

Technical Bulletin



Innova is a company operating in the renewable energy sector and develops advanced climatic comfort systems for every season. The technological solutions it employs combine excellent functional aspects with minimum environmental impact.

The quality and durability of our products are guaranteed by the continuous improvement of our working practices (Kaisen method) and by using the best materials.

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# 1 CERTIFICATIONS

- TUV marking for low voltage safety (EN 60335).
- TUV marking for compliance with EMC standards
- Performance tests conducted in accordance with the EN 1397 standard.
- TUV-certified sound level in accordance with EN ISO 3741: 2001 to measure sound power and UNI ISO 7779: 2001 to measure sound pressure.

# 2 DESCRIPTION

The product is a terminal that represents the best all-in-one solution for heating, cooling and dehumidification. It allows to achieve very high energy saving levels

as it can be combined with low-temperature heat generators such as heat pumps, condensing boilers and systems with built-in solar collectors. With its sophisticated temperature regulator, this product guarantees thermal comfort in every season. It heats and cools extremely quickly, and once the desired temperature is reached it maintains it accurately and silently. While heating, the product develops an effective natural convection effect (similar to a radiator) which considerably reduces the need to activate ventilation. Its harmonious design and exceptional reduced depth (just 13cm deep) means it

can blend into any kind of setting to fit in any kind of home.

The range consists of the models below:

- SL for exposed installation
- SLI for wall or false ceiling built-in installation
- RS version with radiant effect.
  in the versions for systems with 2 and 4 pipes
- SLS with lowered unit for vertical exposure positioning
- RSI with front radiant effect for vertical built-in installation in the versions for systems with 2 and 4 pipes

# 3 RANGE

#### SL MODEL WITH EXPOSED UNIT

SL Model with exposed unit is a terminal that represents the best all-in-one solution for heating, cooling and dehumidification.

Its harmonious design and exceptional reduced depth (just 13cm deep) means it can blend into any kind of setting to fit in any kind of home.

It is available in white and aluminium, with inlet grid or Full Flat design.

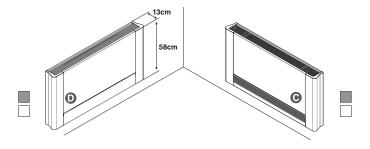
Its particularly thin design is the result of an innovative layout of both the ventilation unit and the heat exchanger. It has a tangential fan with asymmetric blades and the heat exchanger has a wide surface on the front, enabling high airflows to be achieved with low pressure drops and minimum noise.

Its exceptional ventilation efficiency means the energy consumption levels of the electric motor are very low.

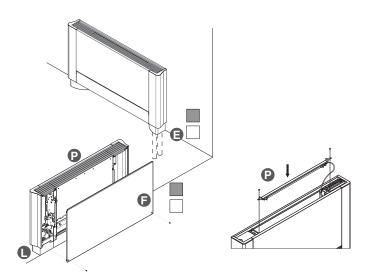
The fan speed is continuously modulated by the temperature control with proportional integral logic, with clear benefits in terms of temperature and humidity regulation in summer.

#### **SETUPS - ACCESSORIES**

- C Version with front inlet grid
- FULL FLAT version with motorised outlet panel
- White RAL 9010
  - Silver grey

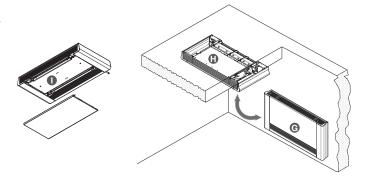


- E Feet to cover the pipework coming from below
- L Feet to anchor the unit to the floor
- F Back cover panel for installations with exposed rear.
- P Air sterilisation device with UVC lamp, can be fitted on all models
- White RAL 9010
- Silver grey



# G-H either vertical or horizontal installation

Condensation drip tray for horizontal installation, accessory required for operation in cooling mode



#### SLS MODEL LOWERED WITH EXPOSED UNIT

limited dimensions of the wall behind make the insertion of a traditional fan coil impossible or unsightly. There are different types of situations: the attic with a low bottom wall, offices with high windows, arcades or halls where the fan coil must

SLS is a low version (only 370 mm) specifically designed for whenever the not stand out... and many other situations for which designers and architects found no specific product on the market. SLS is the solution and fits several different types of applications.

#### **SETUPS - ACCESSORIES**

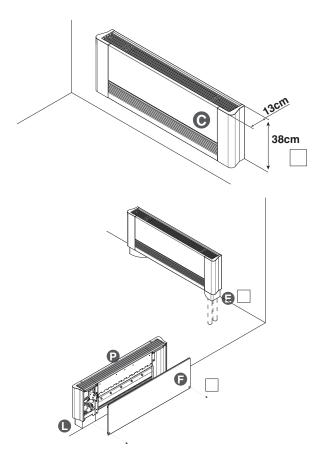
Version with front inlet grid White RAL 9010

Feet to cover the pipework coming from below

Feet to anchor the unit to the floor

Back cover panel for installations with exposed rear.

White RAL 9010



### SLI BUILT-IN MODEL

The SLI model is also particularly suited for built-in installations. Thanks to its reduced depth, it can be inserted in all types of walls and in false ceilings, even shallow ones. Its extremely low noise levels make it the best choice for summer and winter climate control of all rooms, especially for bedrooms, of both private rooms and hotels. The wide range of accessories, both in terms of installation (custom channels, containment casings, air grids) and to monitor functions (remote wall-mounted thermostats, BUS remote management boards) allow for all types of applications in building structures and in conjunction with a variety

of systems. The units come as standard with a double condensation drip tray for both horizontal (on false ceilings) and vertical (on walls) installation. The casing's front cover panel is available in both the wall and ceiling version. This accessory allows to easily clean the air filters through the removable front grid and easily access the SLI terminal for maintenance purposes.

# **SETUPS - ACCESSORIES**

D-O either vertical or horizontal installation

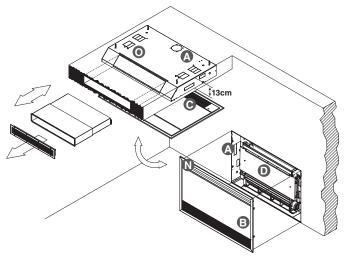
Zinc-coated sheet metal casing for built-in installation (only on versions with 2 pipes)

B Panel for wall built-in vertical installation

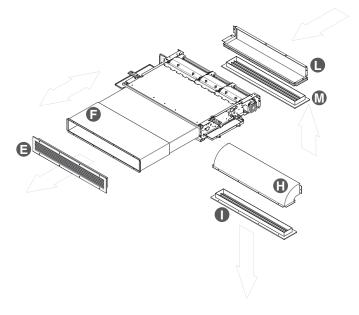
Panel for horizontal built-in installation horizontal ceiling

Adjustable deflector

White RAL 9010



- Telescopic air supply channel Aluminium supply inlet with curved fins for installation on false ceilings Aluminium supply inlet with two rows of fins Ε
- Air inlet channel with 90° curve Н
- Aluminium intake grid with straight profile M
- Air intake fitting



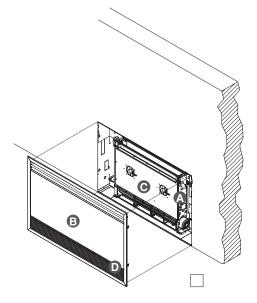
# RSI MODEL BUILT-IN WITH RADIANT EFFECT (ONLY VERTICAL INSTALLATION)

In the RSI model, the innovative front radiant panel solution combines with built-in models. Even wall-mounted products can therefore transmit classical front warmth directly on the wall enclosing the casing.

Obviously this solution can only be applied to models built into the wall and not on the ceiling.

# **SETUPS - ACCESSORIES**

- С
- Vertical installation only Zinc-coated sheet metal casing for built-in installation (only on versions Α
- В Panel for wall built-in vertical installation
- Adjustable deflector
- White RAL 9003 opaque



#### **RS MODEL WITH RADIANT EFFECT**

The product is capable of rapidly heating in winter and cooling and dehumidifying in summer whilst maintaining ideal thermal comfort levels.

Namely, during the heating stage the product combines the convection and ventilation effect with the radiant effect of the front panel, which increases the well-being of people in the room. Thanks to this unique operating principle, once it reaches the comfort temperature the terminal maintains it without the support of the main fan and therefore it operates in absolute silence. The fan turns off gradually through a modulating control, as the room reaches the desired temperature set on the controller. This exclusive patent is based on a simple and yet highly effective concept that prevents the operating complications and poor reliability of systems with built-in radiators and special valves. The size and design of the appliances are completely identical to the SL series and therefore very elegant and compact.

During winter, the operating principle is based on micro-fans with very low energy demand and minimum noise levels that allow to send hot air, coming from the heat exchanger, to the inside of the front panel of the appliance and therefore heat it effectively. With this principle, the terminal also provides significant power while heating, without running the main fan. In this way a comfortable temperature is maintained through operation with no relevant airflow and in absolute silence. In summer mode, the airflow generated by the micro-fans is stopped to prevent dew from forming on the terminal's front surface.

#### **SETUPS - ACCESSORIES**

- C Version with front inlet grid
- D FULL FLAT version with motorised outlet panel
- P Air sterilisation device with UVC lamp, can be fitted on all models
- White RAL 9010
- Silver grey



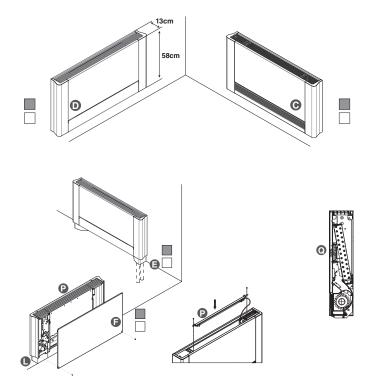
L Feet to anchor the unit to the floor

Back cover panel for installations with exposed rear.

Q Micro-fans with very low energy consumption

White RAL 9010

Silver grey



# 4 COMPOSITION OF THE SUPPLY CODE

Appliances part of the product range can be set up with a number of accessories to best adapt them to the system's needs or to make installation easier. Upon request, some accessories can be supplied directly installed by the manufacturer,

while other accessories must be ordered separately (see Accessories section).

#### 5 POSITION OF CONNECTIONS AND POSSIBLE INVERSION

The standard configuration of the machines has the hydraulic connections on the left and the control panels on the right.

If the positions must be inverted, the operation can be performed directly at the factory on demand.

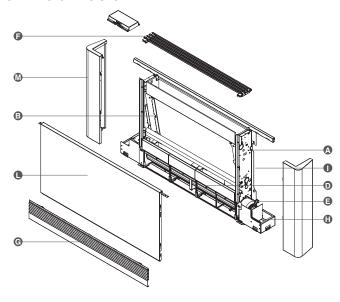
# 5 COMPONENTS

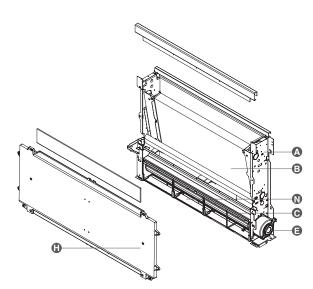
Α	Load-bearing structure	made with high-resistance electrolytically zinc-coated sheet metal
В	Thermal exchange battery	made with copper pipes and aluminium pack finnning with high-efficiency coils. 3/4 Eurokonus threaded fittings, compliant with the requirements of new EU standards. The battery is fitted with a sensor to detect the water temperature.
D	Ventilation unit	inclusive of tangential fan made from synthetic material with staggered fins (minimal noise) mounted on EPDM anti- vibration supports. Statically and dynamically balanced rotor, assembled directly on the motor's shaft.
E	Resin-pack single-phase electric motor	fitted on anti-vibration EPDM supports with HALL effect sensor.
F	Reversible air outlet grid	made with aluminium painted with oven-dried epoxy powders (metallic silver paint). Its generous size enhances its high mechanical strength.
G	Air intake grid	made with electrolytically zinc-coated sheet metal painted with oven-dried epoxy powders (metallic silver paint or RAL 9010), with quick-release device to clean the filters and safety microswitch.
Н	Shock-proof PVC condensation drip tray	, easy to disassemble for periodic cleaning.
Н	Shock-proof ABS condensation drip tray	(optional vertical installation for SL/SLI versions)
1	Sound-proofing structural back panel	made with high-resistance compressed fibres (FIMBORD GR900)
L	Front outer casing	made with electrolytically zinc-coated sheet metal painted with oven-dried epoxy powders (metallic silver paint or RAL 9010).
M	Dismountable sides	to conduct inspections inside the compartment, electrical or hydraulic connections
N	Polypropylene honeycomb air filter	, it can be regenerated by washing or blowing it. G1 classification in accordance with the EN 779 standard.
0	Condensation drain fitting	to channel condensation towards a suitable drainage area
Р	Micro-fan	with low energy consumption levels to increase the convection effect

Accessories (see attached data sheets)

# **SL AND SLS VERSIONS**

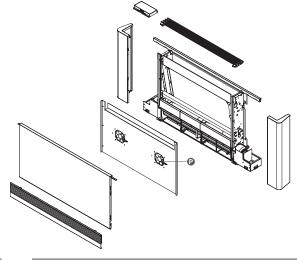


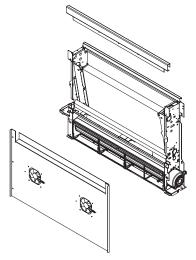




# **RS VERSIONS**

**RSI VERSIONS** 





# 6 TECHNICAL DATA

# 2 PIPES

PERFORMANCE			SL 200 SLI 200	RS 200 RSI 200	SLS 200	SL 400 SLI 400	RS 400 RSI 400	SLS 400	SL 600 SLI 600	RS 600 RSI 600	SLS 600	SL 800 SLI 800	RS 800 RSI 800	SLS 800		RS 1000 RSI 1000	SLS 1000
Total cooling capacity	a	W	830	830	560	1760	1760	1040	2650	2650	1640	3340	3340	2310	3800	3800	3140
Sensitive cooling capacity		W	620	620	520	1270	1270	840	1960	1960	1400	2650	2650	2100	3010		2500
Water flow rate		I/h	143	143	95	303	303	179	456	456	281	574	574	397	654	654	539
Water pressure drop		kPa	7,2	7,2	4,7	8,4	8,4	10,7	22,5	22,5	- 1-	18,6	18,6	2,1	24,9	24,9	14,5
Heating capacity with water inlet at 50°C	b	W	1090	1150	780	2350	2460	1570	3190	3410	2380	4100	4400	3250	4860	5200	3910
Water flow rate (water inlet at 50 °C)		I/h	143	143	95	303	303	179	456	456		574	574	397	654		539
Water pressure drop (water inlet at 50 °C)		kPa	5,7	6,5	1,4	6,6	7,5	8,8	16,3	20,2	3,4	14	16,7	3,5	18,3		13,4
Heating capacity without ventilation (50 °C)		W	210	320	150	247	380	165	291	460	217	366	550	290	449	660	361
Heating capacity with water inlet at 70°C	С	W	1890	2020	1390	3990	4150	2730	5470	5800	4140	6980	7500	5650	8300	8600	6620
Water flow rate (70 °C ΔT 10)		l/h	162	174	119	343	357	234	471	500	356	600	645	485	714		569
Water pressure drop (70 °C ΔT 10)		kPa	6,7	7,2	2	7,6	8,2	13	16,1	21,2	4,7	14	17,7	4,5	19,8	23,8	14
Heating capacity without ventilation (70		W	322	540	236	379	670	259	447	780	338	563	920	455	690	1080	550
HYDRAULIC FEATURES																	
Battery water content		litri	0,47	0,47	0,28	0,8	0,8	0,45	1,13	1,13	0,61	1,46	1,46	0,77	1,8	1,8	0,94
Maximum operating pressure		bar	10	10	10	10	10	10	10	10		10	10	10	10	10	10
Hydraulic connections		pollici	eurokonus 3/4	eurokonus 3/4	eurokonus 3/4	eurokonus 3/4	eurokonus 3/4	eurokonus 3/4	eurokonus 3/4	eurokonus 3/4	eurokonus 3/4	eurokonus 3/4	eurokonus 3/4	eurokonus 3/4	eurokonus 3/4	eurokonus 3/4	eurokonus 3/4
AERAULIC DATA																	
Maximum airflow	d	m3/h	162	162(*)	140	320	320(*)	250	461	461 (*)	390	576	576 (*)	540	648	648 (*)	600
Airflow at medium speed (AUTO mode)		m3/h	113	113(*)	96	252	252(*)	199	367	367 (*)	306	453	453 (*)	416	494	494 (*)	460
Airflow at minimum ventilation speed		m3/h	55	55(*)	49	155	155(*)	119	248	248 (*)	204	370	370 (*)	343	426	426 (*)	403
Maximum static pressure available		Pa	10	10	10	10	10	10	13	13	10	13	13	10	13	13	10
ELECTRICAL DATA																	
Power supply voltage		V/ph/Hz	230/1/50	230/1/50		230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50
Maximum power consumption		W	11,9	12,9	11,9	17,6	19,6	17,6	19,8	21,8	- 1-	26,5	29,5	26,5	29,7	32,7	43
Maximum current consumption		Α	0,11	0,11	0,11	0,16	0,16	0,16	0,18	0,18	0,18	0,26	0,26	0,26	0,28		0,27
Power consumption at minimum speed		W	6	6	6	12	12	12	14	14	14	18	18	18	19	19	19
SOUND LEVEL																	
Sound pressure at maximum airflow	g	dB(A)	39,4	39,4	38,8	40,2	40,2	39,5	42,2	42,2	41,4	42,5	42,5	41,6	43,9	43,9	42,6
Sound pressure at medium airflow	g	dB(A)	33,2	33,2	32,7	34,1	34,1	33,5	34,4	34,4	33,7	35	35	34,3	37,6	37,6	36,5
Sound pressure at minimum airflow	g	dB(A)	24,2	24,2	23,8	25,3	25,3	24,9	25,6	25,6	25,1	26,3	26,3	25,7	27,6	27,6	26,8
Sound pressure at temperature set point	g	dB(A)	18,8	18,8	18,8	19,6	19,6	19,6	22,3	22,3	22,3	22,7	22,7	22,7	23,8	23,8	23,8
DIMENSIONS AND WEIGHT			SL 200 RS 200	SLI 200 RSI 200	SLS 200	SL 400 RS 400	SLI 400 RSI 400	SLS 400	SL 600 RS 600	SLI 600 RSI 600	SLS 600	SL 800 RS 800	SLI 800 RSI 800	SLS 800		SLI 1000 RSI 1000	SLS 1000
Total length		mm	735	525	735	935	725	935	1135	925	1135	1335	1125	1335	1535	1325	1535
Total height (without support feet)		mm	579	590	379	579	590	379	579	590	379	579	590	379	579	590	379
Total depth		mm	129	126	129	129	126	129	129	126	129	129	126	129	129	126	129
Net weight		Kg	17	9	12	20	12	14	23	15	16	26	18	19	29	21	23

#### **4 PIPES**

			SL 200-4T	SLI 200-4T	SL 400-4T	SLI 400-4T	SL 600-4T	SLI 600-4T	SL 800-4T	SLI 800-4T	SL 1000-4T	SLI 1000-4T
PERFORMANCE												
Total cooling capacity	a	W	760	760	1620	1620	2420	2420	3040	3040	3640	3640
Sensitive cooling capacity		W	566	566	1205	1205	1800	1800	2300	2300	2720	2720
Water flow rate		l/h	130	130	277	277	416	416	523	523	627	627
Water pressure drop		kPa	6,1	6,1	7,1	7,1	18,6	18,6	14,9	14,9	21,7	21,7
Heating capacity with water inlet at 50°C	b	W	610	610	1290	1290	1710	1710	2130	2130	2900	2900
Water flow rate (water inlet at 50 °C)		I/h	104	104	222	222	294	294	366	366	499	499
Water pressure drop (water inlet at 50 °C)		kPa	4,7	4,7	6,8	6,8	10,4	10,4	10,1	10,1	15	15
Heating capacity with water inlet at 70°C	С	W	980	980	2110	2110	2790	2790	3480	3480	4740	4740
Water flow rate (70 °C ΔT 10)		I/h	85	85	181	181	240	240	299	299	408	408
Water pressure drop (70 °C ΔT 10)		kPa	3,4	3,4	4,8	4,8	7,2	7,2	5,4	5,4	8,8	8,8
HYDRAULIC FEATURES												
Cooling battery water content		litri	0,47	0,47	0,8	0,8	1,13	1,13	1,46	1,46	1,8	1,8
Heating battery water content		litri	0,16	0,16	0,27	0,27	0,38	0,38	0,49	0,49	0,6	0,6
Maximum operating pressure		bar	10	10	10	10	10	10	10	10	10	10
Hydraulic connections		pollici	eurokonus 3/4									
AERAULIC DATA												
Maximum airflow	d	m3/h	147	147	289	289	411	411	529	529	602	602
Airflow at medium speed (AUTO mode)		m3/h	101	101	230	230	323	323	408	408	462	462
Airflow at minimum ventilation speed		m3/h	51	51	138	138	215	215	336	336	404	404
Maximum static pressure available		Pa	8	10	8	10	11	13	11	13	11	13
ELECTRICAL DATA												
Power supply voltage		V/ph/Hz	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50
Maximum power consumption		W	11,9	11,9	17,6	17,6	19,8	19,8	26,5	26,5	29,7	29,7
Maximum current consumption		A	0,11	0,11	0,16	0,16	0,18	0,18	0,26	0,26	0,28	0,28
Power consumption at minimum speed		W	6	6	12	12	14	14	18	18	19	19
SOUND LEVEL												
Sound pressure at maximum airflow	g	dB(A)	39,2	39,2	39,8	39,8	41,8	41,8	42,2	42,2	43,6	43,6
Sound pressure at medium airflow	g	dB(A)	33,1	33,1	33,9	33,9	34,2	34,2	34,8	34,8	37,2	37,2
Sound pressure at minimum airflow	g	dB(A)	24,2	24,2	25,1	25,1	25,4	25,4	26,1	26,1	27,4	27,4
Sound pressure at temperature set point	g	dB(A)	18,8	18,8	19,6	19,6	22,3	22,3	22,7	22,7	23,8	23,8
DIMENSIONS AND WEIGHT												
Total length		mm	735	479	935	679	1135	879	1335	1079	1535	1279
Total height (without support feet)		mm	639	650	639	650	639	650	639	650	639	650
Total depth		mm	129	126	129	126	129	126	129	126	129	126
Net weight		Kg	18	10	21	13	25	17	28	20	32	24

Water temperature at battery inlet 7°C, water temperature at battery outlet 12°C, ambient air temperature 27°C dry bulb (a)

Note: the complete performance data in the 2 pipe and 4 pipe versions are available in the SELECTION PROGRAM on our website www.innovaenergie.com

and 19°C wet bulb (UNI EN 1397)
Water temperature at battery inlet 50°C, water flow rate as in cooling mode, ambient air temperature 20°C (UNI EN 1397 (b)

standard)
Water temperature at battery inlet 70°C, water temperature at battery outlet 60°C, ambient air temperature 20° (c)

<sup>(</sup>g) (\*) Sound pressure measured in semianechoic chamber in compliance with ISO 7779
Cooling capacity. There is a greater heating capacity at all speeds, with a 20 m3/h increase for the 200 model and a 40 m3/h increase for all other models.

# **OPERATING LIMITS**

		Air ambient	temperature	Inlet water temperature		
OPERATING MODES		MIN	MAX	MIN	MAX	
Cooling / Heating	°C	5	32	4	80	

Maximum pressure - water side: 1000 kPa

▲ To be used correctly, the fan coil must only operate within the temperature range indicated in the table. If the unit is operated outside the limits indicated above, this may lead to malfunctions or water leaks.

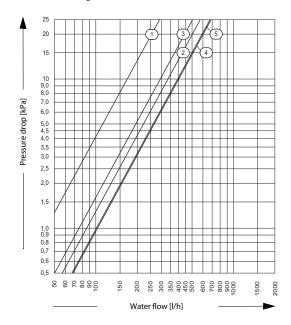
#### 8 FLOW RATE - PRESSURE DROP CHARTS

#### Key

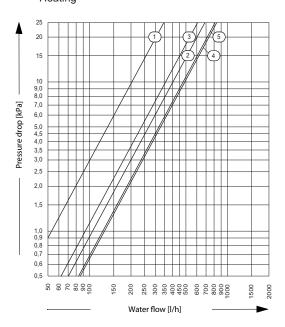
- 200 model 400 model 600 model
- 2 3 4 5
- 800 model 1000 model

# SL - SLI - RS - RSI

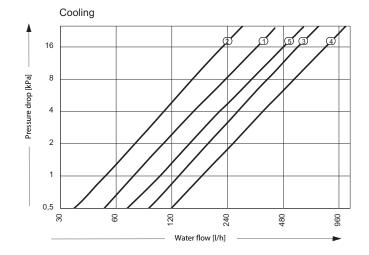


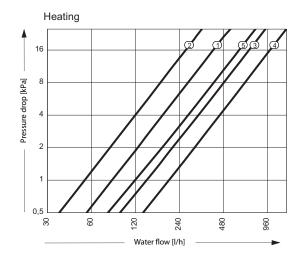


# Heating

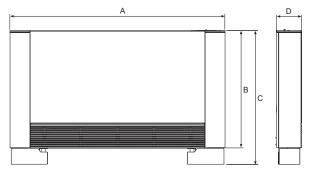


# SLS

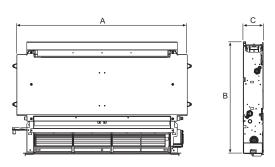




# VERSIONS: SL - RS 2 PIPES - SL 4 PIPES - SLS 2 PIPES



# SLI 2-PIPE - SLI 4-PIPE - RSI BUILT-IN VERSIONS



#### **VERSIONS: SL - RS 2 PIPES**

		sl - rs 200	sl - rs 400	sl - rs 600	sl - rs 800	sl - rs 1000
DIMENSIONS						
A	mm	735	935	1135	1335	1535
В	mm	579	579	579	579	579
С	mm	659	659	659	659	659
D	mm	129	129	129	129	129
WEIGHT						
Net weight	Kg	17	20	23	26	29

# **VERSIONS: SL 4 PIPES**

		sl 200	sl 400	sl 600	sl 800	sl 1000
DIMENSIONS						
A	mm	735	935	1135	1335	1535
В	mm	639	639	639	639	639
С	mm	719	719	719	719	719
D	mm	129	129	129	129	129
WEIGHT						
Net weight	Ka	18	21	25	28	32

# **SLI - RSI 2-PIPES BUILT-IN VERSIONS**

		sli 200	sli 400	sli 600	sli 800	sli 1000
DIMENSIONS						
A	mm	525	725	925	1125	1325
В	mm	590	590	590	590	590
С	mm	126	126	126	126	126
WEIGHT						
Not weight	Va	0	10	15	10	21

# **SLI 4-PIPE BUILT-IN VERSIONS**

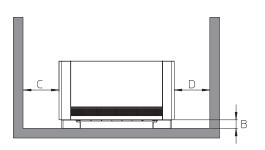
		sli 200	sli 400	sli 600	sli 800	sli 1000
DIMENSIONS						
A	mm	525	725	925	1125	1325
В	mm	650	650	650	650	650
С	mm	126	126	126	126	126
WEIGHT						
Not weight	Kn	10	13	17	20	2/

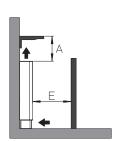
# **VERSIONS: SLS 2 PIPES**

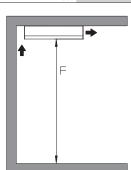
		sl - rs 200	sl - rs 400	sl - rs 600	sl - rs 800	sl - rs 1000
DIMENSIONS						
A	mm	735	935	1135	1135	1535
В	mm	659	659	659	659	659
С	mm	579	579	579	579	579
D	mm	129	129	129	129	129
WEIGHT						
Net weight	Kg	12	14	16	19	23

# 11 POSITIONING

	200	400	600	800	1000
DISTANCES					
A mm	140	140	140	140	140
B mm	80	80	80	80	80
C mm	20	20	20	20	20
D mm	20	20	20	20	20
E mm	400	400	400	400	400
F mm	2500	2500	2500	2500	2500



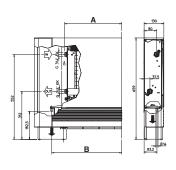


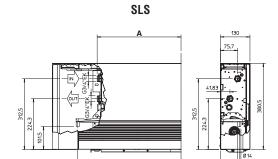


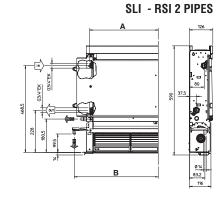
# 12 HYDRAULIC CONNECTIONS

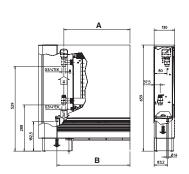
		200	400	600	800	1000				
SL - SLI without valves										
A	mm	170,5	270,5	370,5	470,5	570,5				
В	mm	254	354	454	554	654				
SL - SLI with two-way valve										
A	mm	210	310	410	510	610				
В	mm	254	354	454	554	654				
SL - SLI with three-way valve	SL - SLI with three-way valve									
A	mm	282	382	482	582	682				
В	mm	254	354	454	554	654				

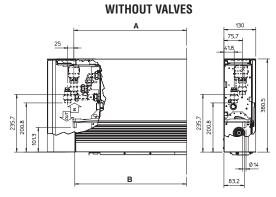


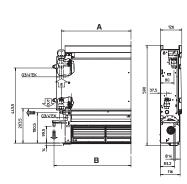


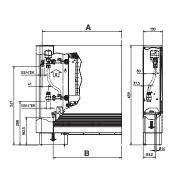


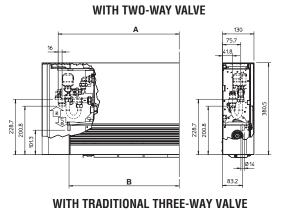


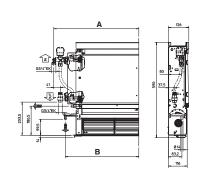


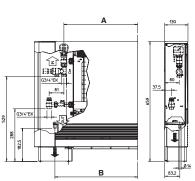


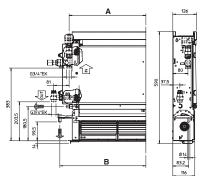












# WITH BALANCING THREE-WAY VALVES

# **5** POSITION OF CONNECTIONS AND POSSIBLE INVERSION

The standard configuration of the machines has the hydraulic connections on the left and the control panels on the right.

If the positions must be inverted, the operation can be performed directly at the factory on demand.

# 13 CONNECTING PIPING

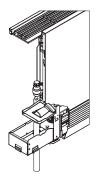
The position of the hydraulic connections can be inverted from left to right during installation.

The choice and the dimension of the hydraulic lines are the responsibility of the designer, who must operate in accordance with good practice regulations and laws in force.

		200	400	600	800	1000
DISTANCES						
Water flow rate	I/h	215	390	525	700	890
Ø Steel	u	1/2	1/2	1/2	3/4	3/4
Ø Copper	mm	14	16	18	18	22
Ø Multilayer	mm	16	18	20	20	26

# 14 CONDENSATION DRAIN

The condensation drainage system must be adequately sized (minimum internal diameter of the pipe 16 mm) and the piping positioned so that along the route it always maintains a specific gradient, which must the never lower than 1%. In vertical installations the drainage pipe is connected directly to the drainage tray, positioned below on the side shoulder, under the hydraulic connections. In horizontal installations the drainage pipe is connected to the drainage pipe already fitted on the machine.





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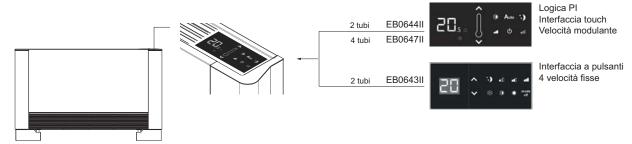
# 16 CONTROLS

The Company has developed an extensive range of electronic controls for its terminals. Their features have been designed to perfectly adapt to the performance levels of the appliances.

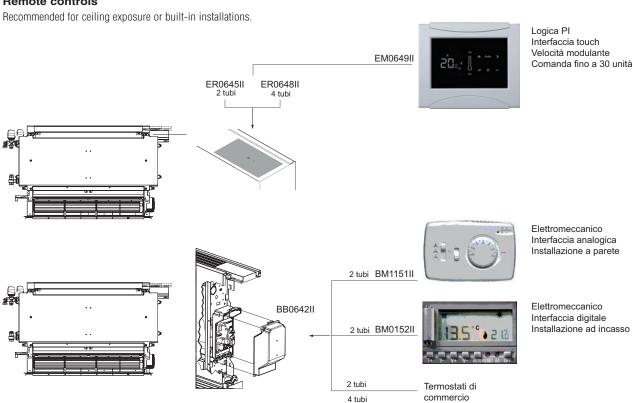
The controls are divided into: the PID modulating models and the more traditional type, with three or four ventilation speeds.

#### Controls on board machine

Recommended for vertical exposure installations.

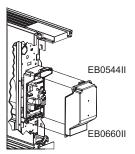


#### Remote controls



#### **Network controls**

Recommended for control by supervisors and domotica



Scheda elettronica per il controllo di rete dei ventilconvettori Web server ethernet Abbinabile a comandi con logica PI

Bridge modbus ASCII/RTU abbinabile ai soli EB0644II e EB0647II

#### **DESCRIPTION OF CONTROLS**

#### Electronic controls with PID adjustment

- EB0644
- ER0645
- FB0647
- ER0648
- EM0649

The control panels with PID logic are an advanced electronic system to manage the functions of a modern terminal for heating and climate control. By means of a series of specially developed functional algorithms, the operation of the machine is adapted according to your needs, ensuring maximum comfort. The serial port allows the integration with innovative control systems, meeting the needs of the most demanding users or users with special professional needs

Controls that involve the installation of the wall-mounted remote control are fitted with a RS485 serial port which manages the broadcast communication between the wall-mounted remote control and the electronic controls for remotisation.

The serial communication protocol is "Modicon Modbus" in ASCII mode.

The ventilation speed adjustment is a modulating type based on PID logic (algorithms based on the proportional mathematic functions, derived and integrated by temperature trends) and not with fixed levels like with most of traditional fan coils. This advanced temperature control criterion allows for greater precision and stability in maintaining the temperature. By means of a serial interface to be connected to a PC or via programming keys it is possible to set or modify many operating parameters to perfectly adapt the control to the type of system.

MV1  $\,$  motor fan - communication hysteresis EV1/EV2 in cool.=+0.5°K

EV1 hot water electrovalve (±0.5)

EV2 cold water electrovalve

RCH Chiller control

BP1 heating proportional band

BP2 cooling proportional band

SP setpoint BN Neutral Band

BC Conventional Band

ta ambient temperature

Switching hysteresis EV1/EV2 in cooling=+0.5 $^{\circ}$ K

Hysteresis EV1 in heating=1°K(±0.5)

#### In addition, all these controls have:

- Modulating motor speed adjustment with feedback by means of a Hall cell for automatic adjustment and accurate maintenance of the programmed ventilation speed ranges.
- Water temperature probe system for ventilation exclusion in case the water temperature is too low for heating or too high for cooling.
- Outlets to control the valves both in the 2 and 4-pipe versions. The 2-pipe versions have a 230V outlet to control the summer and winter electrovalve and any outlet for the servomotors of the mobile intake panel of the full-flat versions, while the 4-pipe versions have two independent 230V outlets to control a summer and a winter electrovalve.

LAN network.

The main functions carried out by this special control are:

Local or remote network supervision and control

Through this serial port it is possible to create a network with max 31 peripheral

To meet the building automatic needs a board has been designed, supplied as an

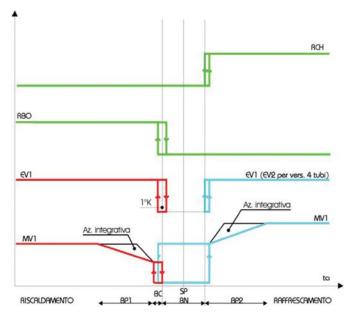
accessory, that allows to connect the terminal to a normal cabled or wireless

devices adequately programmed, fitted with the RS485 option and connected

- Weekly, summer and winter programming with three temperature intervals
- The programming based on intervals allows to leave a margin for correction without the need to turn on the PC
- Manual operation that allows freely use the device

to just one master device.

- It is possible to completely block the control on board the machine to prevent it from being used incorrectly in areas accessible to the public
- Does not use proprietary Bus systems, but a network interface like that of PCs



# Independent dry contacts to control a chiller and a boiler according to needs of the room

- Programmable input for stand-by switch-off (for instance, window contact or hotel room card) or for the "energy saving" function with the variation of the set temperature if there is no-one in the room.
- Serial connection to modify operation parameters both through PC and a programming key.

# The main functions that can be selected by the user

- · Setting of desired temperature
- AUTO function that determines the automatic adjustment of the ventilation speed according to the difference between the ambient temperature and the set temperature.
- SILENT function that carries out a program similar to the one indicated above but with a maximum speed reduction to make the machine extremely quiet.
- NIGHT function that carries out a program similar to the silent function by
- further reducing the noise and modifying the set temperature to better adapt to night-time.
- MAX function that allows to rapidly attain the desired temperature conditions for very cold rooms in winter or very hot rooms in summer



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#### Electronic controls with fixed speed adjustment EB0643

Control on board machine with speed adjustment, ON/OFF, summer/ winter selector and room thermostat adjustable from 5 to 40°C with buttons, and minimum winter temperature function. The control is suited for installation on board all versions of the machine, except for built-in versions. It has a 230V outlet to control an electrovalve.

After 20 seconds from the last action, the panel brightness is purposely dimmed for greater comfort during night time, and the room temperature is shown on the display.

Maximum brightness is restored when pressing any key.

Holding the 2 temperature increase and decrease keys (> 5 sec) blocks the keyboard. The letters bL appear on the display when any key is pressed.

#### Fan management

The four rotation speeds (450 (cooling only), 680, 1100, 1400 rpm) are adjusted through the sensor feedback in the motor winding.

Speed is selected by pressing the specific button which is also for switching the unit on-off. It is displayed when one of the four LEDs switches on unambiguously (from left to right: supersilent, minimum, medium and maximum).

The supersilent function guarantees summer dehumidifying only with the fan at low speed and winter radiant heating only with the fan off.

If the machine works with the water temperature probe and the temperature is not suitable for the current mode (max 20°C cooling and min 30°C for heating with 1°C hysteresis) the fan stops and the fault is indicated by the corresponding LED of the selected function flashing (blue cooling or red heating).

When the set point temperature is reached, both in heating and cooling, the fan LED switches off, the minimum speed holding function even below the cooling set point is not indicated by any LED.

While the LEDs are, it is still possible to view and change ventilation speed of the next active phase by pressing the key.

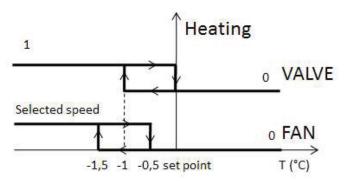
#### Plant water shut-off valve output

The features of the EV1 output controlling the valve are 240 V AC with a capacity of 1A. The control is not modulating but the on/off type.

# **Heating program**

By holding the summer/winter key (> 2 seconds) you access the heating algorithm (indicated by the red LED on). If the air temperature is below the set point and the water temperature is suitable for the operating mode, the motor starts at the selected speed (except for the supersilent function where the fan is always off) and the EV1 output is activated regardless of the water temperature. In heating mode, the valve and fan have different hysteresis cycles:

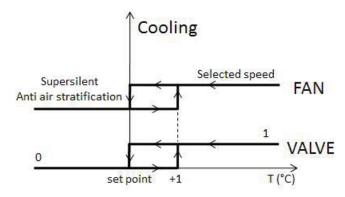
The valve closes at the set point temperature and opens with a 1°C hysteresis. The fan switches off 0.5°C before the set point temperature and has a 1°C hysteresis.



#### Cooling program

By holding the summer/winter key (> 2 seconds) you access the cooling algorithm (indicated by the blue LED on). For temperature values above the set point, the shut-off valve and fan are active (if the water temperature is suitable for the working mode). When the temperature set point is reached, the EV1 valve de-energizes and the fan is switched to supersilent speed (therefore in cooling mode the fan must never be stopped).

The valve restart hysteresis and return to the selected fan speed will be 1°C. While operating above the set point, three fan speeds can be chosen at will.



#### Water probe management

The board has a quick connector to connect the NTC 2 KΩ probe at 25°C, present on the appliance positioned in the specific coil sump. It stops the fan when water is not suitable (with only the selected speed LED flashing).

The board algorithm also includes operation without the probe: if the board detects the probe, start-up is performed in normal conditions, but if it does not detect the probe, its absence is signalled by simultaneous flashing of the red and blue LEDs and operation is blocked. To confirm operation without probe, the summer/winter button must be held for 5 seconds. This condition is stored by the board for all subsequent start-ups.

In any case, when the probe is connected, normal operation is resumed with temperature thresholds

In case of breakage, disconnection or detection of faulty values, the machine blocks and this is signalled.

In this case as well fan operation can be restored by bypassing the control by pressing the summer/winter button for 5 seconds.

#### **Electromechanical controls**

#### • BM1151

The wall-mounted control BM1151II is an electronic thermostat with ON/OFF switch, a three-speed switch and a summer/winter switch. The control must be combined with the remote adjustment control BB0642. It is equipped with a live output for powering an electrovalve and a presence sensor input (if closed, the fan coil goes into standby).

L-N 230V-50Hz electric power supply

CP Presence sensor input (if closed, the fan coil goes into standby.)

COM Common neutral for the inputs

EV Consent input

V1 Maximum fan speed (1400rpm)

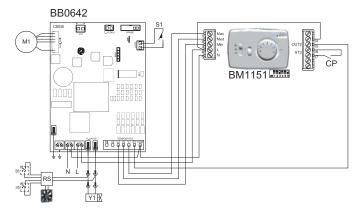
V2 Medium fan speed (1100rpm) V3 Minimum fan speed (680rpm)

V4 Supersilent speed (450rpm)

Y1 Water electrovalves (output with voltage at 230V/50Hz 1A)

RS RS version wiring M1 Inverter DC fan motor

S1 Grid safety microswitch



#### • BM0152

The BM0152 built-in control kit allows you to adjust all the functions of the fan coil. It is equipped with a live output for powering an electrovalve. Via the incorporated probe, it adjusts the room temperature by acting on the three speeds of the fan coil. If it is connected to the water probe located in the device coil sump, it controls the minimum functions during the heating mode (42°C) and maximum functions during the cooling mode (17°C). It must be fitted in combination with the remote adjustment control BB0642.

L-N 230V-50Hz electric power supply

COM Common neutral for the inputs

EV Consent input

V1 Maximum fan speed (1400rpm)

V2 Medium fan speed (1100rpm)

V3 Minimum fan speed (680rpm)

V4 Supersilent speed (450rpm)

Y1 Water electrovalve (output with voltage at 230V/50Hz 1A)

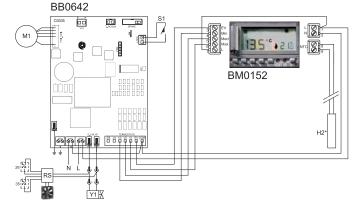
RS RS version wiring

M1 Inverter DC fan motor

S1 Grid safety microswitch

H2\* Water temperature probe (2kohm)

\* Positioned in the machine's coil.



#### · BB0642 with 3-speed thermostats

The BB0642 driver board, fitted on the machine, allows you to manage the motor with fixed speeds; it can be combined to the wall controls with the electromechanical thermostats of the manufacturer and to all 3-speed controls sold on the market.

The board is also suitable for combination with fan coil modules in the domotica management sector.

It has a 230V output to pilot the summer and winter electrovalve.

I -N 230V-50Hz electric power supply

COM Common neutral for the inputs

ΕV Electrovalve consent input

V1

Maximum fan speed

V2 Medium fan speed

٧3 Minimum fan speed V/4 Supersilent speed

Heating, cooling selection input. See Water probe management paragraph E/I

Y1 Hot water electrovalves (output with voltage at 230V/50Hz 1A)

RS RS version wiring

M1 Inverter DC fan motor

S1 Grid safety microswitch

CV Thermostat electrovalves output

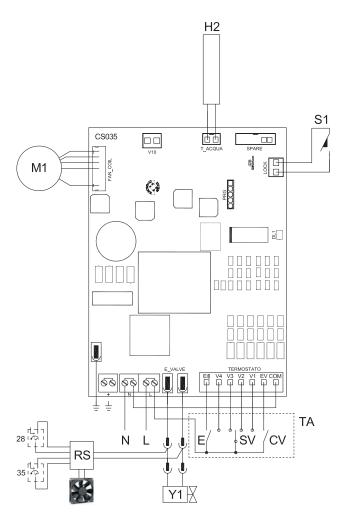
Thermostat speed switch SV

H2\* Water temperature probe (2kΩ)

TΑ 3-speed room thermostat (to be purchased, installed and connected by

Ε Possible thermostat heating/cooling selection. See the Water probe management paragraph.

Position in the machine's coil. See the Water probe management paragraph



# • BB0642 with 0÷10V thermostats

The BB0642 driver board, fitted on the machine, allows you to manage the motor with modulating speed by means of the 0-10V analogue input.

It has a 230V output to pilot the summer and winter electrovalve.

L-N 230V-50Hz electrical supply

10V 0÷10VDC input driving signal

Hot water electrovalves (output with voltage at 230V/50Hz 1A) Y1

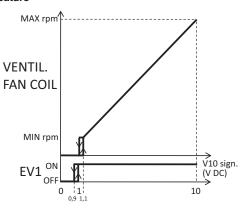
RS RS version's connection

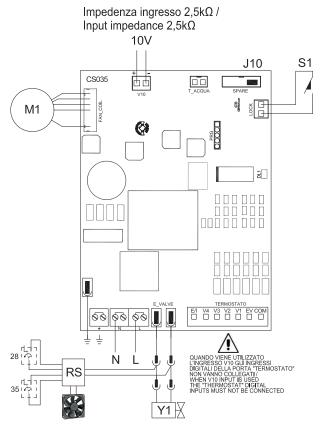
M1 Inverter DC fan motor

Grid safety microswitch S1

J10 0÷10VDC enable input

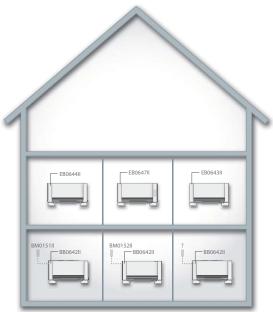
# **Output feature**





# **EXAMPLES OF CONTROL APPLICATIONS**

# Stand alone configurations on board machine



#### Controlls

EB0644II PID electronic control panel with controls fitted on the machine (for versions with 2 pipes)
EB0647II PID electronic control panel with controls fitted on the machine (for versions with 4 pipes)
EB0643II Electronic control with 4 speeds and controls on board the machine
Autotransformer with 6 speeds to connect to traditional thermostate

BB0642II Autotransformer with 6 speeds to connect to traditional thermostats
BM0151II Wall control with thermostat, summer/winter selector and speed selector
BM0152II Built-in control with thermostat, summer/winter selector and speed selector

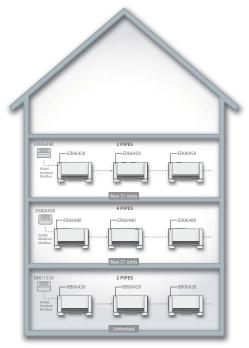
? Traditional control by the installer

#### **ACCESSORY**

BB0646II Motor connection cable for units with hydraulic connections on the right

In the event one needs to invert the position of the hydraulic coil connections from the left side to the right side of the device, the electric connections box is also inverted, but since the fan motor and the grid safety microswitch are constrained in the original position, one must use the special kit BB0646, available as an accessory.

# Configurations of machines in parallel with remote controls

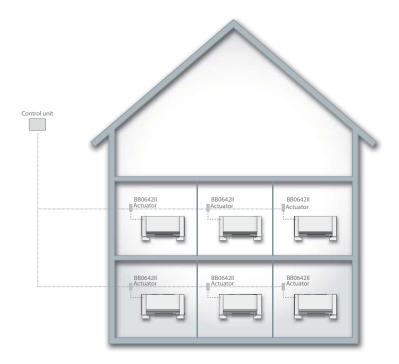


# Controlls

EM0649II Electronic TOUCH LCD wall-mounted control panel with ambient probe PID electronic control for connection to wall control (for 2-pipe versions) PID electronic control for connection to wall control (for 4-pipe versions)

Controllers are available on the market for domotica management which can easily be interfaced to the BB0642II driver board

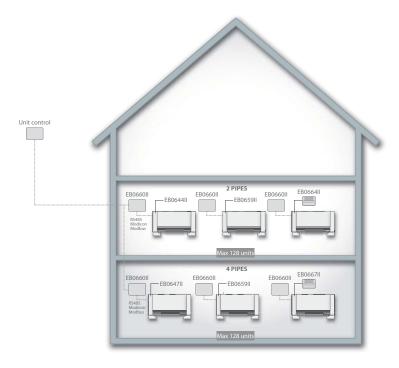
# **Domotica consumer**



# Controlls

BB0642II Driver for Inverter DC motors for connection to standard 3-speed thermostats or with 0-10V analogue connection

#### **Domotica Professional**



# Controlls

EM0649II	Electronic TOUCH LCD wall-mounted control panel with ambient probe
EB0644II	PID electronic control panel with controls fitted on the machine (for versions with 2 pipes)
EB0647II	PID electronic control panel with controls fitted on the machine (for versions with 4 pipes)
EB0660II	Bridge Modbus ASCII/RTU
EB0659II	PID electronic control panel without control
EB0664II	PID electronic control panel with controls mounted on the wall (for 2-pipe versions)
EB0667II	PID electronic control panel with controls mounted on the wall (for 4-pipe versions)

\* WI-FI transmission module not supplied

The ASCII/RTU modbus bridge allows you to interface controls on the machine in the RS485 serial network with PID logic EB0644II and EB0647II with a supervisor. In this configuration, the EB0644II and EB0647II controls can also be installed on built-in versions.

#### **WEB SERVER**

# Web server board for network control for controls with PID logic

#### • EB0544II

The Web server board allows to connect terminals fitted with electronic controls with PID logic to a normal cabled or wireless LAN network (with the special optional accessory).

#### **Main functions**

- · Local or remote network supervision and control
- Weekly, summer and winter programming with three temperature intervals
- The programming based on intervals allows to leave a margin for correction without the need to turn on the PC
- Manual operation that allows to freely use the terminal
- It is possible to completely block the control on board the machine to prevent incorrect use in areas accessible to the public
- Does not use proprietary Bus systems, but a network interface like that of PCs

#### Control and supervision instruments

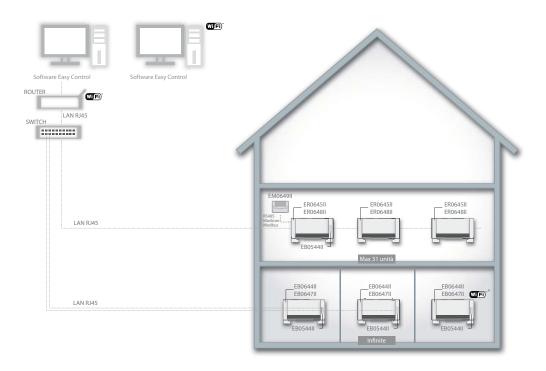
- Double web integrated interface for PC and optimisation for palmtop computers and Windows Mobile smartphones
- SOAP server to develop customised applications
- · EasyControl software

#### **Energy savings**

- By connecting the "Window open" digital input, the terminal turns off automatically when a window is opened to allow fresh air in the room or for cleaning purposes and turns on again when the window is closed.
- Moreover, for hotels and offices the "Presence" digital input connected to a universal switch for cards or keys allows to automatically switch off the terminal when guests are not in the room or employees are not in the office.

#### Consent transmission to the boiler or the chiller

- Via the contact, for maximum compatibility with third-party devices
- Via cabled or wireless ethernet networks to chillers with web servers



#### Controlls

EM0649II	Remote control panel for wall installation with ambient probe
ER0645II	PID electronic control for connection to wall control (for 2-pipe versions)
ER0648II	PID electronic control for connection to wall control (for 4-pipe versions)
EB0644II	PID electronic control panel with controls fitted on the machine (for versions with 2 pipes)
EB0647II	PID electronic control panel with controls fitted on the machine (for versions with 4 pipes)
EB0544II	Electronic board for remote network control (BMS) of the fan coils (WEB server)

WI-FI transmission module not supplied



### 17 HYDRAULIC ACCESSORIES AND FITTINGS

The range of valve units and fittings developed by the Company covers all the main applications. However, there is always the option of developing special combinations for our valve units and fittings for specific system requirements. The fan coil terminals and all the hydraulic accessories are fitted with 3/4" Eurokonus fittings and can guarantee the seal without having to add other elements (hemp, gaskets, Teflon, liquid sealants, etc.) thanks to an O-ring gasket inserted in the special cone-shaped seat.

These are very common in residential systems and there are fittings and adapter

for all the system components (manifolds, valves, copper and multilayer pipes). Our range of accessories comprises flat adapters that allow to turn the 3/4" Eurokonus male fitting in a very common M 3/4" GAS fitting if your have having difficulties finding Eurokonus terminal connections for the various types of pipes (copper, multilayer pipes, etc.)

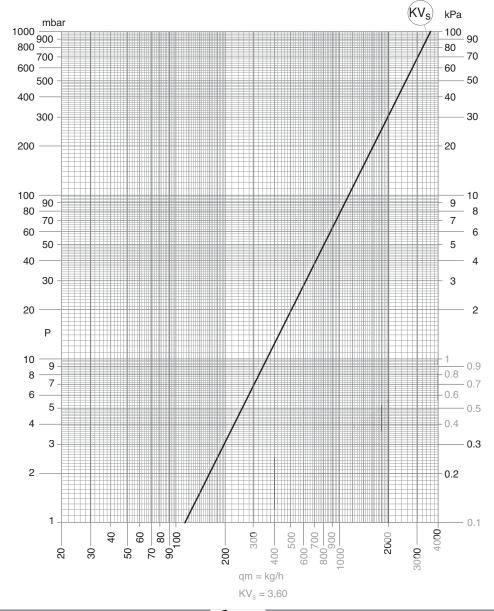
#### CIRCUIT VALVES

The Company's circuit valves are very reliable over time and this is guaranteed by the best materials and very low pressure drops. The KV value, 3.6, is very high for a valve dedicated to climate control terminals.

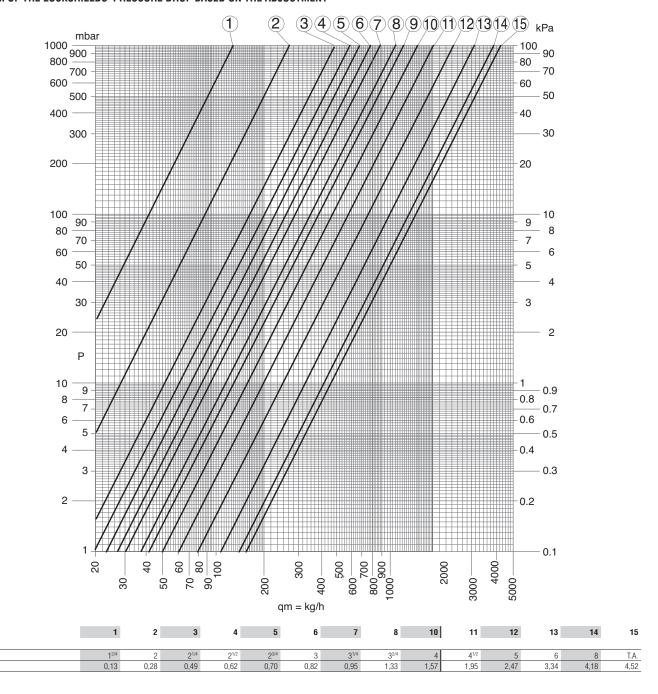
The considerable stroke of the closure mechanism guarantees effective flow rate adjustment even with modulating thermo-actuators. The lockshields supplied with the hydraulic kits are a dual micrometric adjustment with position memory in the event of temporary closure. This feature allows for an optimal balancing of the systems. The balancing valves

(fitted on some 3-way units) allow to accurately adjust the amount of water that flows in terms of supply and return when the ambient temperature conditions are met (terminal off). To favour the thermal insulation of the bodies of the valves, The Company has developed a series of insulating cupels that are very easy to apply and remove for easier maintenance.

# KV CHART OF THE SHUT-OFF VALVE WHEN FULLY OPENED (INCLUDED IN V20139II, V30140II, I20205II, V40219II KITS)

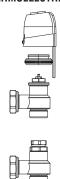


# DIAGRAM OF THE LOCKSHIELDS' PRESSURE DROP BASED ON THE ADJUSTMENT

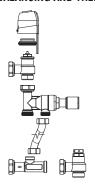


ADJ Kv

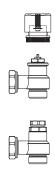
# 2-WAY VALVE UNIT WITH THERMOELECTRIC MOTOR



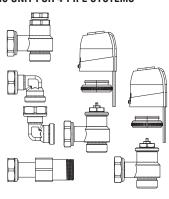
# 3-WAY VALVE UNIT WITH BALANCING AND THERMOELECTRIC MOTOR



#### **MANUAL 2-WAY VALVE UNIT**



# 2-WAY HYDRAULIC UNIT FOR 4-PIPE SYSTEMS





#### Description

2-way valve unit with electrothermal motor. The unit consists of the shut-off valve, the hydraulic lockshield and the electrothermal motor.

#### **Features**

This hydraulic accessory is suitable for applications where there is already a balancing of the system's flow rate based on the number of active terminals (by means of: self-regulating electronic pumps, general balancing valves for the system's branches, etc.). The kit also comes with the pre-moulded insulating cupels for the body of the valve and the lockshield.

#### Codes

V20139II 2-way valve unit with thermoelectric motor

AC configurable accessory: can be factory installed upon request

#### Description

Valve unit with third by-pass way with balancing regulator and electrothermal motor. The unit consists of: shut-off valve, adjustable by-pass valve, with outlet manifold lockshield and flexible by-pass pipe.

#### **Features**

This hydraulic accessory is suitable for systems without automatic balancing devices (self-regulating electronic pumps, branch balancing valves). For each individual device it is possible to adjust both the correct water flow rate circulating in the device and the water flow rate diverted in the by-pass. The kit also comes with the pre-moulded insulating cupels for the body of the shut-off valve, the lockshield and the by-pass valve.

#### Codes

V30140II 3-way valve unit with balancing and thermoelectric motor

AC configurable accessory: can be factory installed upon request

#### Description

2-way valve unit with manual closure: The unit consists of the shut-off valve, the hydraulic lockshield and plastic handwheel to close the valve itself.

#### Features

This hydraulic accessory is suitable for applications where there is already a balancing of the system's flow rate based on the number of active terminals (by means of: self-regulating electronic pumps, general balancing valves for the system's branches, etc.) and there is no need for the automatic control of the closure or opening of the terminal's hydraulic circuit.

# Codes

I20205II manual 2-way valve unit

AC configurable accessory: can be factory installed upon request

#### Description

2-way hydraulic unit for 4-pipe systems with double electrothermal motor: the unit consists of two shut-off valves, two lockshields and two electrothermal motors.

#### Features

It contains all the fittings for the connection to "4-pipe" double-battery terminals (cold – hot). The kit also comes with the pre-moulded insulating cupels for the bodies of the valves and the lockshields.

#### Codes

V40219II 2-way hydraulic unit for 4-pipe systems

AC configurable accessory: can be factory installed upon request

# 3-WAY HYDRAULIC UNIT FOR 4-PIPE SYSTEMS



#### Description

Unit with 3-way diverter valves with electrothermal motor. The unit consists of a 3-way valve with calibrated deviation by-pass, hydraulic lockshield, outlet fitting and flexible pipe to connect the by-pass.

#### **Features**

This accessory is recommended in all cases where the system does not require special branch balancing, but still needs an hydraulic by-pass for non active terminals. The kit also comes with the pre-moulded insulating cupels for the body of the valve and the lockshield

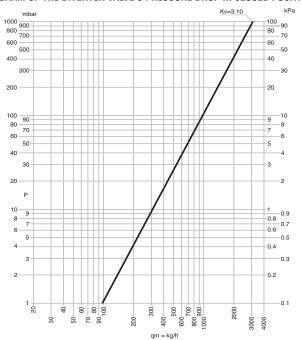
#### Codes

V30361II

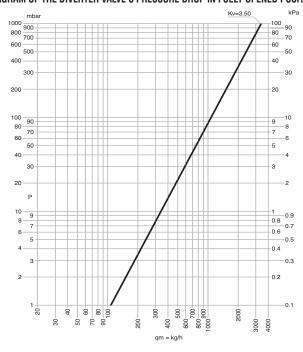
3-way hydraulic unit for 4-pipe systems

AC configurable accessory: can be factory installed upon request

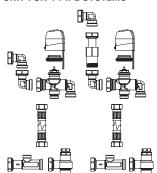
#### DIAGRAM OF THE DIVERTER VALVE'S PRESSURE DROP IN CLOSED POSITION



#### DIAGRAM OF THE DIVERTER VALVE'S PRESSURE DROP IN FULLY OPENED POSITION



#### 3-WAY HYDRAULIC UNIT FOR 4-PIPE SYSTEMS



#### Description

3-way hydraulic unit for 4-pipe systems with double electrothermal motor. The unit consists of two diverter valves, two lockshields, two electrothermal motors, two flexible pipes to connect the by-passes and various connection fittings inside the terminal. The kit also comes with the pre-moulded insulating cupels for the bodies of the valves and the lockshields.

# Codes

V60221II 3-way hydraulic unit for 4-pipe systems

AC configurable accessory: can be factory installed upon request

# 2-WAY HYDRAULIC UNIT FOR SLS



#### Description

2-way valve unit with electrothermal motor for SLS: The unit consists of: shut-off valve, hydraulic lockshield, electrothermal motor and two  $90^\circ$  fittings

#### Features

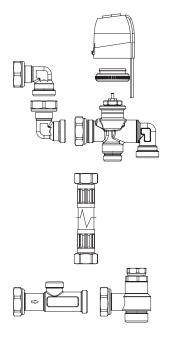
This hydraulic accessory is suitable for applications where there is already a balancing of the system's flow rate based on the number of active terminals (by means of: self-regulating electronic pumps, general balancing valves for the system's branches, etc.) and there is no need for the automatic control of the closure or opening of the terminal's hydraulic circuit.

# Codes

V20661II 2-way valve unit with electrothermal motor for SLS

AC configurable accessory: can be factory installed upon request

# 3-WAY HYDRAULIC UNIT FOR SLS



#### Description

3-way diverter valve unit with electrothermal motor for SLS. The unit consists of a 3-way valve with calibrated diverter bypass, hydraulic lockshield, outlet fitting and a flexible hose for bypass connection and two 90° fittings.

This hydraulic accessory is suitable for systems without automatic balancing devices (self-regulating electronic pumps, branch balancing valves). For each individual device it is possible to adjust both the correct water flow rate circulating in the device and the water flow rate diverted in the by-pass. The kit also comes with the pre-moulded insulating cupels for the body of the shut-off valve, the lockshield and the by-pass valve.

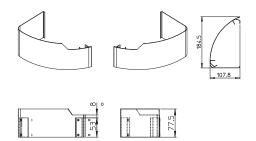
#### Codes

V30662II 3-way valve unit with electrothermal motor for SLS

AC configurable accessory: can be factory installed upon request

# **INSTALLATION ACCESSORIES**

#### **FEET**



#### Description

These accessories allow to cover the connecting hydraulic pipework coming from the floor. They must be mounted on devices

with a wall-anchoring system at the back. Although they have a sophisticated design, they are very easy to remove for maintenance or cleaning purposes.

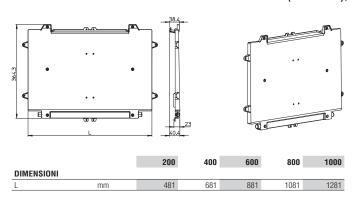
# **Features**

These feet must not be used to anchor terminals (on the floor) for which the LA0604II and LB0605II floor-anchoring feet have been designed. These are illustrated below.

### Codici

LB0157II LA0158II white RAL9010 metallic grev

# CONDENSATION DRIP TRAY FOR SL TERMINAL HORIZONTAL (WITH UNIT), HORIZONTAL CEILING INSTALLATION



# Description

The accessory consists of an ABS tray that can be easily mounted on the front of the

terminal, under the outer casing. The tray also comes with thermal insulation and special fittings to make it easier to position the condensation drain.

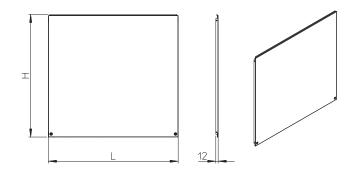
The accessory allows for the horizontal installation of the SL models and collects the condensation produced during operation in cooling mode.

#### Codes

GB0520II for "200" SL terminal for "400" SL terminal for "600" SL terminal for "800" SL terminal GB0521II GB0522II GB0523II GB0524II for "1000" SL terminal

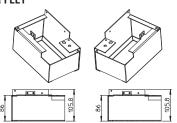
AC configurable accessory: can be factory installed upon request

#### **BACK PANEL**

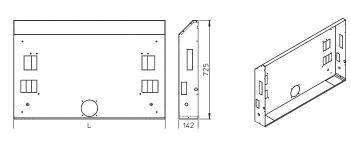


		200	400	600	800	1000
DIMENSIONS						
Н	mm	573	573	573	573	573
L	mm	670	870	1070	1270	1470

# **GROUND ANCHOR FEET**

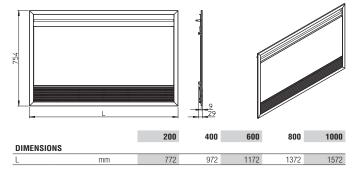


# **CASING FOR BUILT-IN INSTALLATION**



		200	400	600	800	1000
DIMENSIONS						
L	mm	715	915	1115	1315	1515

#### **CASING COVER PANEL**



#### Description

Back panel for applications with the rear surface of the device exposed. Made with zinccoated sheet metal of the same colour of the terminals painted with epoxy powders. Each back panel is packed individually.

The accessory has a decorative function in installations where the rear of the device is exposed, as for instance when it is placed behind a cabinet or when there is some space between the wall and the device.

#### Codes

LB0171II	for "200" terminal, white RAL 9010
LB0173II	for "400" terminal, white RAL 9010
LB0175II	for "600" terminal, white RAL 9010
LB0177II	for "800" terminal, white RAL 9010
LB0179II	for "1000" terminal, white RAL 9010
LA0172II	for "200" terminal, metallic grey
LA0174II	for "400" terminal, metallic grey
LA0176II	for "600" terminal, metallic grey
LA0178II	for "800" terminal, metallic grey
LA0180II	for "1000" terminal, metallic grey
LB0181II	for "200" terminal (4-pipe version)
LB0183II	for "400" terminal (4-pipe version)
LB0185II	for "600" terminal (4-pipe version)
LB0187II	for "800" terminal (4-pipe version)
LB0189II	for "1000" terminal (4-pipe version)
LA0182II	for "200" terminal (4-pipe version)
LA0184II	for "400" terminal (4-pipe version)
LA0186II	for "600" terminal (4-pipe version)
LA0188II	for "800" terminal (4-pipe version)
LA0190II	for "1000" terminal (4-pipe version)
LB0665II	for "200" model terminal (SLS version) white RAL 9010
LB0666II	for "400" model terminal (SLS version) white RAL 9010
LB0667II	for "600" model terminal (SLS version) white RAL 9010
LB0668II	for "800" model terminal (SLS version) white RAL 9010
LB0669II	for "1000" model terminal (SLS version) white RAL 9010

#### Description

This is a pair of feet to anchor the terminal to the floor in cases where its rear surface cannot be anchored.

They allow to pass the hydraulic pipework coming from the floor. They are made with zinc-coated sheet metal and painted with epoxy powders.

#### Codes

LA0604II LB0605II metallic grey White RAL 9010

#### Description

This accessory consists of a zinc-coated sheet metal casing designed to be inserted in walls or false ceilings and contains the terminal. This device has the pre-shearings required to pass the hydraulic pipework and electric cables. The frame is coupled with the built-in cover panel described below.

# **Features**

This accessory makes concealed applications of our terminals easy and very accurate in terms of installation. Their extremely reduced depth (obviously thanks to the extraordinary compact design of our terminals) allows to position them both on walls and on very

# Codes

L00568II	for "200" terminal
L00569II	for "400" terminal
L00570II	for "600" terminal
L00571II	for "800" terminal
L00572II	for "1000" terminal

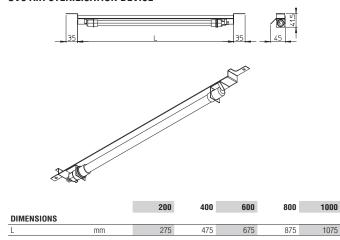
# Description

The panel is designed to be perfectly coupled with the recessed outer casing of the same size. It consists of: an external frame, a front panel, a removable grid to clean the air filters and an adjustable deflector to divert the room's airflow. The central part of the panel can be easily removed, allowing for a fast and complete maintenance of the devices. They have sophisticated finishes so that they can be perfectly integrated in the rooms. The standard colour is white RAL 9010, but other colours are available upon request.

#### Codes

VERTICAL (wall-mounted)
LB0578II recessed for "200" unit
LB0579II recessed for "400" unit
LB0580II recessed for "600" unit
LB0581II recessed for "800" unit LB0582II recessed for "1000" unit HORIZON<sup>-</sup> AL (ceiling-mounted) recessed for "200" unit recessed for "400" unit recessed for "600" unit recessed for "600" unit recessed for "800" unit recessed for "1000" unit LB0618II LB0619II I B0620II LB0621II LB0622II

#### **UVC AIR STERILISATION DEVICE**



### Description

The device consists of: a professional UV lamp and related power supply device, a frame to mount it inside the machine and connection cabling. As it is widely known, UVC rays have a very effective anti-bacterial and anti-virologic action when they are used in the correct emission spectrum, which is guaranteed only by professional lamps such as the one fitted inside our terminals. The unique favourable position of the UVC emitter inside our machine allows the lamp to act on high volumes of air that re-circulate in the room and this sterilises the air itself. The duration of the UVC effect of an excellent lamp is approximately 12,000 hours, after this period (about two-three years of operation), we recommend replacing it

### Codes

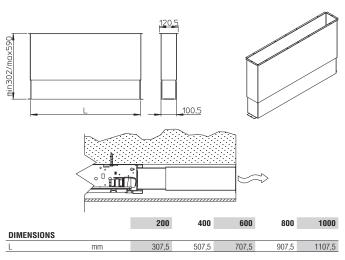
GB0545II	for "200" terminal
GB0546II	for "400" terminal
GB0547II	for "600" terminal
GB0548II	for "800" terminal
GB0549II	for "1000" terminal
GB0555II	Spare UVC lamp for "20

GB0555II Spare UVC lamp for "200" terminal GB0556II Spare UVC lamp for "400" terminal GB0557II Spare UVC lamp for "600" terminal

GB0558II Spare UVC lamp for "800" and "1000" terminals

AC configurable accessory: can be factory installed upon request

### AIR SUPPLY TELESCOPIC CHANNEL FOR BUILT-IN INSTALLATION ON FALSE CEILINGS



#### Description

This accessory makes it easier to install our SLI built-in terminals inside false ceilings. Indeed, there are many situations in which the terminal itself cannot be connected directly to the air outlet (for instance in traditional installations in hotel rooms).

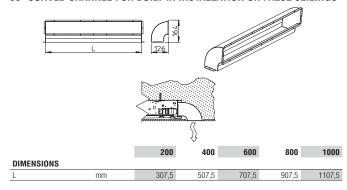
#### Features

The length of the telescopic channel can be adjusted to better adapt to installation requirements. It is made with zinc-coated sheet metal, inside coated with insulation material to prevent the formation of dew.

#### Codes

DB0160II	to be combined with the SLI 200 terminal
DB0161II	to be combined with the SLI 400 terminal
DB0162II	to be combined with the SLI 600 terminal
DB0163II	to be combined with the SLI 800 terminal
DB0164II	to be combined with the SLI 1000 terminal

### 90° CURVED CHANNEL FOR BUILT-IN INSTALLATION ON FALSE CEILINGS



# Description

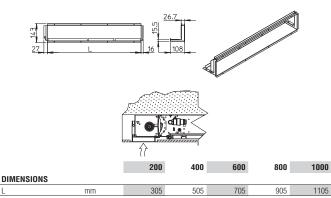
 $90^{\circ}$  curved channel made with zinc-coated sheet metal, inside coated with insulation material.

This accessory allows to convey the airflow coming from the SLI built-in terminal into an inlet placed at 90° with respect to the air outlet. A common application is the one related to terminals installed horizontally inside false ceilings with the relative inlet exposed on the lower surface of the false ceiling itself.

# Codes

DB0165II	to be	combined	with	the	SLI	200 terminal
DB0166II	to be	combined	with	the	SLI	400 terminal
DB0167II	to be	combined	with	the	SLI	600 terminal
DB0168II	to be	combined	with	the	SLI	800 terminal
DB0169II	to be	combined	with	the	SLI	1000 termina

# AIR INTAKE FITTING FOR BUILT-IN INSTALLATION



# Description

Air intake fitting made with zinc-coated sheet metal and designed to allow full accessibility to the air filters.

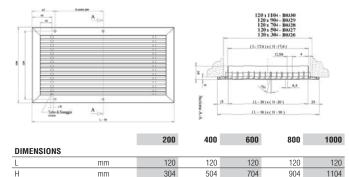
# **Features**

This fitting allows to convey the room's air from an inlet grid placed on the false ceiling or on the wall into the terminal installed in a vertical position in the false ceiling itself or installed vertically inside a wall.

### Codes

DB0194II	to be combined with the SLI 200 terminal
DB0195II	to be combined with the SLI 400 terminal
DB0196II	to be combined with the SLI 600 terminal
DB0197II	to be combined with the SLI 800 terminal
DB0198II	to be combined with the SLI 1000 termina

#### AIR INTAKE GRID WITH STRAIGHT PROFILE



304

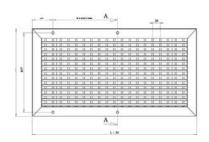
504

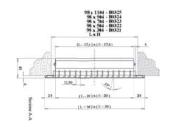
704

904

# AIR INTAKE GRID WITH STRAIGHT PROFILE

mm





		200	400	600	800	1000
DIMENSIONS						
L	mm	98	98	98	98	98
Н	mm	304	504	704	904	1104

#### Description

Aluminium profile intake grid with linear geometry, it can be perfectly coupled with the air intake fittings for built-in installation. In the aluminium frame around the grid there is a series of holes to fix the frame itself to the intake fitting.

#### **Features**

This element guarantees an easy removal of the grid itself to periodically clean the air

#### Codes

DR0326II	to be combined with the SLI 200 terminal
DR0327II	to be combined with the SLI 400 terminal
DR0328II	to be combined with the SLI 600 terminal
DR0329II	to be combined with the SLI 800 terminal
DB0330II	to be combined with the SLI 1000 termina

#### Description

The accessory consists of an aluminium inlet with two rows of fins to adjust the airflow both horizontally and vertically.

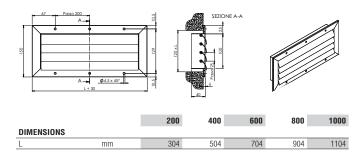
#### **Features**

It is suited for all types of built-in installation of the terminals where the airflow is directed inside the room from a wall or a higher vertical element of the false ceiling (typical situation of hotel rooms). The dimensions and holes on the frame fit perfectly with the accessories: telescopic channel and 90° curved channel.

#### Codes

DR0321II	to be combined with the SLI 200 terminal
DR0322II	to be combined with the SLI 400 terminal
DR0323II	to be combined with the SLI 600 terminal
DR0324II	to be combined with the SLI 800 terminal
DR0325II	to be combined with the SLI 1000 terminal

# AIR INTAKE GRID WITH STRAIGHT PROFILE



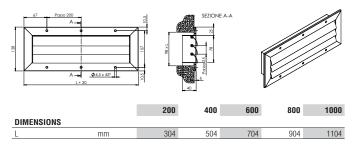
# Description

Aluminium intake grid, particularly suited for installation on false ceilings. The curved profile completely covers the inside, which gives a more elegant touch to the application.

#### Codes

DR055911	to be combined with the SLI 200 terminal
DR0560II	to be combined with the SLI 400 terminal
DR0561II	to be combined with the SLI 600 terminal
DR0562II	to be combined with the SLI 800 terminal
DR0563II	to be combined with the SLI 1000 terminal

# AIR INLET WITH CURVED PROFILE FOR APPLICATIONS ON FALSE CEILINGS



#### Description

Inlet with curved profile, particularly suited for air distribution from false ceilings. The design of the individual fins allows to focus the adjustment on the horizontal airflow, which does not create inconveniences for people in a room with air-conditioning.

### Codes

DR0550II	to be combined with the SLI 200 terminal
DR0551II	to be combined with the SLI 400 terminal
DR0552II	to be combined with the SLI 600 terminal
DR0553II	to be combined with the SLI 800 terminal
DR0554II	to be combined with the SLI 1000 termina

# 19 TESTO DI CAPITOLATO

#### AIR LEAF SL

#### Ventilconvettore SL

Fornitura e posa in opera di ventilconvettore di profondità massima 130 mm con motore modulante in corrente continua (BLDC), composto da batteria di scambio in rame-alluminio con pacco alettato mandrinato ad alta efficienza, struttura portante di supporto in lamiera acciaio elettrozincata, bacinella raccolta condensa in PVC antiurto e pannello schienale in materiale insonorizzante. Gruppo ventilatore tangenziale in materiale sintetico ad alette sfalsate (elevata silenziosità) con motore in corrente continua modulante, montato su supporti

antivibranti EPDM, griglia di ripresa apribile in alluminio verniciato con parte inferiore chiusa che evita la deformazione della stessa in caso di urti accidentali con filtro estraibile in maglia sintetica a trama sottile, mantellatura completa in lamiera di acciaio verniciata a forno con polveri epossidiche, griglia superiore con alette direzionabili abbinabile a controlli elettronici modulanti o a gradini, di tipo Inverter DC. Attacchi idraulici Eurokonus sx o dx da ¾".

#### Ventilconvettore SL 200

Potenza nominale in condizionamento 830 W (acqua 7°/12°C) Potenza nominale riscaldamento ventilato 1890 W ( 70°C); 1090 W (50°C) Assorbimento elettrico max 11,9 W 230 V monofase Pressione sonora max 39,4 dBA — min 24,2 dBA Dimensioni : mm 735 x 579 x 129 Peso: kg. 17

#### Ventilconvettore SL 400

Potenza nominale in condizionamento 1760 W (acqua 7°/12°C) Potenza nominale riscaldamento ventilato 3990 W ( 70°C); 2350 W (50°C) Assorbimento elettrico max 17,6 W 230 V monofase Pressione sonora max 40,2 dBA — min 25,3 dBA Dimensioni : mm 935 x 579 x 129 Peso: kg. 20

#### Ventilconvettore SL 600

Potenza nominale in condizionamento 2650 W (acqua 7°/12°C) Potenza nominale riscaldamento ventilato 5470 W ( 70°C); 3190 W (50°C) Assorbimento elettrico max 19,8 W 230 V monofase Pressione sonora max 42,2 dBA — min 25,6 dBA Dimensioni : mm 1135 x 579 x 129 Peso: kg. 23

#### Ventilconvettore SL 800

Potenza nominale in condizionamento 3340 W (acqua 7°/12°C) Potenza nominale riscaldamento ventilato 6980 W ( 70°C); 4100 W (50°C) Assorbimento elettrico max 26,5 W 230 V monofase Pressione sonora max 42,5 dBA — min 26,3 dBA Dimensioni : mm 1335 x 579 x 129 Peso: kg. 26

# Ventilconvettore SL 1000

Potenza nominale in condizionamento 3800 W (acqua 7°/12°C) Potenza nominale riscaldamento ventilato 8300 W ( 70°C); 4860 W (50°C) Assorbimento elettrico max 29,7 W 230 V monofase Pressione sonora max 43,9 dBA — min 27,6 dBA Dimensioni : mm 1535 x 579 x 129 Peso: kg. 29

# Accessori

- Piedini di sostegno con bloccaggio a vite e pannello di finitura LB0157II/ LA0158II
- Kit gruppo valvola a 2 vie V20139II
- Kit gruppo valvola a 3 vie V30140II/V30361II

#### Comandi

- Kit comando elettronico modulante PI Inverter DC (RS / SL e SLI), con azionamento touch - EB0644II (per versione 4 tubi EB0647II)
- Kit comando elettronico a gradini Inverter DC, selettore vel.(RS / SL) -
- Kit controllo Inverter per motori BLDC per regolazioni remote (RS / SL e SLI) per collegamento a termostati modulanti (0-10V) o a gradini - EB0642II
- Kit controllo inverter DC modulante PI per collegamento a pannello touch a parete (EM0649II) ER0645II (per versione 4 tubi ER0648II)
- Kit comando remoto (master/slave) a parete con display LCD ad azionamento touch elettronico modulante inverter DC - EM0649II

#### AIR LEAF SLI

#### Ventilconvettore SLI

Fornitura e posa in opera di ventilconvettore ad incasso di profondità massima 130 mm con motore modulante in corrente continua (BLDC), composto da batteria di scambio in rame-alluminio con pacco alettato mandrinato ad alta efficienza, struttura portante di supporto in lamiera acciaio elettrozincata, bacinella raccolta condensa in PVC antiurto e pannello schienale in materiale

insonorizzante. Gruppo ventilatore tangenziale in materiale sintetico ad alette sfalsate (elevata silenziosità) con motore in corrente continua modulante, montato su supporti antivibranti EPDM, filtro estraibile in maglia sintetica a trama sottile abbinabile a controlli elettronici modulanti o a gradini di tipo Inverter DC.. Attacchi idraulici Eurokonus sx o dx da ¾".

#### Ventilconvettore SLI 200

Potenza nominale in condizionamento 830 W (acqua 7°/12°C) Potenza nominale riscaldamento ventilato 1890 W ( 70°C); 1090 W (50°C) Assorbimento elettrico max 11,9 W 230 V monofase Pressione sonora max 39,4 dBA — min 24,2 dBA Dimensioni : mm 525 x 590 x 126 Peso: kg. 9

# Ventilconvettore SLI 400

Potenza nominale in condizionamento 1760 W (acqua 7°/12°C) Potenza nominale riscaldamento ventilato 3990 W ( 70°C); 2350 W (50°C) Assorbimento elettrico max 17,6 W 230 V monofase Pressione sonora max 40,2 dBA — min 25,3 dBA Dimensioni : mm 725 x 590 x 126 Peso: kg. 12

#### Ventilconvettore SLI 600

Potenza nominale in condizionamento 2650 W (acqua 7°/12°C) Potenza nominale riscaldamento ventilato 5470 W ( 70°C); 3190 W (50°C) Assorbimento elettrico max 19,8 W 230 V monofase Pressione sonora max 42,2 dBA — min 25,6 dBA Dimensioni : mm 925 x 590 x 126 Peso: kg. 15

#### Ventilconvettore SLI 800

Potenza nominale in condizionamento 3340 W (acqua 7°/12°C) Potenza nominale riscaldamento ventilato 6980 W ( 70°C); 4100 W (50°C) Assorbimento elettrico max 26,5 W 230 V monofase Pressione sonora max 42,5 dBA — min 26,3 dBA Dimensioni : mm 1125 x 590 x 126 Peso: kg. 18

### Ventilconvettore SLI 1000

Potenza nominale in condizionamento 3800 W (acqua 7°/12°C) Potenza nominale riscaldamento ventilato 8300 W ( 70°C); 4860 W (50°C) Assorbimento elettrico max 29,7 W 230 V monofase Pressione sonora max 43,9 dBA — min 27,6 dBA Dimensioni : mm 1325 x 590 x 126 Peso: kg. 21

#### Accessori

- Kit gruppo valvola a 2 vie V20139II
- Kit gruppo valvola a 3 vie V30140II/V30361II

# Comandi

- Kit comando elettronico modulante PI Inverter DC (RS / SL e SLI), con azionamento touch - EB0644II (per versione 4 tubi EB0647II)
- Kit controllo Inverter per motori BLDC per regolazioni remote (RS / SL e SLI) per collegamento a termostati modulanti (0-10V) o a gradini - EB0642II
- Kit controllo inverter DC modulante PI per collegamento a pannello touch a parete (EM0649II) - ER0645II (per versione 4 tubi ER0648II)
- Kit comando remoto (master/slave) a parete con display LCD ad azionamento touch elettronico modulante inverter DC - EM0649II

# Accessori speciali

- Plenum telescopico DB0160II/DB0161II/DB0162II/DB0163II/DB0164II
- Plenum 90° DB0165II/DB0166II/DB0167II/DB0168II/DB0169II
- Plenum aspirazione DB0194II/DB0195II/DB0196II/DB0197II/DB0198II
- Cassaforma L00568II/L00569II/L00570II/L00571II/L00572II
- Pannello estetico di chiusura LB0578II/LB0579II/LB0580II/LB0581II/ LB0582II/LB0618II/LB0619II/LB0620II/LB0622II
- Griglie aspirazione/mandata DR0559II/DR0560II/DR0561II/DR0562II/ DR0563II/DR0550II/DR05551II/DR0553II/DR0554II



#### AIR LEAF SLS

#### Ventilconvettore SLS

Fornitura e posa in opera di ventilconvettore con altezza ridotta e profondità massima 130 mm con motore modulante in corrente continua (BLDC), composto da batteria di scambio in rame-alluminio con pacco alettato mandrinato ad alta efficienza, struttura portante di supporto in lamiera acciaio elettrozincata, bacinella raccolta condensa in PVC antiurto e pannello schienale in materiale insonorizzante. Gruppo ventilatore tangenziale in materiale sintetico ad alette sfalsate (elevata silenziosità) con motore in corrente continua

modulante, montato su supporti antivibranti EPDM, griglia di ripresa apribile in alluminio verniciato con parte inferiore chiusa che evita la deformazione della stessa in caso di urti accidentali con filtro estraibile in maglia sintetica a trama sottile, mantellatura completa in lamiera di acciaio verniciata a forno con polveri epossidiche, griglia superiore con alette direzionabili abbinabile a controlli elettronici modulanti o a gradini di tipo Inverter DC. Attacchi idraulici Eurokonus sx o dx da ¾".

#### Air Leaf SLS 200

Potenza nominale in condizionamento 560 W (acqua 7°/12°C) Potenza nominale riscaldamento ventilato 1390 W ( 70°C); 780 W (50°C) Assorbimento elettrico max 11,9 W 230 V monofase Pressione sonora max 38,8 dBA — min 23,8 dBA Dimensioni : mm 735 x 379 x 129 Peso: kg. 12

#### Air Leaf SLS 400

Potenza nominale in condizionamento 1040 W (acqua 7°/12°C) Potenza nominale riscaldamento ventilato 2730 W ( 70°C); 1570 W (50°C) Assorbimento elettrico max 17,6 W 230 V monofase Pressione sonora max 39,5 dBA — min 24,9 dBA Dimensioni : mm 935 x 379 x 129 Peso: kg. 14

#### Air Leaf SLS 600

Potenza nominale in condizionamento 1640 W (acqua 7°/12°C) Potenza nominale riscaldamento ventilato 4140 W ( 70°C); 2380 W (50°C) Assorbimento elettrico max 41 W 230 V monofase Pressione sonora max 41,4 dBA — min 25,1 dBA Dimensioni : mm 1135 x 379 x 129 Peso: kg. 16

#### Air Leaf SLS 800

Potenza nominale in condizionamento 2310 W (acqua 7°/12°C) Potenza nominale riscaldamento ventilato 5650 W ( 70°C); 3250 W (50°C) Assorbimento elettrico max 26,5 W 230 V monofase Pressione sonora max 41,6 dBA — min 25,7 dBA Dimensioni : mm 1335 x 379 x 129 Peso: kg. 19

# Air Leaf SLS 1000

Potenza nominale in condizionamento 3140 W (acqua 7°/12°C) Potenza nominale riscaldamento ventilato 6620 W ( 70°C); 3910 W (50°C) Assorbimento elettrico max 43 W 230 V monofase Pressione sonora max 42,6 dBA — min 26,8 dBA Dimensioni : mm 1535 x 379 x 129 Peso: kg. 23

# Accessori

- Piedini di sostegno con bloccaggio a vite e pannello di finitura. LB0157II/ LA0158II
- Kit gruppo valvola a 2 vie V20661II
- Kit gruppo valvola a 3 vie V30662II

# Comandi

- Kit comando elettronico modulante PI Inverter DC (RS / SL e SLI), con azionamento touch - EB0644II
- Kit comando elettronico a gradini Inverter DC, selettore vel.(RS / SL ) -EB0643II
- Kit controllo Inverter per motori BLDC per regolazioni remote (RS / SL e SLI) per collegamento a termostati modulanti (0-10V) o a gradini - EB0642II
- Kit controllo inverter DC modulante PI per collegamento a pannello touch a parete (EM0649II) - ER0645II
- Kit comando remoto (master/slave) a parete con display LCD ad azionamento touch elettronico modulante inverter DC - EM0649II

#### AIR LEAF RS

#### Ventilconvettore RS

Fornitura e posa in opera di ventilconvettore con effetto di irraggiamento frontale e sistema di regolazione e controllo PID, composto da batteria di scambio in rame-alluminio con pacco alettato mandrinato ad alta efficienza, struttura portante di supporto in lamiera acciaio elettrozincata, bacinella raccolta condensa in PVC antiurto e pannello schienale in materiale insonorizzante. Gruppo ventilatore tangenziale in materiale sintetico ad alette sfalsate (elevata silenziosità) con motore monofase modulante in continuo, montato su supporti antivibranti EPDM, griglia di ripresa apribile in alluminio verniciato con parte

inferiore chiusa che evita la deformazione della stessa in caso di urti accidentali, con filtro estraibile in maglia sintetica a trama sottile, mantellatura completa in lamiera di acciaio verniciata a forno con polveri epossidiche, griglia superiore con alette direzionabili e pannello digitale di comando e di impostazione della regolazione, completo di termostato ambiente (estate/inverno) e led di indicazione delle funzioni impostate. Attacchi idraulici Eurokonus sx o dx da ¾" con gruppo idraulico.

#### Air Leaf RS 200

Potenza nominale in condizionamento 830 W (acqua 7°/12°C)
Potenza nominale riscaldamento ventilato 2020 W ( 70°C); 1150 W (50°C)
Potenza nominale riscaldamento statico 540 W ( 70°C); 320 W (50°C)
Assorbimento elettrico max 12,9 W 230 V monofase
Pressione sonora max 39,4 dBA — min 24,2 dBA
Dimensioni : mm 737 x 579 x 131 Peso: kg. 17,3

# Air Leaf RS 600

Potenza nominale in condizionamento 2650 W (acqua 7°/12°C) Potenza nominale riscaldamento ventilato 5800 W ( 70°C); 3450 W (50°C) Potenza nominale riscaldamento statico 780 W ( 70°C); 460 W (50°C) Assorbimento elettrico max 21,8 W 230 V monofase Pressione sonora max 42,2 dBA — min 25,6 dBA Dimensioni : mm 1137 x 579 x 131 Peso: kg. 23

# Air Leaf RS 1000

Potenza nominale in condizionamento 3800 W (acqua 7°/12°C) Potenza nominale riscaldamento ventilato 8600 W ( 70°C); 5200 W (50°C) Potenza nominale riscaldamento statico 1080 W ( 70°C); 660 W (50°C) Assorbimento elettrico max 32,7 W 230 V monofase Pressione sonora max 43,9 dBA — min 27,6 dBA Dimensioni : mm 1537 x 579 x 131 Peso: kg 29,4

#### Comandi

Kit comando elettronico remotabile Kit controllo ventilatore per regolazioni remote Pannello di controllo e regolazione remoto (master/slave) a parete.

#### Air Leaf RS 400

Potenza nominale in condizionamento 1760 W (acqua 7°/12°C)
Potenza nominale riscaldamento ventilato 4150 W ( 70°C); 2500 W (50°C)
Potenza nominale riscaldamento statico 670 W ( 70°C); 380 W (50°C)
Assorbimento elettrico max 19,6 W 230 V monofase
Pressione sonora max 40,2 dBA — min 25,3 dBA
Dimensioni : mm 937 x 579 x 131 Peso: kg. 20,4

#### Air Leaf RS 800

Potenza nominale in condizionamento 3340 W (acqua 7°/12°C) Potenza nominale riscaldamento ventilato 7500 W ( 70°C); 4400 W (50°C) Potenza nominale riscaldamento statico 920 W ( 70°C); 550 W (50°C) Assorbimento elettrico max 29,5 W 230 V monofase Pressione sonora max 42,5dBA — min 26,3 dBA Dimensioni : mm 1337 x 579 x 131 Peso: kg. 26,4

# Accessori

Piedini di sostegno con bloccaggio a vite e pannello di finitura. Kit gruppo valvola a 2 vie Kit gruppo valvola a 3 vie

#### AIR LEAF RSI

#### Ventilconvettore RSI

Fornitura e posa in opera di ventilconvettore ad incasso con effetto irraggiamento frontale e e profondità massima 130 mm con motore modulante in corrente continua (BLDC), composto da batteria di scambio in rame-alluminio con pacco alettato mandrinato ad alta efficienza, struttura portante di supporto in lamiera acciaio elettrozincata, bacinella raccolta condensa in PVC antiurto e

pannello schienale in materiale insonorizzante. Gruppo ventilatore tangenziale in materiale sintetico ad alette sfalsate (elevata silenziosità) con motore in corrente continua modulante, montato su supporti antivibranti EPDM, filtro estraibile in maglia sintetica a trama sottile abbinabile a controlli elettronici modulanti o a gradini di tipo Inverter DC. Attacchi idraulici Eurokonus sx o dx da ¾".

#### Air Leaf RSI 200

Potenza nominale in condizionamento 830 W (acqua  $7^{\circ}/12^{\circ}$ C) Potenza nominale riscaldamento ventilato 2020 W ( $70^{\circ}$ C); 1150 W ( $50^{\circ}$ C) Assorbimento elettrico max 12,9 W 230 V monofase Pressione sonora max 39,4 dBA — min 24,2 dBA Dimensioni : mm 525 x 590 x 126 Peso: kg. 9

#### Air Leaf RSI 400

Potenza nominale in condizionamento 1760 W (acqua  $7^{\circ}/12^{\circ}$ C) Potenza nominale riscaldamento ventilato 4150 W ( $70^{\circ}$ C); 2460 W ( $50^{\circ}$ C) Assorbimento elettrico max 19,6 W 230 V monofase Pressione sonora max 40,2 dBA — min 25,3 dBA Dimensioni : mm 725 x 590 x 126 Peso: kg. 12

#### Air Leaf RSI 600

Potenza nominale in condizionamento 2650 W (acqua 7°/12°C) Potenza nominale riscaldamento ventilato 5800 W ( 70°C); 3410 W (50°C) Assorbimento elettrico max 21,8 W 230 V monofase Pressione sonora max 42,2 dBA — min 25,6 dBA Dimensioni : mm 925 x 590 x 126 Peso: kg. 15

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# Accessori

Kit gruppo valvola a 2 vie V20139IIKit gruppo valvola a 3 vie V30140II/V30361II

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- Kit comando elettronico modulante PI Inverter DC (RS / SL e SLI), con azionamento touch - EB0644II
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- Kit controllo inverter DC modulante PI per collegamento a pannello touch a parete (EM0649II) - ER0645II
- Kit comando remoto (master/slave) a parete con display LCD ad azionamento touch elettronico modulante inverter DC - EM0649II

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- Plenum 90° DB0165II/DB0166II/DB0167II/DB0168II/DB0169II
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- Cassaforma L00568II/L00569II/L00570II/L00571II/L00572II
- Pannello estetico di chiusura LB0578II/LB0579II/LB0580II/LB0581II/ LB0582II/LB0618II/LB0619II/LB0620II/LB0621II/LB0622II
- Griglie aspirazione/mandata DR0559II/DR0560II/DR0561II/DR0562II/ DR0563II/DR0550II/DR0551/DR0552II/DR0553II/DR0554II

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