sound pressure levels dB(A) are measured at a distance of 3 m, directional factor Q = 2, according to EN 3744.

with Electric Heater

MODEL		LU 10E-230		LU 10E-400		LU 15E	
Speed		1	2	1	2	1	2
		MIN	MAX	MIN	MAX	MIN	MAX
Maximum installation height	m	2,5	2,5	2,5	2,5	2,5	2,5
Length	mm	1144	1144	1144	1144	1644	1644
Air flow	m ³ /h	760	1260	760	1260	1090	1900
Electric heater - 1° stage	kW	2	2	2	2	3	3
Electric heater - 2nd stage	kW	3	3	3	3	6	6
Sound pressure (Lp) ⁽¹⁾	dB(A)	39	49	39	49	39	50
Motor voltage	V	230	230	230	230	230	230
Electric heater voltage	V/Ph	230/1	230/1	400/3	400/3	400/3	400/3
Motor power input	W	63	86	63	86	86	134
Current absorbed	A	0,27	0,37	0,27	0,37	0,39	0,58
Electric heater absorption – 1st stage	A	8,7	8,7	3,0	3,0	4,5	4,5
Electric heater absorption – 2st stage	A	13,1	13,1	4,5	4,5	9,0	9,0

(1) The sound pressure levels dB(A) are measured at a distance of 3 m, directional factor Q = 2, according to EN 3744.

MELTEMI LU-ECM TECHNICAL SPECIFICATIONS

Ventilation only

MODEL		LU-ECM 10A		LU-ECM 15A		LU-ECM 20A	
Speed		1	2	1	2	1	2
		MIN	MAX	MIN	MAX	MIN	MAX
Maximum installation height	m	2,5	2,5	2,5	2,5	2,5	2,5
Length	mm	1144	1144	1644	1644	2150	2150
Air flow	m ³ /h	760	1260	1090	1900	1450	2560
Sound pressure (Lp) ⁽¹⁾	dB(A)	39	49	39	50	41	52
Motor voltage	V	230	230	230	230	230	230
Motor power input	W	25,5	64,8	49,8	113,0	53,5	165,0
Current absorbed	A	0,22	0,55	0,42	0,92	0,46	1,30

(1) The sound pressure levels dB(A) are measured at a distance of 3 m, directional factor Q = 2, according to EN 3744.

with Water Coil

MODEL		LU-ECM 10W		LU-ECM 15W		LU-ECM 20W	
Speed		1	2	1	2	1	2
		MIN	MAX	MIN	MAX	MIN	MAX
Maximum installation height	m	2,5	2,5	2,5	2,5	2,5	2,5
Length	mm	1144	1144	1644	1644	2150	2150
Air flow	m ³ /h	740	1150	1050	1750	1310	2250
Heating ⁽¹⁾	kW	4,56	5,87	6,65	8,94	8,81	12,19
Heating ⁽²⁾	kW	2,63	3,36	3,79	5,06	5,11	7,02
Sound pressure (Lp) ⁽³⁾	dB(A)	39	49	39	50	41	52
Motor voltage	V	230	230	230	230	230	230
Motor power input	W	19,8	46,9	36,4	81,2	38,5	120,5
Current absorbed	A	0,18	0,39	0,32	0,69	0,35	0,97

(1) Air temperature 18 °C – Water temperature 80/60 °C.

(2) Air temperature 18 °C – Water temperature 60/40 °C.

(3) The sound pressure levels dB(A) are measured at a distance of 3 m, directional factor Q = 2, according to EN 3744.

with Electric Heater

MODEL		LU-ECM 10E-230		LU-ECM 10E-400		LU-ECM 15E		LU-ECM 20E	
Speed		1	2	1	2	1	2	1	2
		MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
Maximum installation height	m	2,5	2,5	2,5	2,5	2,5	2,5	2,5	2,5
Length	mm	1144	1144	1144	1144	1644	1644	2150	2150
Air flow	m ³ /h	760	1260	760	1260	1090	1900	1305	2310
Electric heater - 1 st stage	kW	2	2	2	2	3	3	3	3
Electric heater - 2 nd stage	kW	3	3	3	3	6	6	6	6
Sound pressure (Lp) ⁽¹⁾	dB(A)	39	49	39	49	39	50	41	52
Motor voltage	V	230	230	230	230	230	230	230	230
Electric heater voltage	V/Ph	230/1	230/1	400/3	400/3	400/3	400/3	400/3	400/3
Motor power input	W	22,0	52,0	22,0	52,0	40,0	89,0	42,4	132,0
Current absorbed	A	0,19	0,43	0,19	0,43	0,35	0,75	0,39	1,06
Electric heater absorption – 1 st stage	A	8,7	8,7	3,0	3,0	4,5	4,5	4,5	4,5
Electric heater absorption – 2 st stage	A	13,1	13,1	4,5	4,5	9,0	9,0	9,0	9,0

(1) The sound pressure levels dB(A) are measured at a distance of 3 m, directional factor Q = 2, according to EN 3744.

THERMAL EMISSIONS

W serie with hot water coil

Entering Air Temperature 18 °C

Model	Vn		Qv m³/h	Ph kW	WT: 80 / 60 °C			WT: 60 / 40 °C			
					LAT °C	Qw l/h	Δp kPa	Ph kW	LAT °C	Qw l/h	Δp kPa
10W	2	MAX	1150	5,87	33,0	252	28	3,36	26,6	144	11
	1	MIN	740	4,56	36,2	196	18	2,63	28,5	113	7
15W	2	MAX	1750	8,94	33,1	385	14	5,06	26,6	217	5
	1	MIN	1050	6,65	36,7	286	8	3,79	28,7	163	3
20W	2	MAX	2250	12,19	34,0	524	29	7,03	27,2	302	12
	1	MIN	1310	8,82	37,9	379	16	5,12	29,5	220	7

WT: Water temperature
Vn: Nominal speeds
Qv: Air flow
Ph: Heating emission
LAT: Leaving air temperature
Qw: Water flow rate
Δp: Pressure drop

The 20W model is for LU-ECM only.

Model	Vn		Qv m³/h	Ph kW	WT: 50 / 30 °C			WT: 50 / 40 °C			
					LAT °C	Qw l/h	Δp kPa	Ph kW	LAT °C	Qw l/h	Δp kPa
10W	2	MAX	1150	2,07	24,5	89	5	3,00	27,3	258	32
	1	MIN	740	1,63	23,3	70	3	2,34	25,7	201	20
15W	2	MAX	1750	3,06	24,5	132	2	4,56	27,6	392	16
	1	MIN	1050	2,32	23,2	100	1	3,39	25,7	292	9
20W	2	MAX	2250	4,38	23,8	188	5	6,25	26,2	537	26
	1	MIN	1310	3,22	25,3	138	3	4,52	28,2	388	28

WT: Water temperature
Vn: Nominal speeds
Qv: Air flow
Ph: Heating emission
LAT: Leaving air temperature
Qw: Water flow rate
Δp: Pressure drop

The 20W model is for LU-ECM only.

Model	Vn		Qv m³/h	Ph kW	WT: 45 / 35 °C			WT: 40 / 30 °C			
					LAT °C	Qw l/h	Δp kPa	Ph kW	LAT °C	Qw l/h	Δp kPa
10W	2	MAX	1150	2,39	25,4	205	22	1,76	22,5	152	13
	1	MIN	740	1,86	24,1	160	14	1,38	23,5	119	8
15W	2	MAX	1750	3,61	25,6	310	11	2,65	22,5	228	6
	1	MIN	1050	2,69	24,1	232	6	1,98	23,6	171	4
20W	2	MAX	2250	4,98	24,5	428	23	3,70	22,9	318	14
	1	MIN	1310	3,61	26,2	311	13	2,70	24,1	232	8

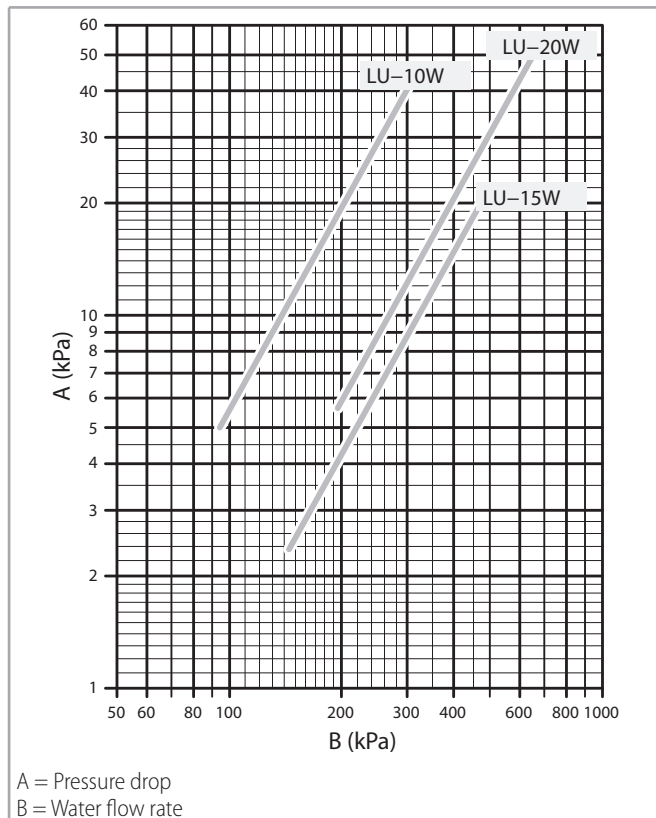
WT: Water temperature
Vn: Nominal speeds
Qv: Air flow
Ph: Heating emission
LAT: Leaving air temperature
Qw: Water flow rate
Δp: Pressure drop

The 20W model is for LU-ECM only.

WATER SIDE PRESSURE DROP AND INSTALLATION NOTES

Water side pressure drop

W serie with hot water coil



The water pressure drop figures refer to a mean water temperature of 50 °C; for different temperatures, multiply the pressure drop figures by the correction factors K.

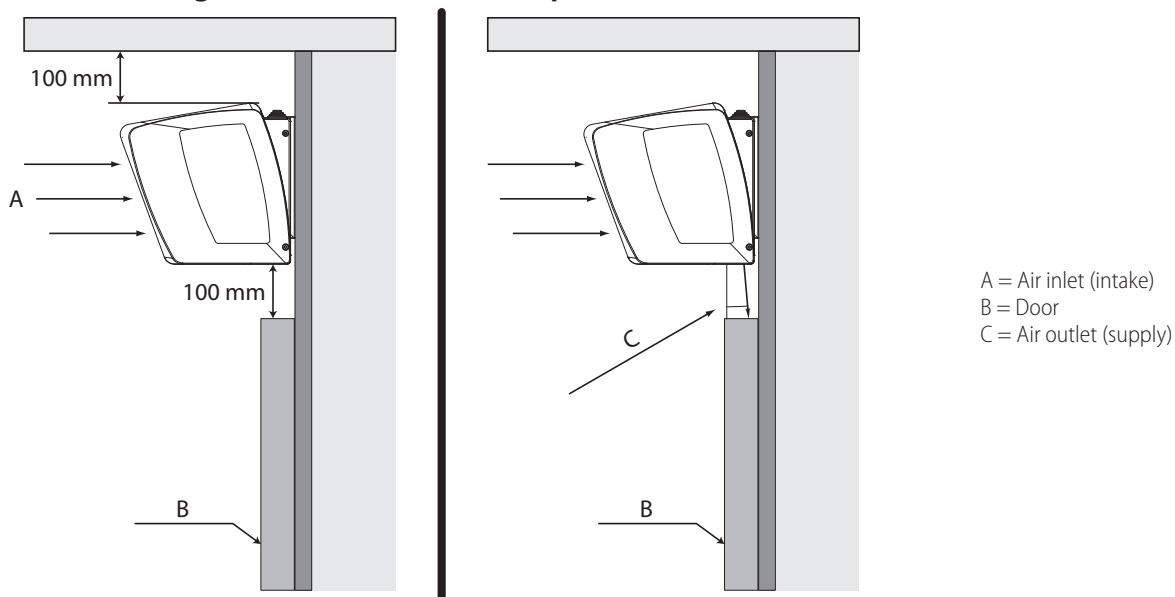
	Mean water temperature (°C)				
	35	40	50	60	70
K correction factor	1,09	1,06	1,00	0,94	0,88

Installation notes

⚠ In order to allow suitable space for maintenance, but above all to guarantee the correct operation of the door curtain, the distance indicated must be observed.

The product, in addition, must not be installed in plenums or in false ceilings without adequate air intake.

Distance that must be guaranteed for the correct operation of the door curtain



CONTROLS

LU-A Control system

The units are equipped, as standard, with electronic board to manage:

- High/Low speed ON button.
- ON indication and failure LED.
- Clamps for "Door Contact" external connection.
- Clamps for connecting a remote ON/OFF switch.
- Dip switch to set the post-ventilation delay time of the door closure fan.



LU-W/E and LU-ECM-A/W/E Control system

The units are equipped, as standard, with electronic board, receiver unit for remote control and RR03-LU remote control to manage:

- ON/OFF unit.
- Fan speed selection.
- Water valve ON/OFF actuator ("W" version).
- Activation of the electric heater 1st and 2nd stage ("E" version).
- Door interlock.
- Remote ON/OFF interlock.

Several units can be controlled in Master/Slave mode. The units can be managed by the T-MB2 control (accessory).



RR03-LU infra-red remote control

The infra-red remote control allows you to set the door curtain operation parameters from a remote position. The **RR03-LU** infra-red remote control features the following functions:

- ON and OFF unit switch.
- Temperature set configuration.
- Fan speed (low or high) setting.
- Operation mode setting (fan only, heating 1st or 2nd stage for the version with electric heater).
- Time setting.

- 24 hours ON/OFF program.



T-MB2 wall control (accessory)

ID	Code
T-MB2	9066994E



Control with TFT 2,4" coloured graphic display for wall installation, equipped with WiFi module and BLE for the management of the connected unit via Sabiana APP.

The main characteristics are:

- Management by keyboard, via supervision system or via Sabiana APP
- Management of one single unit or of several units in Master/Slave mode.
- ON/OFF switch
- Operation mode setting
- Room temperature internal sensor, which can be defined as a priority compared to the return air sensor on the fan coil
- Fan speed switch
- Advanced daily/weekly ON/OFF programming with 3 pre-settable weekly programs
- Viewing and change of the operating mode parameters of the unit, alarm notification and information related to the unit
- Activation/deactivation of the room temperature display
- Firmware updating via Cloud

Dimensions: 115x75x20 mm

MAIN COMPONENTS



The **LC / LC-ECM** door curtains are intended to be installed near entrances of shops or shopping centres.

The unit comes with integrated control system specifically designed for every type of operation or without control.

Model with integral control

LC-A: ventilation only, it is provided with wall mounted remote control. The control allows to switch the door barrier on and off and to set the speed required (high or low) by pressing a step-by-step button.

LC-ECM-A: ventilation only. The unit comes with remote control with T-MB wall mounted display.

LC / LC-ECM-W/E: operation with hot water or electric coil.

The boards are provided with door contact connection or with ON/OFF remote control.

Product specification

- Remote control (LC-A)
- Power board fitted on the unit and remote control (LC-W/E)
- 2 fan speeds.
- Auxiliary fan motor supply relay
- 2 stage electric coil.
- Master/Slave connection of several units.
- 230V output to control an ON/OFF valve
- The versions with electric heater are equipped with two safety thermostats; the first one with automatic reset, set at 45 °C, while the second one with manual reset, set at 80 °C.

Model without control

LC-AS: ventilation only.

LC-WS: operation with water.

Product specification

- Terminal board
- 2 fan speeds.
- WM-3V speed control (accessory)

Recommended installation height: 3.5 metres

Installation: horizontal

Available lengths: 1, 1.5 and 2 metres

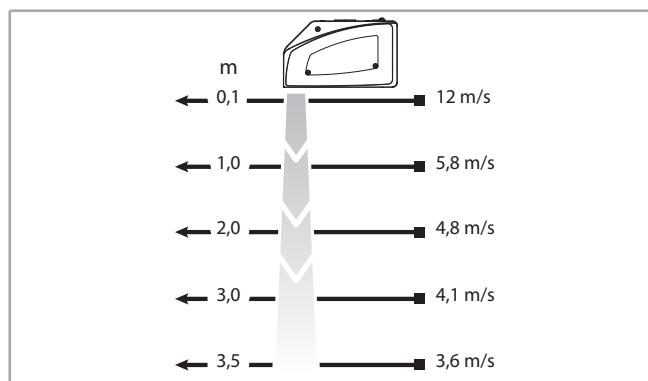
Electric heater:

LC / LC-ECM-10E 8 kW 400V 3 Ph

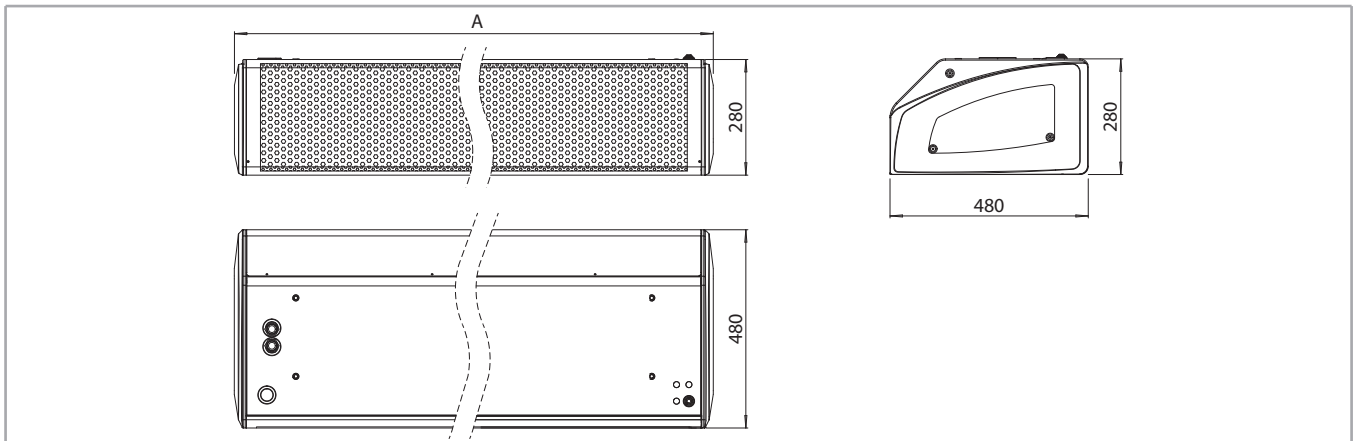
LC / LC-ECM-15E 12 kW 400V 3Ph

LC-ECM-20E 16 kW 400V 3Ph

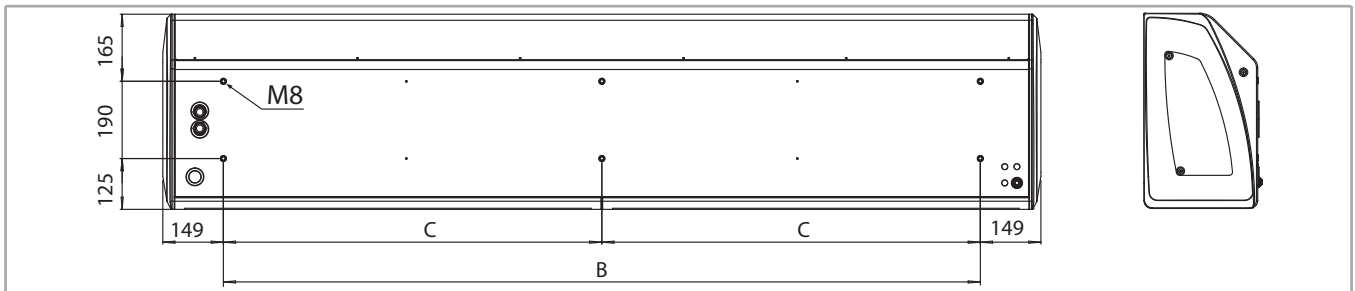
2 row hot water coil



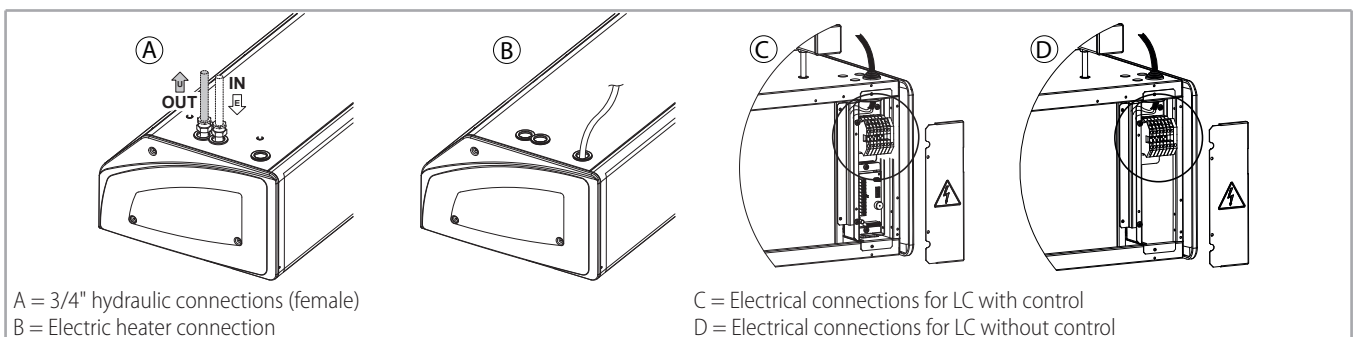
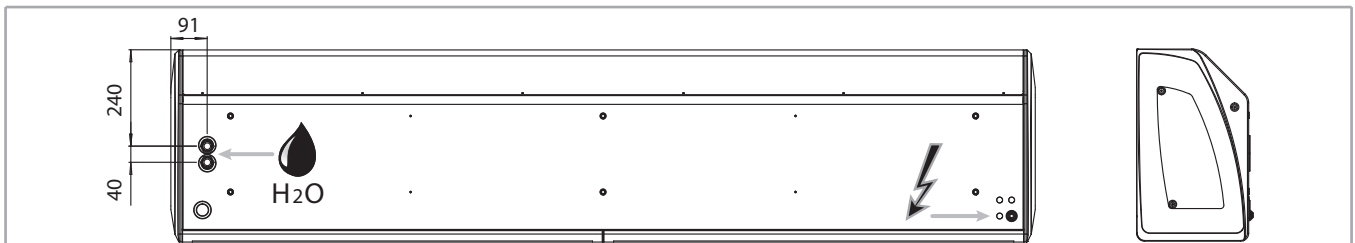
DIMENSION AND WEIGHT



Bracket position



Hydraulic and electrical connection positions

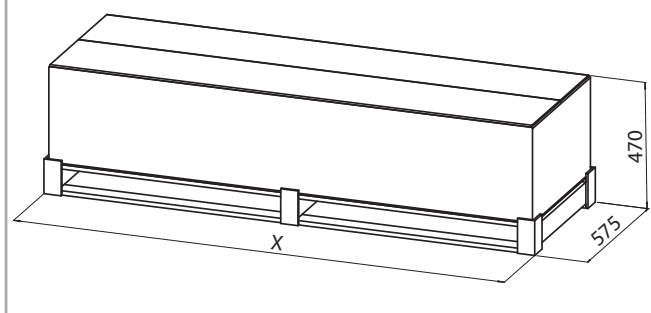


Dimensions (mm)

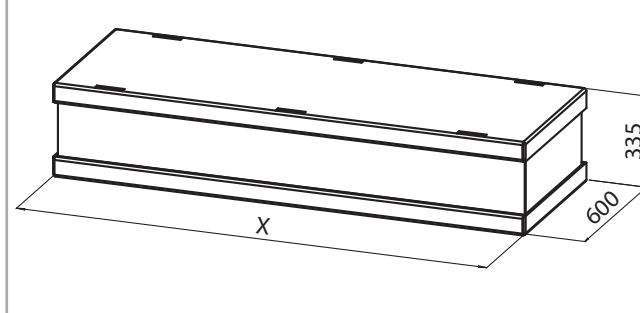
Model		10	15	20
A	mm	1125	1625	2160
B	mm	828	1328	1862
C	mm	-	-	931

Packed unit

LC / LC-ECM -10/-15 Packed unit



LC / LC-ECM -20 Packed unit



Model		10	15	20
X	mm	1210	1710	2255

Weights (kg)

Ventilation only (type A models with integral control and AS type without control)

Model		10A	15A	20A
Weight with packaging	kg	34,5	45,6	78,5
Weight without packaging	kg	31,0	41,0	60,0

with Water Coil (type W models with integral control and WS type without control)

Model		10W	15W	20W
Weight with packaging	kg	39,5	51,6	86,5
Weight without packaging	kg	36,0	47,0	68,0

with Electric Heater

Model		10E	15E	20E
Weight with packaging	kg	37,5	49,6	83,5
Weight without packaging	kg	34,0	45,0	65,0

Water content (l)

Model		10	15	20
Water content	l	1,40	2,10	2,85

MELTEMI LC TECHNICAL SPECIFICATIONS

Ventilation only (type A models with integral control and AS type without control)

MODEL		LC 10A		LC 15A		LC 20A	
Speed		1	2	1	2	1	2
		MIN	MAX	MIN	MAX	MIN	MAX
Maximum installation height	m	3,5	3,5	3,5	3,5	3,5	3,5
Length	mm	1125	1125	1625	1625	2160	2160
Air flow	m ³ /h	1200	2100	1500	3150	2400	4200
Sound pressure (Lp) ⁽¹⁾	dB(A)	38	52	38	56	38	54
Motor voltage	V	230	230	230	230	230	230
Motor power input	W	230	330	200	540	460	660
Current absorbed	A	1,15	1,57	1,00	2,35	2,30	3,14

(1) The sound pressure levels dB(A) are measured at a distance of 3 m, directional factor Q = 2, according to EN 3744.

with Water Coil (type W models with integral control and WS type without control)

MODEL		LC 10W		LC 15W		LC 20W	
Speed		1	2	1	2	1	2
		MIN	MAX	MIN	MAX	MIN	MAX
Maximum installation height	m	3,5	3,5	3,5	3,5	3,5	3,5
Length	mm	1125	1125	1625	1625	2160	2160
Air flow	m ³ /h	1100	1900	1500	3000	2200	4000
Heating ⁽¹⁾	kW	12,44	18,46	17,49	27,59	26,21	38,59
Heating ⁽²⁾	kW	7,07	10,29	10,04	15,51	15,34	22,26
Sound pressure (Lp) ⁽³⁾	dB(A)	38	52	38	56	38	54
Motor voltage	V	230	230	230	230	230	230
Motor power input	W	230	330	200	540	460	660
Current absorbed	A	1,15	1,57	1,00	2,35	2,30	3,14

(1) Air temperature 18 °C – Water temperature 80/60 °C.

(2) Air temperature 18 °C – Water temperature 60/40 °C.

(3) The sound pressure levels dB(A) are measured at a distance of 3 m, directional factor Q = 2, according to EN 3744.

with Electric Heater

MODEL		LC 10E		LC 15E		LC 20E	
Speed		1	2	1	2	1	2
		MIN	MAX	MIN	MAX	MIN	MAX
Maximum installation height	m	3,5	3,5	3,5	3,5	3,5	3,5
Length	mm	1125	1125	1625	1625	2160	2160
Air flow	m ³ /h	1200	2100	1500	3150	2400	4200
Electric heater - 1° stage	kW	4	4	6	6	8	8
Electric heater - 2nd stage	kW	8	8	12	12	16	16
Sound pressure (Lp) ⁽¹⁾	dB(A)	38	52	38	56	38	54
Motor voltage	V	230	230	230	230	230	230
Electric heater voltage	V/Ph	400/3	400/3	400/3	400/3	400/3	400/3
Motor power input	W	230	330	200	540	460	660
Current absorbed	A	1,15	1,57	1,00	2,35	2,30	3,14
Electric heater absorption – 1st stage	A	6,0	6,0	9,0	9,0	12,0	12,0
Electric heater absorption – 2st stage	A	12,0	12,0	18,0	18,0	24,0	24,0

(1) The sound pressure levels dB(A) are measured at a distance of 3 m, directional factor Q = 2, according to EN 3744.

MELTEMI LC-ECM TECHNICAL SPECIFICATIONS

Ventilation only

MODEL		LC-ECM 10A		LC-ECM 15A		LC-ECM 20A	
Speed		1	2	1	2	1	2
		MIN	MAX	MIN	MAX	MIN	MAX
Maximum installation height	m	3,5	3,5	3,5	3,5	3,5	3,5
Length	mm	1125	1125	1625	1625	2160	2160
Air flow	m ³ /h	1280	2100	1650	3200	2500	4200
Sound pressure (Lp) ⁽¹⁾	dB(A)	38	52	38	56	38	54
Motor voltage	V	230	230	230	230	230	230
Motor power input	W	85	210	86	370	170	420
Current absorbed	A	0,70	1,60	0,40	1,68	1,40	3,20

(1) The sound pressure levels dB(A) are measured at a distance of 3 m, directional factor Q = 2, according to EN 3744.

with Water Coil

MODEL		LC-ECM 10W		LC-ECM 15W		LC-ECM 20W	
Speed		1	2	1	2	1	2
		MIN	MAX	MIN	MAX	MIN	MAX
Maximum installation height	m	3,5	3,5	3,5	3,5	3,5	3,5
Length	mm	1125	1125	1625	1625	2160	2160
Air flow	m ³ /h	1150	1900	1600	3000	2300	4000
Heating ⁽¹⁾	kW	12,44	18,46	17,49	27,59	26,21	38,59
Heating ⁽²⁾	kW	7,07	10,29	10,04	15,51	15,34	22,26
Sound pressure (Lp) ⁽³⁾	dB(A)	38	52	38	56	38	54
Motor voltage	V	230	230	230	230	230	230
Motor power input	W	85	210	86	370	170	420
Current absorbed	A	0,70	1,60	0,40	1,68	1,40	3,20

(1) Air temperature 18 °C – Water temperature 80/60 °C.

(2) Air temperature 18 °C – Water temperature 60/40 °C.

(3) The sound pressure levels dB(A) are measured at a distance of 3 m, directional factor Q = 2, according to EN 3744.

with Electric Heater

MODEL		LC-ECM 10E		LC-ECM 15E		LC-ECM 20E	
Speed		1	2	1	2	1	2
		MIN	MAX	MIN	MAX	MIN	MAX
Maximum installation height	m	3,5	3,5	3,5	3,5	3,5	3,5
Length	mm	1125	1125	1625	1625	2160	2160
Air flow	m ³ /h	1150	2000	1625	3000	2300	4100
Electric heater - 1 st stage	kW	4	4	6	6	8	8
Electric heater - 2 nd stage	kW	8	8	12	12	16	16
Sound pressure (Lp) ⁽¹⁾	dB(A)	38	52	38	56	38	54
Motor voltage	V	230	230	230	230	230	230
Electric heater voltage	V/Ph	400/3	400/3	400/3	400/3	400/3	400/3
Motor power input	W	85	210	86	370	170	420
Current absorbed	A	0,70	1,60	0,40	1,68	1,40	3,20
Electric heater absorption – 1 st stage	A	6,0	6,0	9,0	9,0	12,0	12,0
Electric heater absorption – 2 st stage	A	12,0	12,0	18,0	18,0	24,0	24,0

(1) The sound pressure levels dB(A) are measured at a distance of 3 m, directional factor Q = 2, according to EN 3744.

THERMAL EMISSIONS

LC / LC-ECM W and LC WS series with hot water coil
(type W models with integral control and WS type without control)

Entering Air Temperature 18 °C

Model	Vn		Qv m³/h	Ph kW	WT: 80 / 60 °C			Ph kW	WT: 60 / 40 °C		
					LAT °C	Qw l/h	Δp kPa		LAT °C	Qw l/h	Δp kPa
10W	2	MAX	1900	18,46	44,0	794	14	10,29	32,5	442	5
	1	MIN	1100	12,44	50,8	535	7	7,07	36,7	304	3
15W	2	MAX	3000	27,59	45,2	1186	14	15,51	33,0	667	5
	1	MIN	1500	17,49	52,9	752	6	10,04	38,0	432	2
20W	2	MAX	4000	38,59	46,5	1660	28	22,26	34,5	957	11
	1	MIN	2200	26,21	53,2	1127	14	15,34	38,6	660	6

WT: Water temperature
Vn: Nominal speeds
Qv: Air flow
Ph: Heating emission
LAT: Leaving air temperature
Qw: Water flow rate
Δp: Pressure drop

Model	Vn		Qv m³/h	Ph kW	WT: 50 / 30 °C			Ph kW	WT: 50 / 40 °C		
					LAT °C	Qw l/h	Δp kPa		LAT °C	Qw l/h	Δp kPa
10W	2	MAX	1900	6,10	29,3	262	2	9,36	34,7	805	16
	1	MIN	1100	4,28	26,6	184	1	6,32	31,2	544	8
15W	2	MAX	3000	9,26	30,3	398	2	14,00	35,8	1204	15
	1	MIN	1500	6,15	27,1	264	1	8,90	31,8	766	7
20W	2	MAX	4000	13,79	31,0	593	5	19,71	36,0	1695	33
	1	MIN	2200	9,68	28,2	416	2	13,40	32,6	1152	16

WT: Water temperature
Vn: Nominal speeds
Qv: Air flow
Ph: Heating emission
LAT: Leaving air temperature
Qw: Water flow rate
Δp: Pressure drop

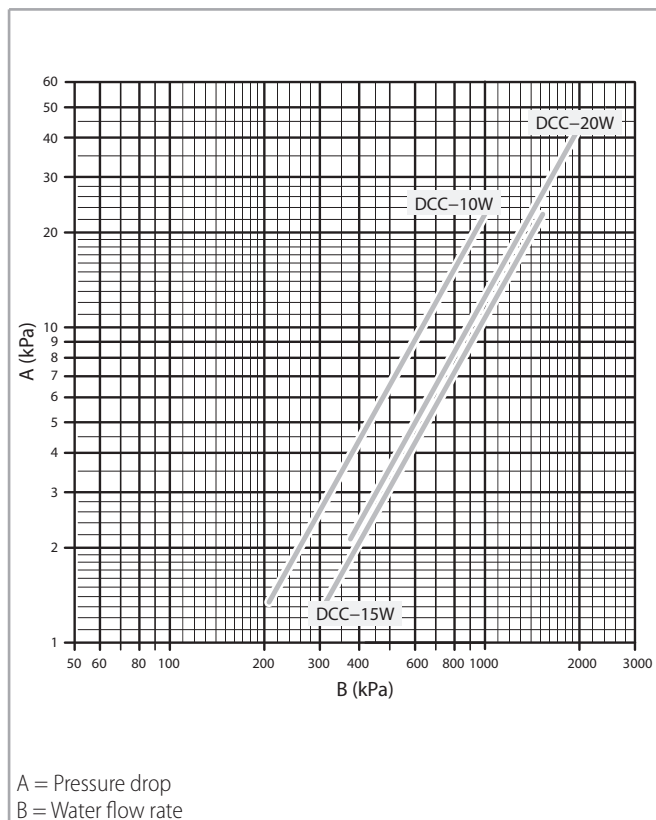
Model	Vn		Qv m³/h	Ph kW	WT: 45 / 35 °C			Ph kW	WT: 40 / 30 °C		
					LAT °C	Qw l/h	Δp kPa		LAT °C	Qw l/h	Δp kPa
10W	2	MAX	1900	7,36	31,2	633	10	5,36	25,5	461	6
	1	MIN	1100	5,01	28,4	431	5	3,68	27,7	316	3
15W	2	MAX	3000	11,05	32,1	951	10	8,08	26,0	695	6
	1	MIN	1500	7,08	28,9	609	4	5,24	28,5	451	3
20W	2	MAX	4000	15,70	32,4	1350	22	11,66	26,7	1003	13
	1	MIN	2200	10,74	29,6	923	11	8,04	28,8	691	7

WT: Water temperature
Vn: Nominal speeds
Qv: Air flow
Ph: Heating emission
LAT: Leaving air temperature
Qw: Water flow rate
Δp: Pressure drop

WATER SIDE PRESSURE DROP AND INSTALLATION NOTES

Water side pressure drop

LC / LC-ECM W and LC WS series with hot water coil



The water pressure drop figures refer to a mean water temperature of 50 °C; for different temperatures, multiply the pressure drop figures by the correction factors K.

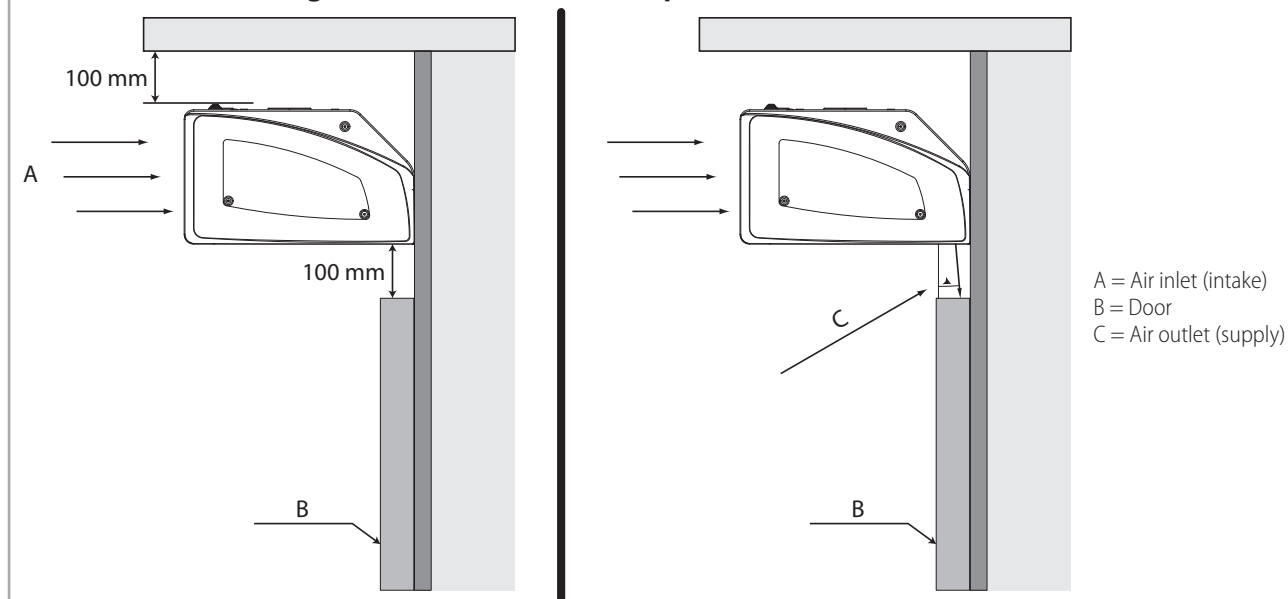
	Mean water temperature (°C)				
	35	40	50	60	70
K correction factor	1,09	1,06	1,00	0,94	0,88

Installation notes

⚠ In order to allow suitable space for maintenance, but above all to guarantee the correct operation of the door curtain, the distance indicated must be observed.

The product, in addition, must not be installed in plenums or in false ceilings without adequate air intake.

Distance that must be guaranteed for the correct operation of the door curtain



CONTROLS

LC-A Control system

Wall-mounted remote control (provided as standard):

- High/Low speed-Standby ON button.
- ON indication or Standby LED.
- Clamps for "Door Contact" external connection.
- Clamps for connecting a remote ON/OFF switch.
- Dip switch to set the post-ventilation delay time of the door closure fan.



LC-W/E - LC-ECM-A/W/E Control system

The units are equipped, as standard, with electronic board and T-MB control to manage:

- ON/OFF unit.
- Fan speed selection.
- Operating mode selection (ventilation only or with heating coil).

- Air temperature set-point configuration.
- Water valve ON/OFF actuator ("W" version).
- Activation of the electric heater 1st and 2nd stage ("E" version).
- Door interlock.
- Remote ON/OFF interlock.

Several units can be controlled in Master/Slave mode.

T-MB wall control



Wall control with display that allows controlling one or more units in Master/Slave mode.

The control is equipped with internal sensor to detect the room temperature, which can be defined as a priority compared to the return air sensor fitted on the door curtain.

The T-MB wall control features the following functions:

- ON and OFF unit switch.
- Temperature set configuration.
- Fan speed (low or high) setting.
- Operation mode setting (fan only, heating 1st or 2nd stage for the version with electric heater).
- Time setting.
- Weekly ON/OFF program.

WM-3V wall control for LI-AS and LI-WS models without control only (accessory)

ID	Code
WM-3V	9066642



- Manual 3 speed switch
- Without thermostatic control
- It does not control the valves

PLENUMS FOR CONCEALED INSTALLATION



The **plenum with aesthetic frame** allows the concealed installation of the LC and LC-ECM Door Curtain model. Thanks to this option, the Air Curtains do not interfere with the harmony of the ambient where they are installed.

Completely integrated in the ceiling, the Plenum for concealed installation is separately supplied and it includes the aesthetic frame, the screws and the fixing brackets.

Both the Plenum and the aesthetic frame are made of galvanized steel, finished with epoxy-polyester painting, RAL 9016.

In any case, on site it is possible to repaint the entire frame in the same color of the ceiling.

Available models

LC/LC-ECM-10 Model



IDENTIFICATION	CODE
PR-LC-10	9042085

LC/LC-ECM-15 Model



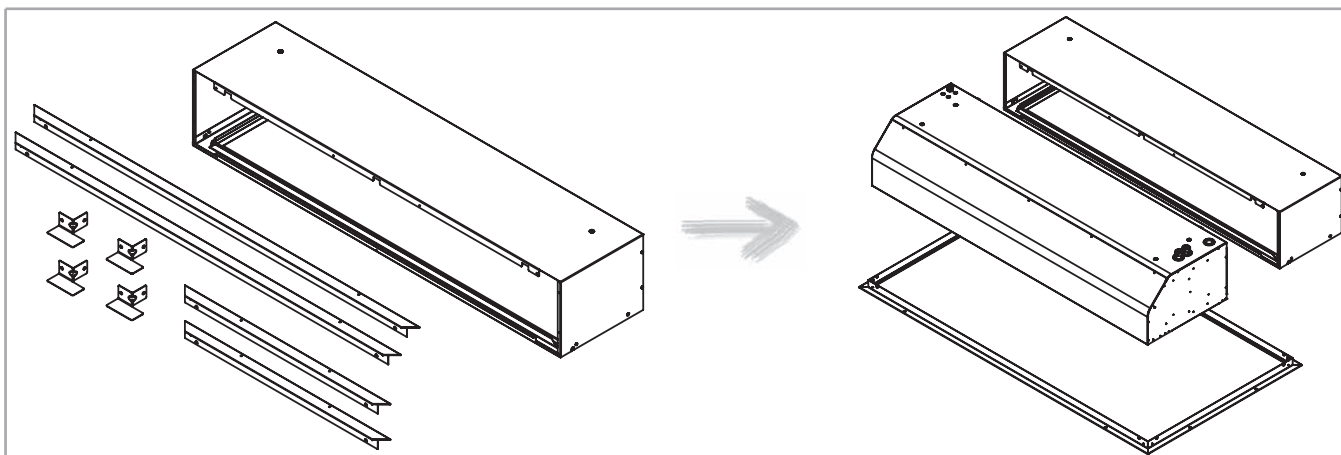
IDENTIFICATION	CODE
PR-LC-15	9042086

LC/LC-ECM-20 Model



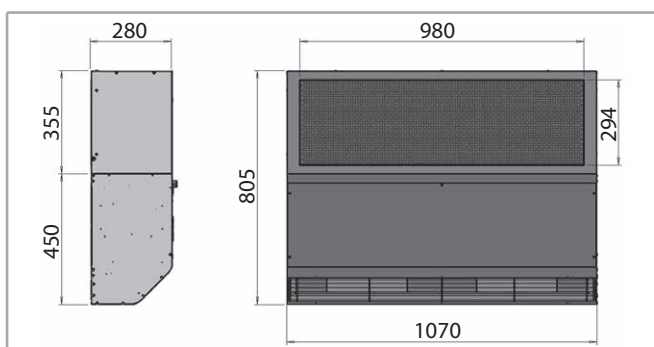
IDENTIFICATION	CODE
PR-LC-20	9042087

Kit Composition



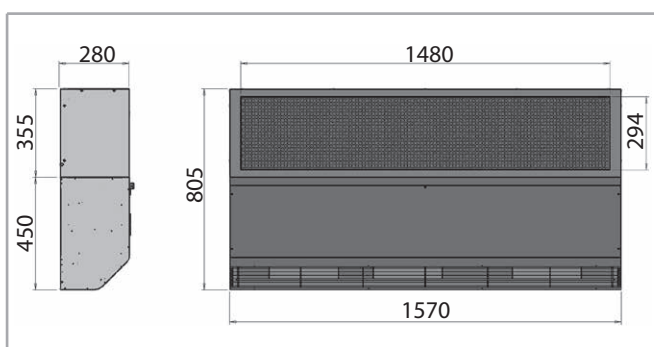
Dimension and weight

LC/LC-ECM-10 Model



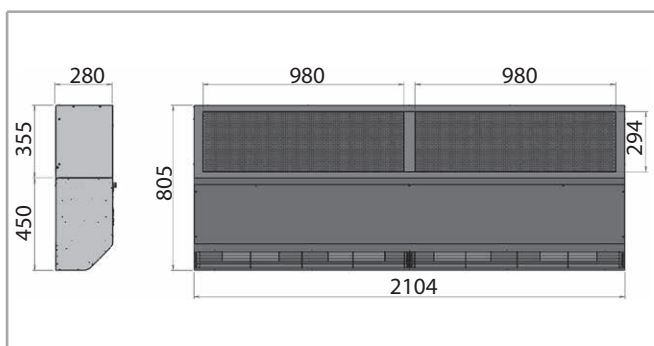
ID	Weight (kg)
PR-LC-10	12

LC/LC-ECM-15 Model



ID	Weight (kg)
PR-LC-15	15

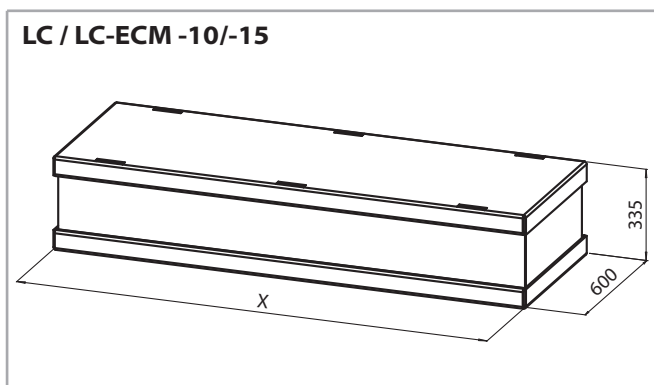
LC/LC-ECM-20 Model



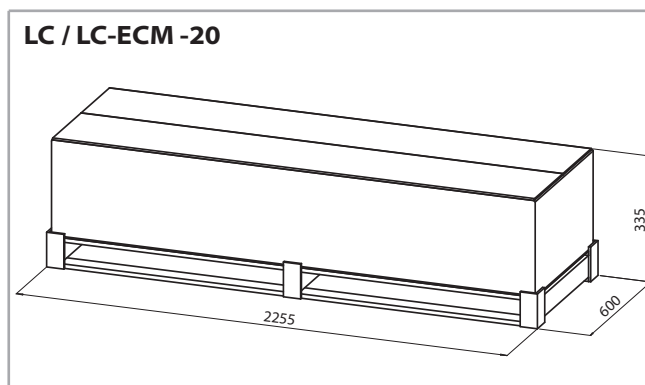
ID	Weight (kg)
PR-LC-20	23

Packed unit

LC / LC-ECM -10/-15



LC / LC-ECM -20



	LC / LC-ECM	
Model	10	15
X (mm)	1210	1710

MAIN COMPONENTS



The **LI** door barriers are intended to be installed near industrial entrances or doors, i.e. wherever the installation height must be up to 4.5 metres (maximum).

The unit comes with integrated control system specifically designed for every type of operation or without control.

Model with integral control

LI-A: ventilation only, it is provided with wall mounted remote control. The control allows to switch the door barrier on and off and to set the speed required (high or low) by pressing a step-by-step button.

LI-W/E: operation with hot water or electric coil. The unit comes with remote control with T-MB wall mounted display.

The boards are provided with door contact connection or with ON/OFF remote control.

Product specification

- Remote control (LI-A)
- Power board fitted on the unit and remote control (LI-W/E)
- 2 fan speeds.
- Auxiliary fan motor supply relay
- 2 stage electric coil.
- Master/Slave connection of several units.
- 230V output to control an ON/OFF valve
- The versions with electric heater are equipped with two safety thermostats; the first one with automatic reset, set at 45 °C, while the second one with manual reset, set at 80 °C.

Model without control

LI-AS: ventilation only.

LI-WS: operation with water.

Product specification

- Terminal board
- 2 fan speeds.
- WM-3V speed control (accessory)

Recommended installation height: 4.5 metres

Installation: horizontal

Available lengths: 1, 1.5 and 2 metres

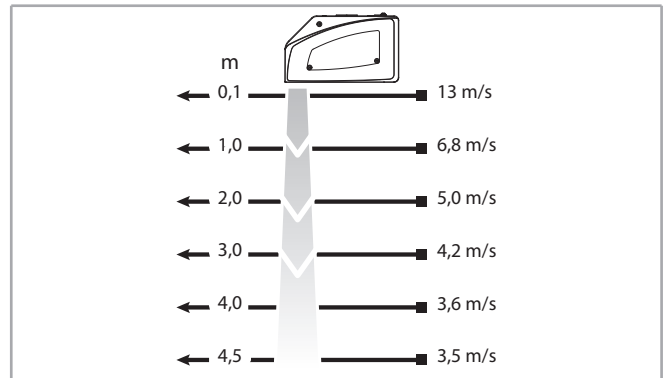
Electric heater:

LI-10E 11 kW 400V 3Ph

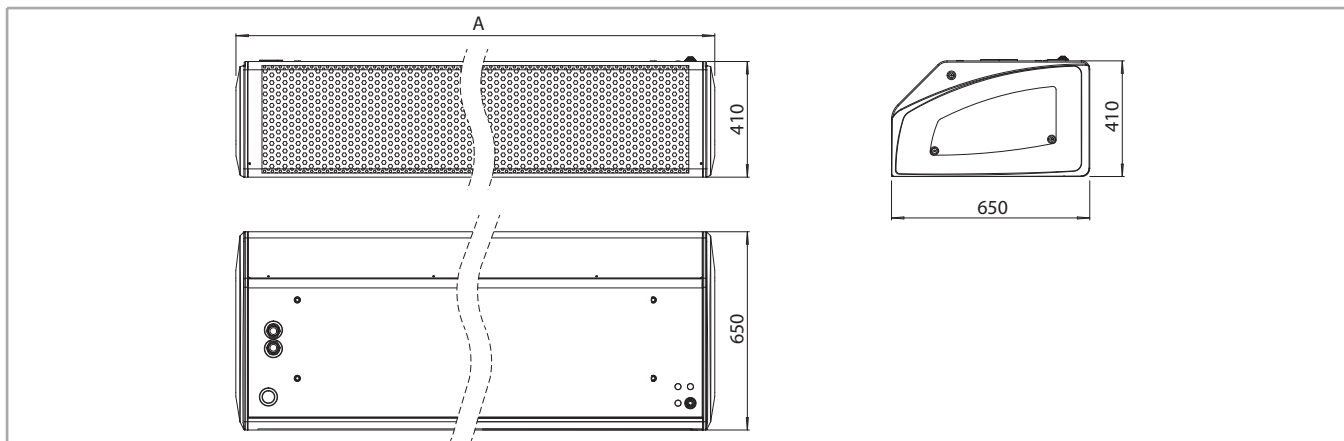
LI-15E 18 kW 400V 3Ph

LI-20E 22 kW 400V 3Ph

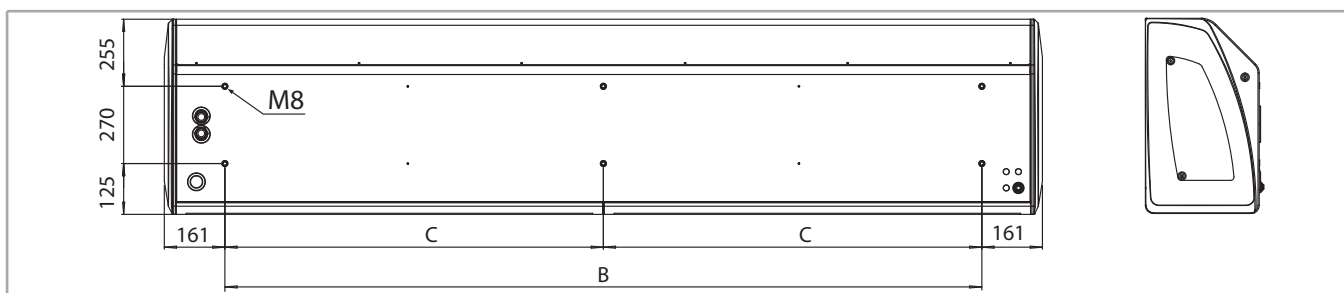
2 row hot water coil



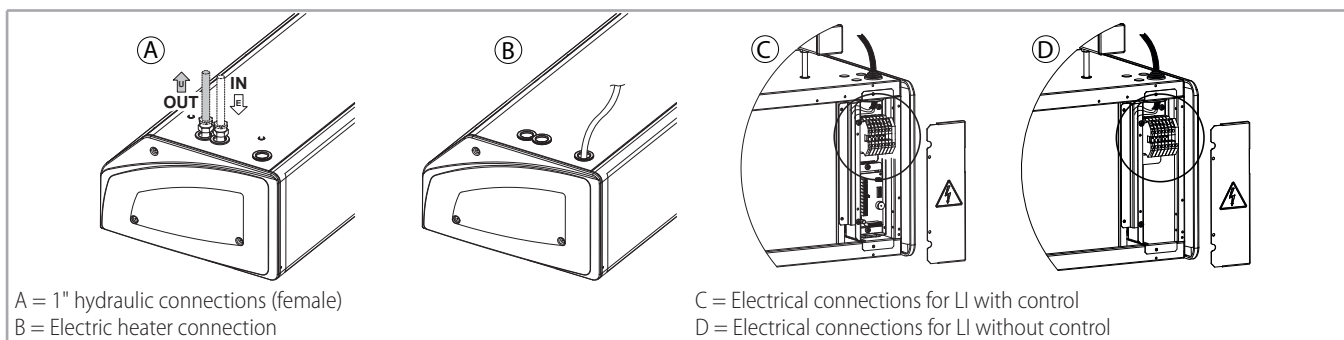
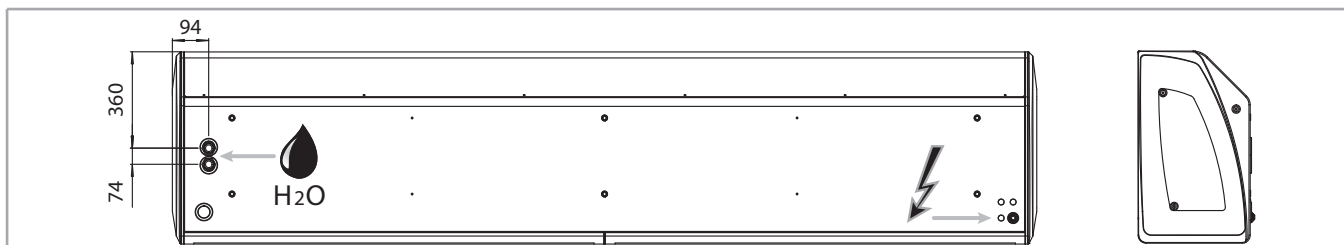
DIMENSION AND WEIGHT



Bracket position



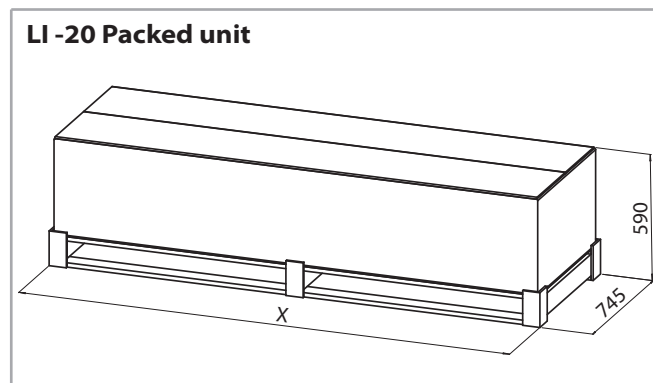
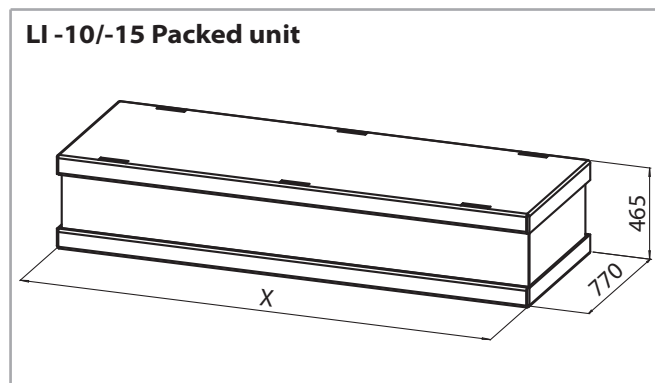
Hydraulic and electrical connection positions



Dimensions (mm)

Model		10	15	20
A	mm	1150	1650	2185
B	mm	828	1328	1862
C	mm	-	-	931

Packed unit



Model		10	15	20
X	mm	1235	1735	2280

Weights (kg)

Ventilation only (type A models with integral control and AS type without control)

Model		10A	15A	20A
Weight with packaging	kg	45,9	67,1	110,0
Weight without packaging	kg	42,0	62,0	88,0

with Water Coil (type W models with integral control and WS type without control)

Model		10W	15W	20W
Weight with packaging	kg	51,9	74,1	120,0
Weight without packaging	kg	48,0	69,0	98,0

with Electric Heater

Model		10E	15E	20E
Weight with packaging	kg	50,9	73,1	118,0
Weight without packaging	kg	47,0	68,0	96,0

Water content (l)

Model		10	15	20
Water content	l	1,65	2,55	3,40

MELTEMI LI TECHNICAL SPECIFICATIONS

Ventilation only (type A models with integral control and AS type without control)

MODEL		LI 10A		LI 15A		LI 20A	
		1	2	1	2	1	2
Speed		MIN	MAX	MIN	MAX	MIN	MAX
Maximum installation height	m	4,5	4,5	4,5	4,5	4,5	4,5
Length	mm	1150	1150	1650	1650	2185	2185
Air flow	m ³ /h	2600	3500	3250	5500	5200	7000
Sound pressure (Lp) ⁽¹⁾	dB(A)	49	58	50	58	51	60
Motor voltage	V	230	230	230	230	230	230
Motor power input	W	400	600	520	940	800	1200
Current absorbed	A	1,80	2,63	2,40	4,20	3,60	5,26

(1) The sound pressure levels dB(A) are measured at a distance of 3 m, directional factor Q = 2, according to EN 3744.

with Water Coil (type W models with integral control and WS type without control)

MODEL		LI 10W		LI 15W		LI 20W	
		1	2	1	2	1	2
Speed		MIN	MAX	MIN	MAX	MIN	MAX
Maximum installation height	m	4,5	4,5	4,5	4,5	4,5	4,5
Length	mm	1150	1150	1650	1650	2185	2185
Air flow	m ³ /h	2600	3500	3250	5500	5200	7000
Heating ⁽¹⁾	kW	23,06	27,32	30,96	42,03	48,47	57,65
Heating ⁽²⁾	kW	12,95	15,25	17,16	22,94	27,57	32,49
Sound pressure (Lp) ⁽³⁾	dB(A)	49	58	50	58	51	60
Motor voltage	V	230	230	230	230	230	230
Motor power input	W	400	600	520	940	800	1200
Current absorbed	A	1,80	2,63	2,40	4,20	3,60	5,26

(1) Air temperature 18 °C – Water temperature 80/60 °C.

(2) Air temperature 18 °C – Water temperature 60/40 °C.

(3) The sound pressure levels dB(A) are measured at a distance of 3 m, directional factor Q = 2, according to EN 3744.

with Electric Heater

MODEL		LI 10E		LI 15E		LI 20E	
		1	2	1	2	1	2
Speed		MIN	MAX	MIN	MAX	MIN	MAX
Maximum installation height	m	4,5	4,5	4,5	4,5	4,5	4,5
Length	mm	1150	1150	1650	1650	2185	2185
Air flow	m ³ /h	2600	3500	3250	5500	5200	7000
Electric heater - 1 st stage	kW	7	7	12	12	14	14
Electric heater - 2 nd stage	kW	11	11	18	18	22	22
Sound pressure (Lp) ⁽¹⁾	dB(A)	49	58	50	58	51	60
Motor voltage	V	230	230	230	230	230	230
Electric heater voltage	V/Ph	400/3	400/3	400/3	400/3	400/3	400/3
Motor power input	W	400	600	520	940	800	1200
Current absorbed	A	1,80	2,63	2,40	4,20	3,60	5,26
Electric heater absorption – 1 st stage	A	10,2	10,2	17,5	17,5	20,5	20,5
Electric heater absorption – 2 nd stage	A	16,0	16,0	26,1	26,1	32,0	32,0

(1) The sound pressure levels dB(A) are measured at a distance of 3 m, directional factor Q = 2, according to EN 3744.

THERMAL EMISSIONS

LI W and LI WS series with hot water coil
(type W models with integral control and WS type without control)

Entering Air Temperature 18 °C

Model	Vn		Qv m³/h	Ph kW	WT: 80 / 60 °C			Ph kW	WT: 60 / 40 °C		
					LAT °C	Qw l/h	Δp kPa		LAT °C	Qw l/h	Δp kPa
10W	2	MAX	3500	27,32	41,1	1175	30	15,25	31,0	656	11
	1	MIN	2600	23,06	44,2	992	22	12,95	32,7	557	8
15W	2	MAX	5500	42,03	40,6	1807	16	22,94	30,0	986	6
	1	MIN	3250	30,96	46,2	1331	9	17,16	33,6	738	3
20W	2	MAX	7000	57,65	42,3	2479	32	32,49	31,7	1397	12
	1	MIN	5200	48,47	45,5	2084	23	27,57	33,6	1185	9

WT: Water temperature
Vn: Nominal speeds
Qv: Air flow
Ph: Heating emission
LAT: Leaving air temperature
Qw: Water flow rate
Δp: Pressure drop

Model	Vn		Qv m³/h	Ph kW	WT: 50 / 30 °C			Ph kW	WT: 50 / 40 °C		
					LAT °C	Qw l/h	Δp kPa		LAT °C	Qw l/h	Δp kPa
10W	2	MAX	3500	9,05	26,8	389	5	13,86	31,3	1192	34
	1	MIN	2600	7,77	25,6	334	4	11,71	29,7	1007	25
15W	2	MAX	5500	13,20	27,1	568	2	21,23	32,0	1825	18
	1	MIN	3250	10,05	25,1	432	1	15,67	29,5	1348	10
20W	2	MAX	7000	19,58	27,5	842	5	29,31	32,0	2520	36
	1	MIN	5200	16,71	26,3	719	4	24,69	30,4	2123	27

WT: Water temperature
Vn: Nominal speeds
Qv: Air flow
Ph: Heating emission
LAT: Leaving air temperature
Qw: Water flow rate
Δp: Pressure drop

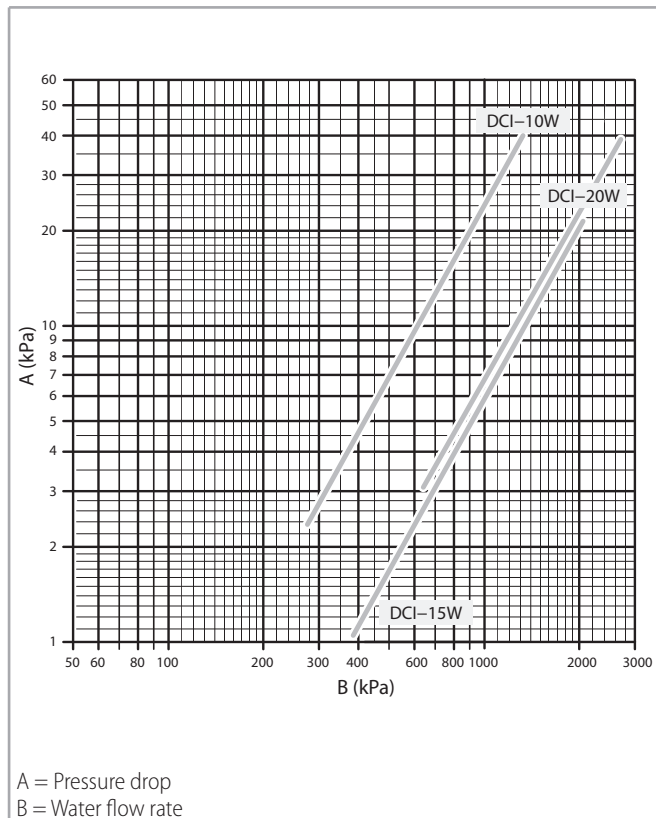
Model	Vn		Qv m³/h	Ph kW	WT: 45 / 35 °C			Ph kW	WT: 40 / 30 °C		
					LAT °C	Qw l/h	Δp kPa		LAT °C	Qw l/h	Δp kPa
10W	2	MAX	3500	10,90	28,5	937	22	7,94	24,7	683	13
	1	MIN	2600	9,24	27,2	795	17	6,76	25,7	581	9
15W	2	MAX	5500	16,56	29,2	1424	12	11,89	24,4	1023	6
	1	MIN	3250	12,29	26,9	1057	7	8,91	26,1	766	4
20W	2	MAX	7000	23,17	29,1	1992	24	16,97	25,2	1459	14
	1	MIN	5200	19,65	27,8	1682	18	14,38	26,2	1237	10

WT: Water temperature
Vn: Nominal speeds
Qv: Air flow
Ph: Heating emission
LAT: Leaving air temperature
Qw: Water flow rate
Δp: Pressure drop

WATER SIDE PRESSURE DROP AND INSTALLATION NOTES

Water side pressure drop

LI W and LI WS series with hot water coil



The water pressure drop figures refer to a mean water temperature of 50 °C; for different temperatures, multiply the pressure drop figures by the correction factors K.

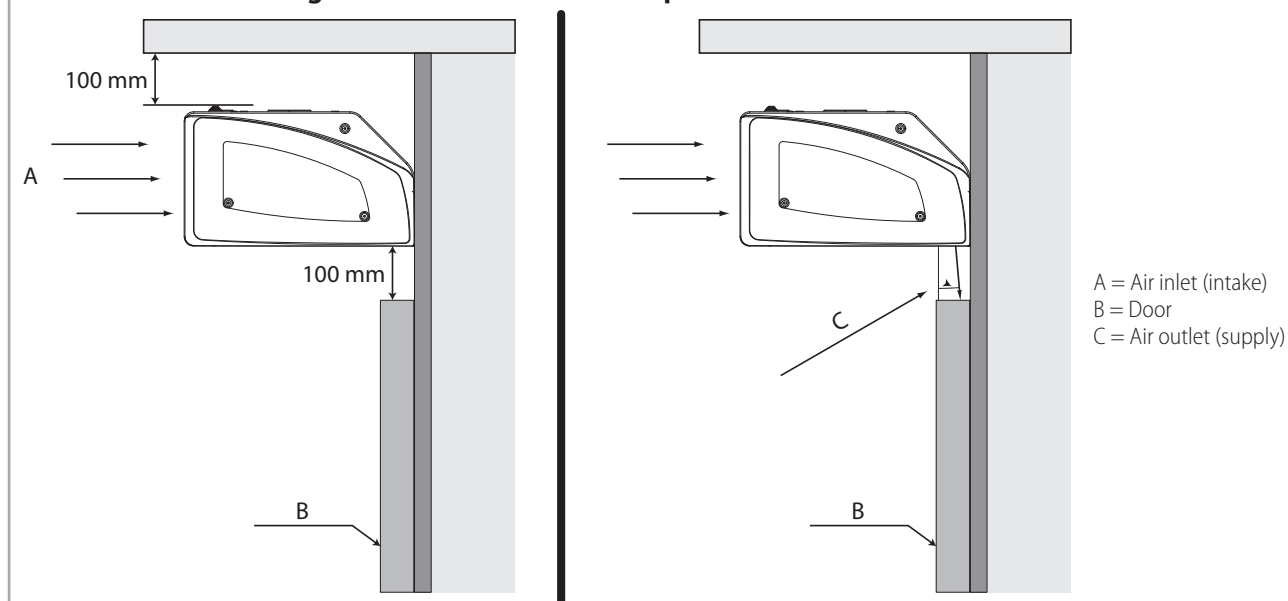
K correction factor	Mean water temperature (°C)				
	35	40	50	60	70
	1,09	1,06	1,00	0,94	0,88

Installation notes

⚠ In order to allow suitable space for maintenance, but above all to guarantee the correct operation of the door curtain, the distance indicated must be observed.

The product, in addition, must not be installed in plenums or in false ceilings without adequate air intake.

Distance that must be guaranteed for the correct operation of the door curtain



CONTROLS

LI-A Control system

Wall-mounted remote control (provided as standard):

- High/Low speed-Standby ON button.
- ON indication or Standby LED.
- Clamps for "Door Contact" external connection.
- Clamps for connecting a remote ON/OFF switch.
- Dip switch to set the post-ventilation delay time of the door closure fan.



LI-W/E Control system

The units are equipped, as standard, with electronic board and T-MB control to manage:

- ON/OFF unit.
- Fan speed selection.
- Operating mode selection (ventilation only or with heating coil).

- Air temperature set-point configuration.
- Water valve ON/OFF actuator ("W" version).
- Activation of the electric heater 1st and 2nd stage ("E" version).
- Door interlock.
- Remote ON/OFF interlock.

Several units can be controlled in Master/Slave mode.

T-MB wall control



Wall control with display that allows controlling one or more units in Master/Slave mode.

The control is equipped with internal sensor to detect the room temperature, which can be defined as a priority compared to the return air sensor fitted on the door curtain.

The T-MB wall control features the following functions:

- ON and OFF unit switch.
- Temperature set configuration.
- Fan speed (low or high) setting.
- Operation mode setting (fan only, heating 1st or 2nd stage for the version with electric heater).
- Time setting.
- Weekly ON/OFF program.

WM-3V wall control for LI-AS and LI-WS models without control only (accessory)

ID	Code
WM-3V	9066642



- Manual 3 speed switch
- Without thermostatic control
- It does not control the valves

ACCESSORIES

Door contact sensor kit

ID	Code
DSC	9042090



As soon as the door is open, the DSC door switch provides the consent for the air curtain operation (ventilation, valve opening, internal electric heater supply) and denies it as soon as the door is closed.

In order to prevent the product from continuous start-stops (see motor stress), you can set post-ventilation of 30, 60 or 90 seconds with specific DIP switches in rooms with frequent door opening-closing operations.

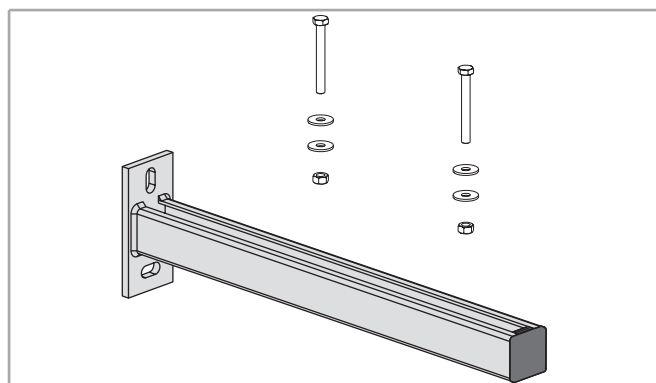
Suspension brackets kit

For versions LC / LC-ECM.

The Kit consists of brackets (N° 2 brackets for sizes LC / LC-ECM-10/15 and N° 3 brackets for size LC / LC-ECM-20) and of the fixing elements (except wall fixing plugs).

For versions LI.

The Kit consists of brackets (N° 2 brackets for sizes LI-10 ed LI-15 e N° 3 brackets for size LI-20) and of the fixing elements (except wall fixing plugs).



Model	ID	N° brackets	Code
LC / LC-ECM-10	ST-LC-10/15	2	9042091
LC / LC-ECM-15	ST-LC-10/15	2	9042091
LC / LC-ECM-20	ST-LC-20	3	9042092
LI-10	ST-LI-10/15	2	9042093
LI-15	ST-LI-10/15	2	9042093
LI-20	ST-LI-20	3	9042094

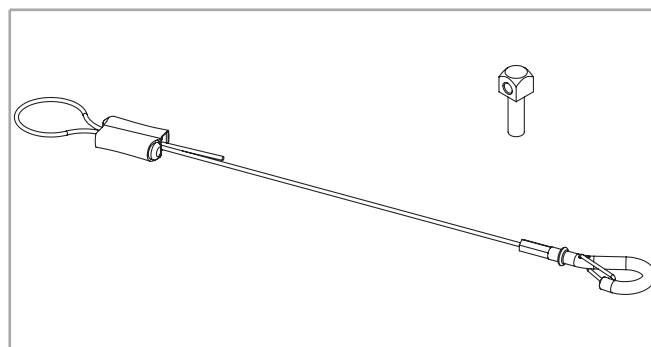
Suspension bracket kit with wires

For versions LC / LC-ECM.

The Kit consists of steel wires with hook (N° 4 wires for sizes LC / LC-ECM-10 ed LC / LC-ECM-15 e N° 6 wires for size LC / LC-ECM-20) and of fixing eye-bolts (except ceiling fixing elements).

For versions LI.

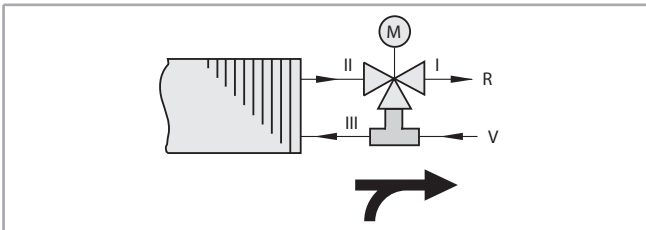
The Kit consists of steel wires with hook (N° 4 wires for sizes LI-10 ed LI-15 e N° 6 wires for size LI-20) and of fixing eye-bolts (except ceiling fixing elements).



Model	ID	N° brackets	Code
LC / LC-ECM-10 - LI-10	CAV-LC/LI-10/15	4	9042095
LC / LC-ECM-15 - LI-15	CAV-LC/LI-10/15	4	9042095
LC / LC-ECM-20 - LI-20	CAV-LC/LI-20	6	9042096

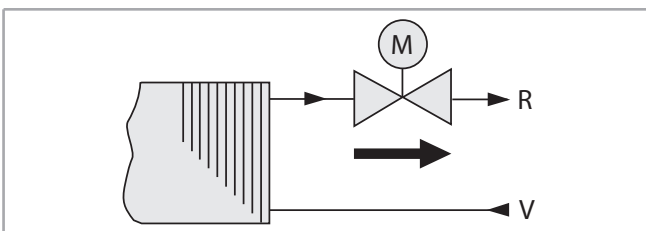
Valves

Three way ON-OFF valves with electric control



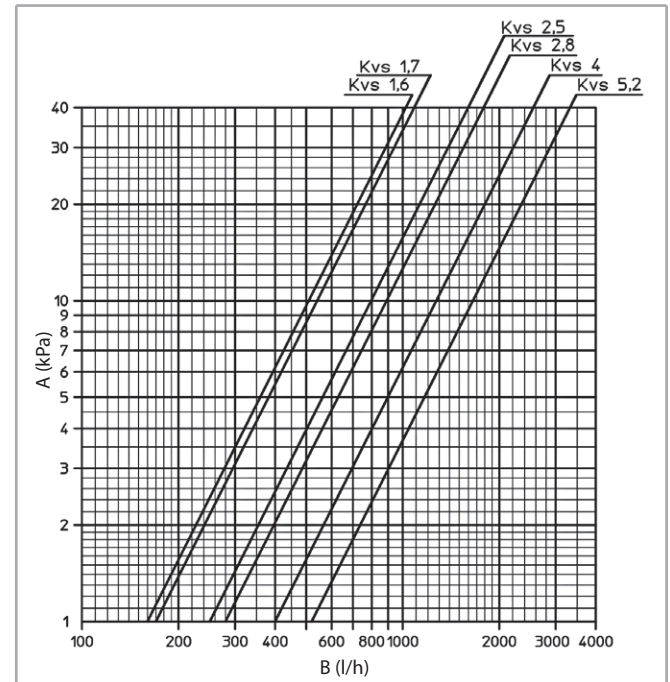
Model	Code	DN (Ø)	Kvs	ΔP max operating kPa	ΔP close off kPa
LU / LU-ECM	9039030	15 (1/2")	1,6	50	150
LC / LC-ECM	9039031	20 (3/4")	2,5	50	50
LC / LC-ECM	9039036	20 (3/4")	4,0	50	50
LI	9042097	25 (1")	4,0	50	50

Two way ON-OFF valves with electric control



Model	Code	DN (Ø)	Kvs	ΔP max operating kPa	ΔP close off kPa
LU / LU-ECM	9039033	15 (1/2")	1,7	50	250
LC / LC-ECM	9039034	20 (3/4")	2,8	50	150
LI	9039035	25 (1")	5,2	60	80

Pressure drop diagram





A company of Arbonia Group
ARBONIA 

Follow us on



Sabiana app



SABIANA SpA

Società a socio unico
via Piave 53 - 20011 Corbetta (MI) Italy
T. +39 02 97203 1 r.a. - F. +39 02 9777282
info@sabiana.it
www.sabiana.it