Heating MVL - MVS Energy Efficient Fan Convector



^{Eip}²¹¹, ^{Cont}^{1,329}, ^{EC}



Advantages of using Sabiana Fan Convectors

- Eurovent certified.
- Quick and Effective. MVS/MVL fan convectors provide heat quickly and efficiently, ensuring comfort conditions are met in minutes.
- Energy Saving. State of the art motor technology offers up to 70% savings against traditional fan motor technology, as well as meeting the latest ErP directive ErP 211 (2011/329/EC) for fan efficiency.
- **Space Saving.** Utilising less wall space than radiators, MVS/MVL fan convectors free up valuable space for other equipment.
- **Safety.** Public safety is paramount. MVS/MVL fan convectors feature rounded corner construction to ensure minimum risk in the event of accidental contact.
- **Tamper-proof Operation.** Constructed using highest quality materials, MVS/MVL fan convectors provide a durable solution within public buildings.
- **Ease of Installation**. Both LTHW connections and airflow configurations can be modified on site to ensure flexibility in the positioning of products within ever changing workspaces/environments.
- **Flexibility.** With a range of 5 models with outputs from 2.5 kW to 14 kW and a range of air inlet/outlet options, MVS/MVL fan convectors can be installed in a variety of applications.

| Ideal applications for fan convectors: | | | | | | |
|--|-------------------|--|--|--|--|--|
| Schools, Universities & Colleges | Community Centres | | | | | |
| Churches | Offices | | | | | |
| Libraries | Village Halls | | | | | |

Product Variants

MVS ANGLE TOP

MVL FLAT TOP

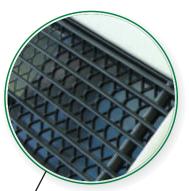




Product Features



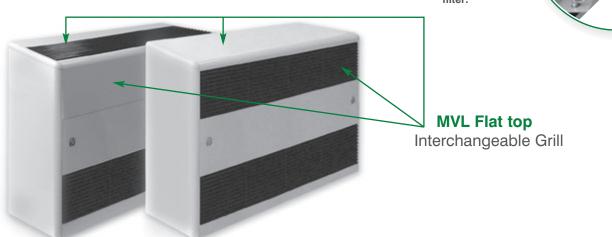
Robust casing with rounded corners. Manufactured from 1mm galvanised steel, finished in light grey (RAL 9002).



Inlet / outlet grills with secondary mesh.

Lockable controls access panel.

EU2 Grade washable synthetic filter.



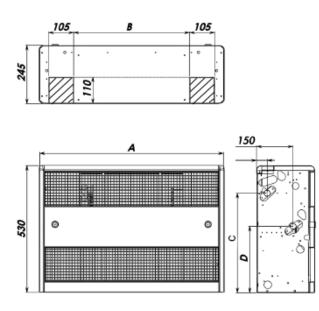
Component Specification

- **Casing** Manufactured from 1 mm galvanised sheet steel. Incorporating removable lockable access panel supplied with suitable key.
- Finish RAL 9002 (light grey)
- **Grilles** Manufactured from extruded aluminium, finished in dark grey
- **Filter** Synthetic return air filter manufactured to EU2 Grade, washable.
- **Fans** Centrifugal, factory balanced to ensure quiet operation.
- Heat Exchanger 4 row, manufactured from drawn copper tube and aluminium fins, mechanically bonded by expansion process. Coil has brazed header complete with 1/8" BSP air vent and drain.

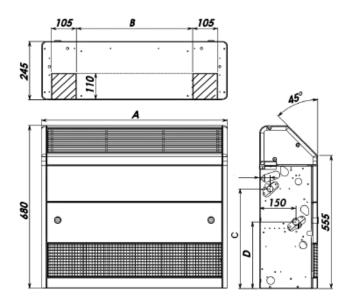
- Connections All water connections 1/2" BSP and are supplied as standard on left hand side (looking at unit) but can be changed easily on site to right hand connections.
- Fan Assembly Mounted on guide rails for easy maintenance.
- Fan Motor Single phase supply, 6 speed motor hermetically sealed with "sealed for life" bearings. Class IP 21, Class B.
- Electrical details single phase supply. 240v, 50Hz

| Product Size | | | | | | | | | |
|--------------|---|-----|-----|------|------|------|--|--|--|
| Ê | | 1 | 2 | 3 | 4 | 5 | | | |
| (mm) : | А | 775 | 990 | 1205 | 1205 | 1420 | | | |
| sions | В | 487 | 702 | 917 | 917 | 1132 | | | |
| Dimensions | С | 460 | 460 | 460 | 460 | 460 | | | |
| Dir | D | 260 | 260 | 260 | 260 | 260 | | | |

MVL FLAT TOP



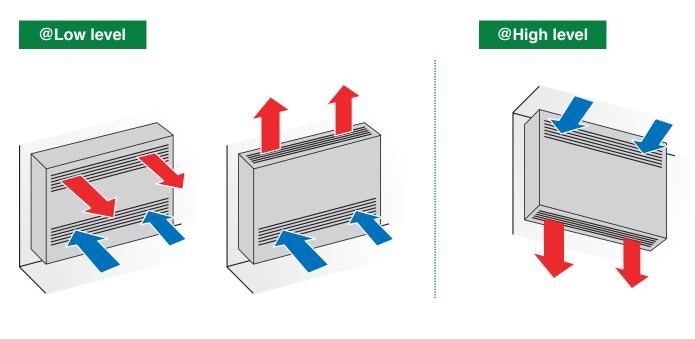
MVS ANGLE TOP



Installation Options

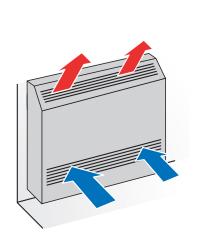
Flexible installation as standard Both MVL & MVS models can be installed at low, medium, high & ceiling level

MVL Model

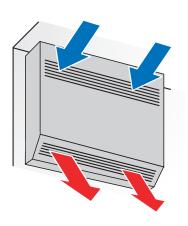


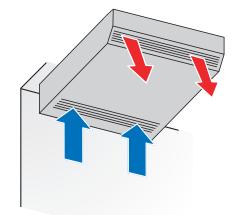
MVS Model

@Low level



@High level





Controls

Factory fitted as standard

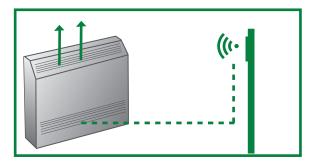
Control platform supplied as standard with the following features:

- Digital backlit controller
- ON/OFF
- 3 Speed selector (3 speeds connected to 6 speed motor)
- Auto fan function
- · Low temperature cut off switch
- · MODBUS BMS Interface as standard
- · Removable key pad
- 7 Day programmable timer

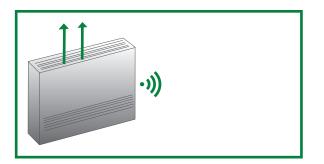


Key pad can operate in the following configurations:

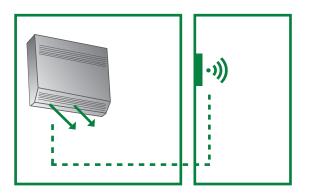
1. Wall control with integrated temperature sensor:



2. Concealed within casing with return air sensor:



3. Positioned remotely in plant room operating on return air sensor:



NB: max distance from unit = 20m

Technical Data

| Model | Speed | Airflow | | Specific | Noise Levels | | 50°C Flow/ 40°C Return . E.A.T 20°C | | | | 80°C Flow/ 60°C Return . E.A.T 20°C | | | | 82°C Flow/ 71°C Return . E.A.T 20°C | | | |
|--------|-----------|---------|------------|-------------------------------|----------------------|-----------|-------------------------------------|------------------|------|-------|-------------------------------------|-------|------|-------|-------------------------------------|-------|------|-------|
| | | m3/h | m3/h L/sec | Fan Power (SFP) W/L/Sec | Sound Power dB(A) | NR Level* | Output | Output Water Air | | Air | Output | Water | | Air | Output | Water | | Air |
| | | məyn | L/ 36C | | | | (Watts) | l/s | kPa | LAT°C | (Watts) | l/s | kPa | LAT°C | (Watts) | l/s | kPa | LAT°C |
| Size 1 | 1 (MIN) | 145 | 40 | 0.35 | 30 | 20 | 1075 | 0.03 | 1.3 | 43 | 2167 | 0.03 | 1.2 | 66 | 2564 | 0.06 | 5.1 | 72 |
| | 2 | 170 | 47 | 0.34 | 33 | 21 | 1216 | 0.03 | 1.6 | 43 | 2451 | 0.03 | 1.5 | 66 | 2904 | 0.07 | 6.4 | 71 |
| | 3 (MED) | 220 | 61 | 0.36 | 40 | 26 | 1550 | 0.04 | 2.5 | 42 | 3130 | 0.04 | 2.3 | 64 | 3724 | 0.08 | 10.1 | 70 |
| | 4 | 250 | 69 | 0.37 | 43 | 29 | 1734 | 0.04 | 3.1 | 42 | 3496 | 0.04 | 2.9 | 64 | 4162 | 0.09 | 12.3 | 70 |
| | 5 (MAX | 295 | 82 | 0.39 | 47 | 33 | 1996 | 0.05 | 4 | 41 | 4036 | 0.05 | 3.7 | 63 | 4810 | 0.11 | 16 | 69 |
| | 6 (BOOST) | 340 | 94 | 0.42 | 51 | 37 | 2265 | 0.05 | 5 | 41 | 4582 | 0.05 | 4.7 | 62 | 5476 | 0.12 | 20.2 | 68 |
| Size 2 | 1 (MIN) | 185 | 51 | 0.27 | 27 | 20 | 1406 | 0.03 | 0.89 | 44 | 2825 | 0.03 | 0.82 | 68 | 3321 | 0.08 | 3.5 | 74 |
| | 2 | 265 | 74 | 0.29 | 33 | 22 | 1969 | 0.05 | 1.6 | 43 | 3967 | 0.05 | 1.5 | 67 | 4682 | 0.11 | 6.4 | 73 |
| | 3 (MED) | 335 | 93 | 0.30 | 39 | 25 | 2476 | 0.06 | 2.5 | 43 | 4990 | 0.06 | 2.3 | 66 | 5915 | 0.13 | 9.8 | 72 |
| 5120 2 | 4 | 400 | 111 | 0.31 | 43 | 29 | 2903 | 0.07 | 3.3 | 43 | 5851 | 0.07 | 3.1 | 66 | 6929 | 0.16 | 13 | 72 |
| | 5 (MAX | 485 | 135 | 0.33 | 47 | 33 | 3442 | 0.08 | 4.5 | 42 | 6956 | 0.08 | 4.2 | 65 | 8255 | 0.19 | 17.8 | 71 |
| | 6 (BOOST) | 570 | 158 | 0.36 | 52 | 38 | 3976 | 0.09 | 5.8 | 42 | 8017 | 0.1 | 5.4 | 64 | 9556 | 0.22 | 23.2 | 70 |
| Size 3 | 1 (MIN) | 250 | 69 | 0.26 | 26 | 21 | 1876 | 0.04 | 1.8 | 43 | 3771 | 0.05 | 1.7 | 67 | 4446 | 0.1 | 7.2 | 73 |
| | 2 | 315 | 88 | 0.25 | 31 | 22 | 2309 | 0.06 | 2.7 | 43 | 4643 | 0.06 | 2.5 | 66 | 5471 | 0.12 | 10.5 | 72 |
| | 3 (MED) | 420 | 117 | 0.27 | 37 | 23 | 2993 | 0.07 | 4.3 | 42 | 6033 | 0.07 | 4 | 65 | 7128 | 0.16 | 16.9 | 71 |
| 5120 5 | 4 | 495 | 138 | 0.28 | 41 | 27 | 3461 | 0.08 | 5.6 | 42 | 6959 | 0.08 | 5.1 | 64 | 8240 | 0.19 | 21.9 | 70 |
| | 5 (MAX | 545 | 151 | 0.30 | 43 | 29 | 3778 | 0.09 | 6.5 | 42 | 7617 | 0.09 | 6.1 | 64 | 9020 | 0.21 | 25.8 | 69 |
| | 6 (BOOST) | 650 | 181 | 0.34 | 48 | 34 | 4395 | 0.1 | 8.5 | 41 | 8862 | 0.11 | 8 | 63 | 10536 | 0.24 | 34.1 | 68 |
| | 1 (MIN) | 415 | 115 | 0.32 | 37 | 23 | 3080 | 0.07 | 4 | 43 | 6190 | 0.07 | 3.7 | 67 | 7293 | 0.17 | 15.5 | 73 |
| | 2 | 505 | 140 | 0.33 | 42 | 28 | 3714 | 0.09 | 5.6 | 43 | 7466 | 0.09 | 5.2 | 66 | 8812 | 0.2 | 21.8 | 72 |
| Size 4 | 3 (MED) | 590 | 164 | 0.34 | 46 | 32 | 4278 | 0.1 | 7.2 | 43 | 8600 | 0.1 | 6.7 | 66 | 10165 | 0.23 | 28.2 | 71 |
| 5126 4 | 4 | 680 | 189 | 0.35 | 49 | 35 | 4889 | 0.12 | 9.1 | 43 | 9829 | 0.12 | 8.5 | 65 | 11664 | 0.27 | 36.2 | 71 |
| | 5 (MAX | 760 | 211 | 0.37 | 52 | 38 | 5382 | 0.13 | 10.9 | 42 | 10849 | 0.13 | 10.1 | 65 | 12860 | 0.29 | 43.1 | 70 |
| | 6 (BOOST) | 830 | 231 | 0.38 | 54 | 40 | 5802 | 0.14 | 12.4 | 42 | 11697 | 0.14 | 11.6 | 64 | 13882 | 0.32 | 49.5 | 70 |
| Size 5 | 1 (MIN) | 445 | 124 | 0.36 | 38 | 24 | 3230 | 0.08 | 2.5 | 43 | 6502 | 0.08 | 2.3 | 66 | 7680 | 0.17 | 9.8 | 71 |
| | 2 | 535 | 149 | 0.36 | 42 | 28 | 3813 | 0.09 | 3.4 | 42 | 7686 | 0.09 | 3.1 | 65 | 9085 | 0.21 | 13.3 | 70 |
| | 3 (MED) | 630 | 175 | 0.38 | 47 | 33 | 4401 | 0.11 | 4.3 | 42 | 8860 | 0.11 | 4 | 64 | 10506 | 0.24 | 17.2 | 70 |
| | 4 | 735 | 204 | 0.39 | 51 | 37 | 5030 | 0.12 | 5.5 | 41 | 10144 | 0.12 | 5.1 | 63 | 12040 | 0.27 | 22 | 69 |
| | 5 (MAX | 840 | 233 | 0.39 | 54 | 40 | 5655 | 0.14 | 6.8 | 41 | 11404 | 0.14 | 6.4 | 62 | 13528 | 0.31 | 27.1 | 68 |
| | 6 (BOOST) | 925 | 257 | 0.40 | 56 | 42 | 6133 | 0.15 | 7.9 | 41 | 12371 | 0.15 | 7.4 | 62 | 14700 | 0.33 | 31.5 | 67 |

The NR noise ratings given are for guidance only. For specific, independently tested sound spectrums, please contact technical sales on 01283 711878



Accessories

Items available for use with MVL and MVS fan convector range:

- 100mm plinths
- Multi unit control package
- · Valve kits for cooling and heating; auxiliary battery for cooling (chilled water)

Sabiana





Sabiana was founded in Italy in 1929, on a shared passion for the manufacture and distribution of reliable, effective products. Sabiana are European market leaders in the HVAC industry. We specialise in both chilled and hot water products for heating and cooling; in particular fan coil units, unit heaters and radiant panelling.

Our first electric air heater was produced in the mid 1930s and, following the end of the Second World War, production began on unit heaters supplied by hot water. The start of the 1970s saw the first international energy crisis, bringing with it a need for an efficient alternative to solve the problem of air conditioning in large spaces. This solution came in the form of ceiling mounted radiant panels. Heating by radiation is energy efficient and low maintenance.

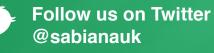
Since 1971, over 5 million square meters of radiant panels have been installed in many types of environments from hospitals and schools, to warehouses and aircraft hangars. By the end of the seventies, more and more offices were requesting the installation of air conditioning solutions. The Fan Coil unit, originally marketed towards domestic users, was now being developed to suit an office environment. The aesthetic appeal of the unit was becoming just as significant as the functionality and the Futura (now reincarnated as the Carisma) fan coil combined design with the traditional reliability and efficiency of Sabiana products.

Contact

Please contact our sales team for sales, selection and technical assistance:

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