



Futura FSR Fan Coil Units

The **Futura fan coil** combines innovative design with the traditional reliability and low noise of Sabiana products. The rounded shape of the cover cabinet and the white and light grey colours allow integration into all types of environments.

Available with centrifugal or tangential fans, installed in view, concealed or residential versions, the units can be controlled by numerous types of wired controllers or infrared remote controls.

As well as strict internal checks during the production processes, the main energy performance ratings are Eurovent certified.

A complete series of accessories, including the innovative Crystall electronic filter, resolves all system requirements.

The **FSR residential series** with *tangential fan*, measuring just 188 mm in depth, has 4 sizes, with single coils, air flow-rates ranging from 100 to 500 m³/h, heat outputs from 1.3 to 6.2 kW and cooling capacities from 0.6 to 2.8 kW.



Main components:

- **OUTER CASING**

Made from strong synthetic lateral corners and from galvanized and prepainted frontal steel sheet. The plastic top grid has fixed louvres and is reversible in order to distribute the air in two different directions.

Standard colours: - lateral corners and top grid: Pantone 427C (light grey)
- frontal sheet: RAL 9003 (white)
- other colours on request.

- **INNER CASING**

Made from galvanized steel with closed cell insulation.

- **FILTER**

The filtration medium is a washable polypropylene net and the filter frame is made of galvanized steel. Special plastic sliding guides allow for easy insertion and removal of the filter.

- **FAN ASSEMBLY**

The tangential fan assembly is composed of two fan shrouds: an external one with an evolving plastic section and an internal one of holed, shaped steel. The fan has an external diameter of 120mm and is the length of the battery. The fins are concave and are positioned in a spiral shape along the whole length of the fan.

- **ELECTRIC MOTOR**

The motor is wired for single-phase with three speeds and thermal protection (klixon). The motor is secured on antivibration mountings and is fitted on the outside of the inner casing. Protection IP 21, class B.

- **HEAT EXCHANGER**

It is manufactured from drawn copper tube and the aluminium fins are mechanically bonded onto the tube by an expansion process. The coil has two 1/2 inch BSP internal connections and 1/8 inch BSP air vent and drain. Flow and return pipe connections are situated at the same end on the left side looking at the unit. On request we can deliver the unit with the connections on the right end side. This operation can also be easily carried out on site during installation.

- **CONDENSATE COLLECTION TRAY**

Made from plastic with an "L" shape fitted on the inner casing. The outside diameter of the condensate discharge pipe is 15mm.



Certifications

The following standard rating conditions are used:

COOLING

Entering air temperature +27°C d.b. +19°C w.b.
 Water temperature +7/12°C

HEATING

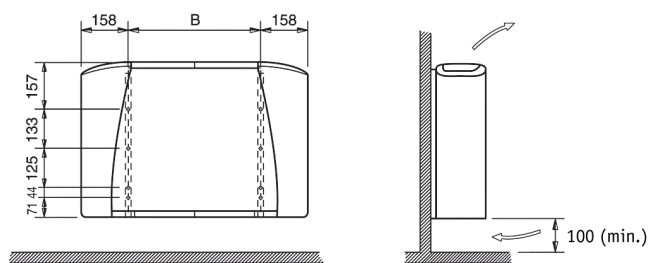
Entering air temperature +20°C
 Water temperature +50°C
water flow rate as for the cooling conditions

MODEL		FSR 1			FSR 2			FSR 3			FSR 4		
		1	2	3	1	2	3	1	2	3	1	2	3
Speed													
Air flow	m ³ /h	110	150	180	160	200	250	230	290	360	320	400	500
Cooling total emission	kW	0,63	0,78	0,88	0,95	1,10	1,30	1,31	1,59	1,87	2,00	2,40	2,80
Cooling sensible emission	kW	0,50	0,60	0,70	0,71	0,86	1,01	1,08	1,31	1,53	1,40	1,71	2,05
Heating	kW	0,80	1,00	1,20	1,13	1,32	1,60	1,80	2,20	2,60	2,50	3,00	3,60
Δp Cooling	kPa	6,0	9,0	11,0	11,5	15,5	20,0	4,4	6,3	7,8	11,0	14,5	20,0
Δp Heating	kPa	4,0	5,5	7,0	9,5	12,5	16,5	4,0	5,0	7,0	10,5	14,1	18,8
Fan	W	20	22	28	20	22	27	22	26	31	25	30	36
Sound power Lw	dBA	31	35	42	34	39	45	34	39	45	34	40	46
Sound pressure Lp	dBA	22	26	33	25	30	36	25	30	36	25	31	37

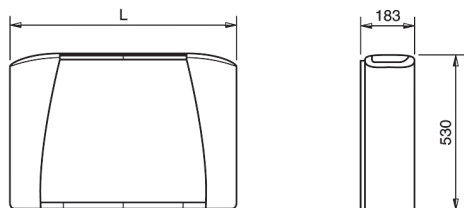
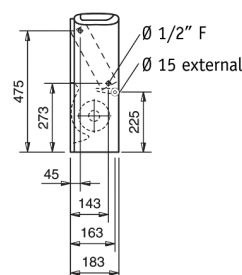
The sound pressure levels apply to the reverberant field of 100m³ room and a reverberation time of 0.5 sec.

Dimensions, weight and water contents

MV Model



COIL CONNECTIONS



MODEL	FSR 1	FSR 2	FSR 3	FSR 4
WEIGHT (kg)	12	13	18	20
WATER CONTENTS (litres)	0.4	0.5	0.8	1.1
L	670	770	985	1200
B	354	454	669	884



SABIANA

ENVIRONMENTAL COMFORT

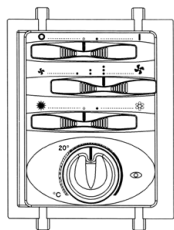
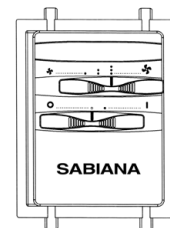


Main controls

FITTED

MV - 3V

ON-OFF switch
and 3 speed switch
without thermostatic control.

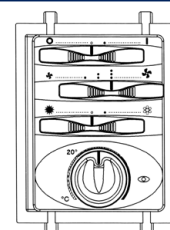


TMV - M

ON-OFF switch,
3 speed switch and
summer / winter switch.
Electronic room thermostat
for fan control (ON-OFF).

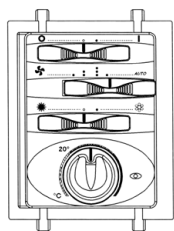
TMV - T

ON-OFF switch,
3 speed switch and
summer / winter switch.
Electronic room thermostat
for fan or valves control (ON-OFF).



TMV - AU

ON-OFF switch, 3 speed switch
or automatic speed selection and
summer / winter switch.
Electronic room thermostat
for fan or valves control (ON-OFF).



The complete control panel list is published on the technical catalogue.

Main accessories

- Feet
- Condensate collection tray
- Rear closing panel
- 2 and 3 way valve
- Crystall electrostatic filter

MB FRIGO
GRUPPA d.o.o.