



Flexible Space

Under Floor Air Conditioning

FA5/FA7 FRESH AIR PRODUCT DESCRIPTION

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Section One - General

1.0 General

Fresh air modules; FA7/FA5 are decentralised units which draw air from outside and inject it into the CAM unit. It has been designed to be located under a floor tile, allowing easy access for maintenance and removal. These units may also be used as extract units in various applications.

The air is taken directly from the building facade or from a distribution riser and it is normally delivered into the underfloor return air path. Heat transmission or condensation effects on the flexible ducts surface, if any, can be avoided by using ducts with external insulation. The diameter of the flexible duct should be equal to the intake / discharge sections on the unit (180 mm).



1.2 Unit Description

FA7/FA5 units contain variable speed single inlet AC fans providing nominal airflows of 630 and 490 m³/h respectively. Powder-coated steel enclosures contain the following:

- Removable lid
- Removable EU3 filter, the filter section provides continuous high-efficiency filtration of the outdoor air. The filter is mounted in a galvanized frame to permit ease of change
- Anti vibration neoprene base
- Direct-driven centrifugal fan equipped with in-built thermal protection with automatic reset
- Fan speed selector with four positions: off, low, medium and high speed
- Terminal box for electrical connection
- Intake/discharge connection spigots for circular flexible duct connections

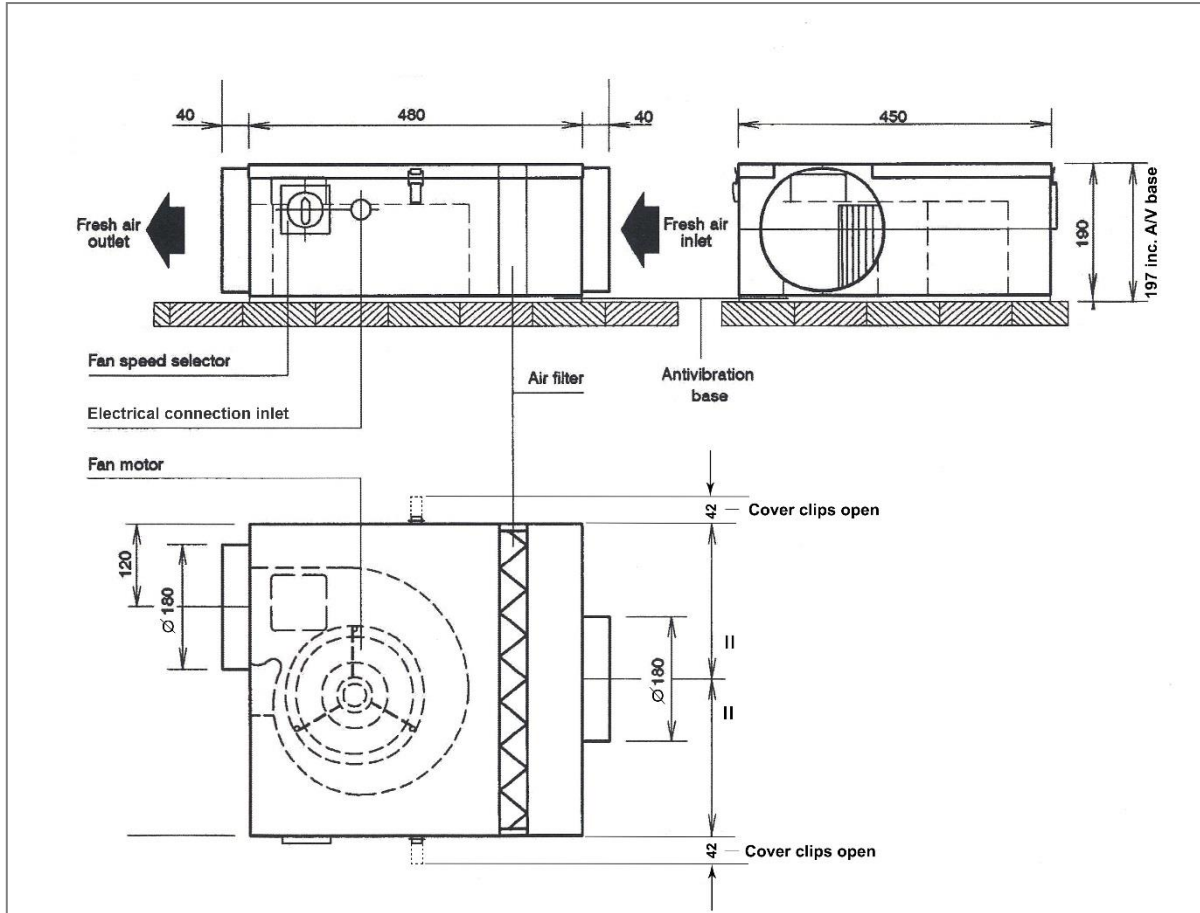
1.3 Unit Data

(1) Nominal air flow refers to the unit equipped with a flexible duct having an equivalent length of approx. 10m

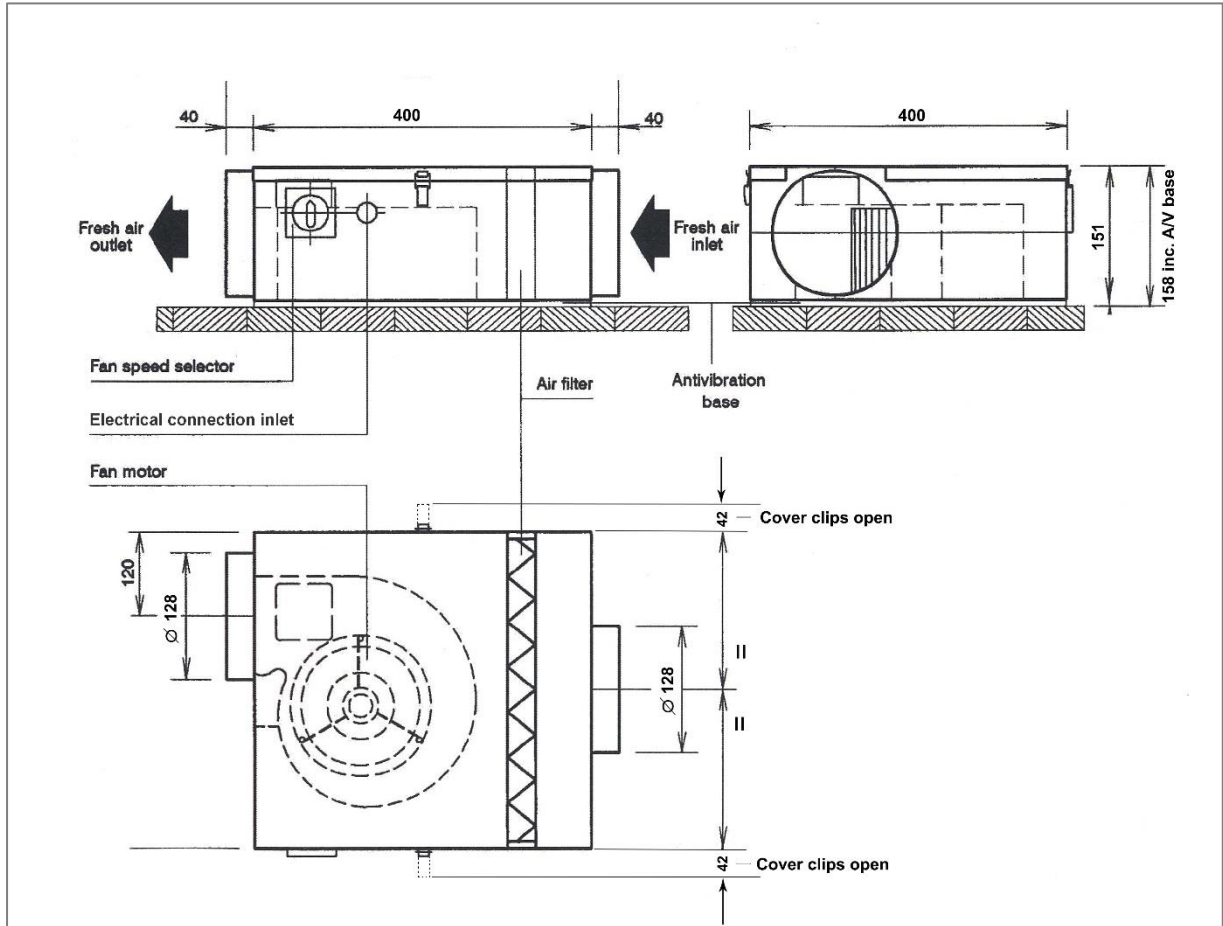
| Model | | FA7 | FA5 |
|-----------------------------------|--------------------|-----------------|-----------------|
| Nominal maximum airflow (1) | m ³ /hr | 430 - 630 | 280 - 490 |
| Flexible duct connection diameter | mm | 180 | 130 |
| Filter size | mm | 185 x 425 x 35 | 145 x 395 x 40 |
| Filter efficiency | - | EU3 | EU3 |
| Fans | number | 1 | 1 |
| Electrical supply line | - | 230/1/50 | 230/1/50 |
| Nominal power | W | 205 | 147 |
| Full load ampere | A | 1.3 | 1.0 |
| Dimensions | mm | 560 x 450 x 197 | 400 x 400 x 158 |
| Sound Power Level | dB(A) | 48/60 | 45/51 |

Section Two – Unit Dimensions

2.0 Overall Dimensions (FA7)

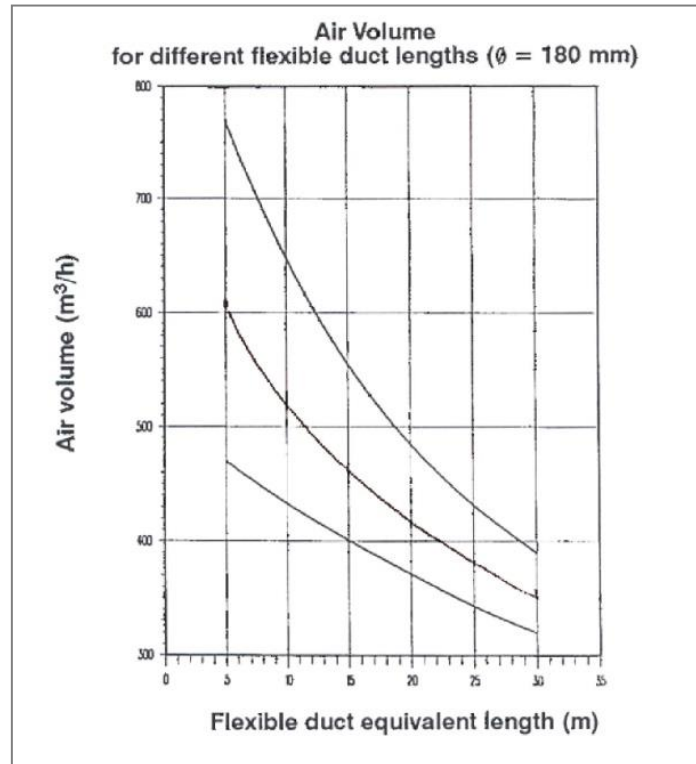


2.1 Overall Dimensions (FA5)

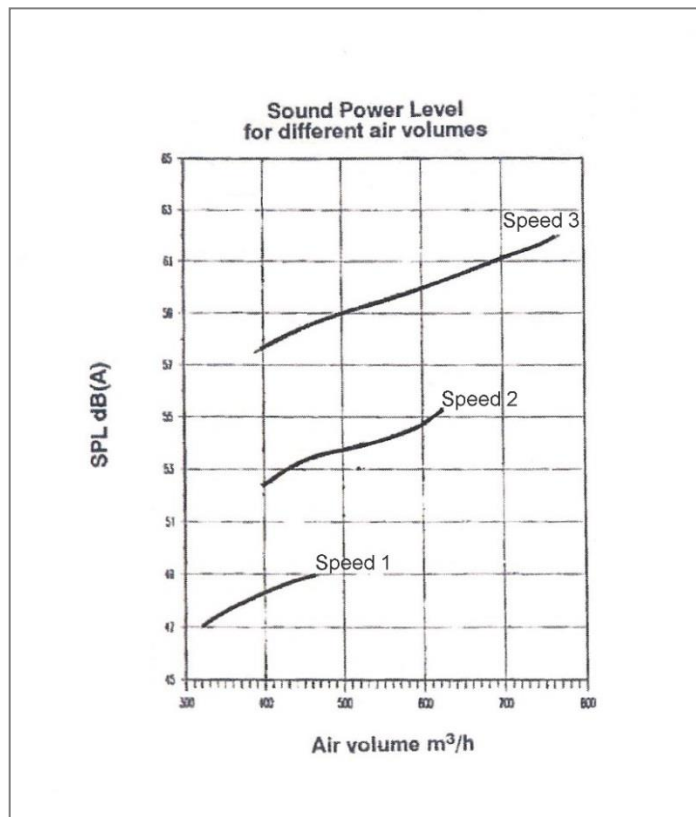


Section Three - Technical

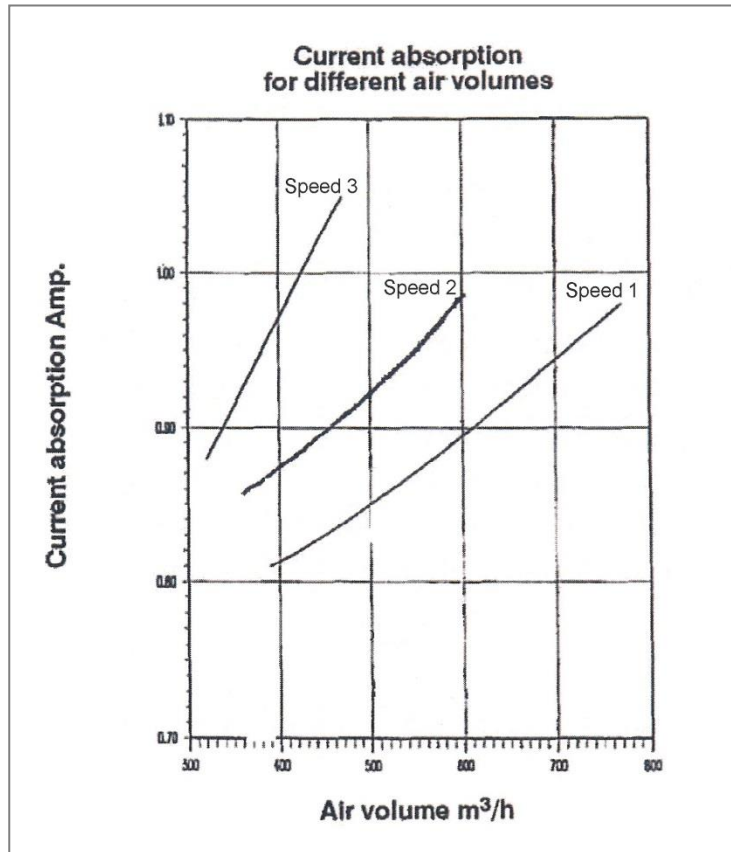
3.0 Air Volume (FA7)



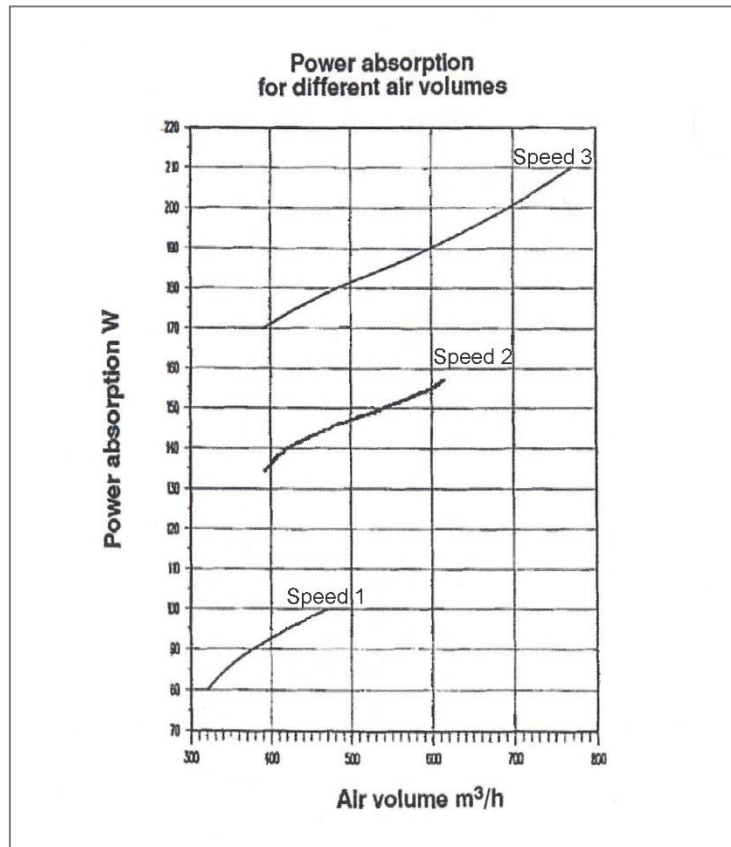
3.1 Sound Power Level (FA7)



3.2 Current Absorption (FA7)

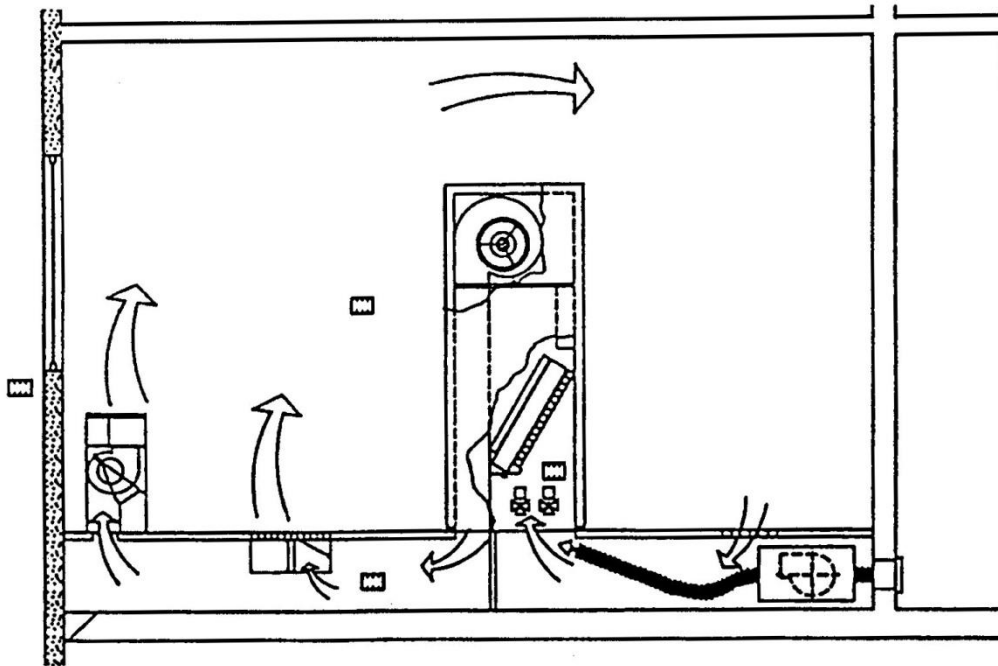


3.3 Power Absorption (FA7)

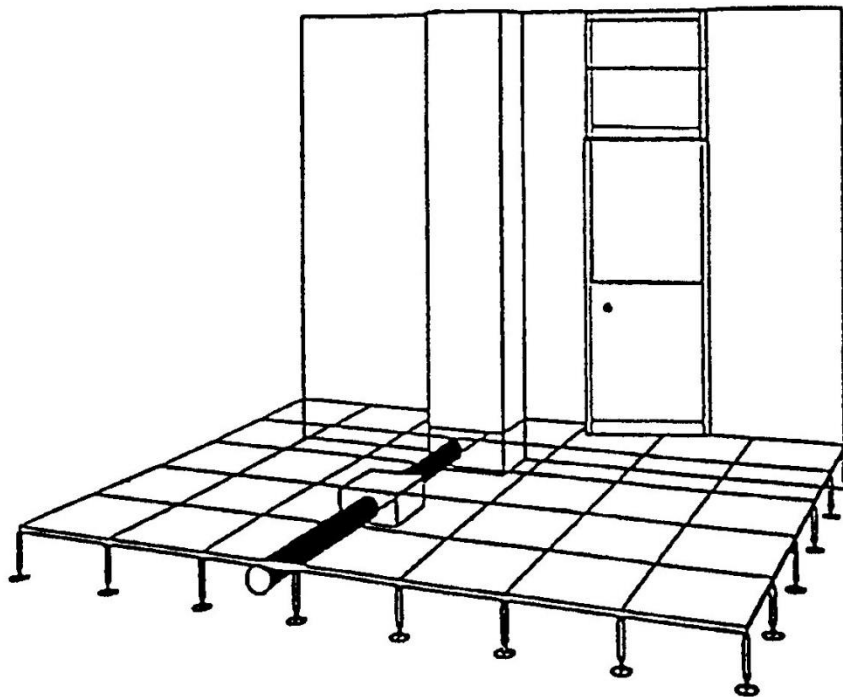


3.4 Fresh Air Intake

Fresh air can be drawn directly from outside using a FA7/FA5 unit...

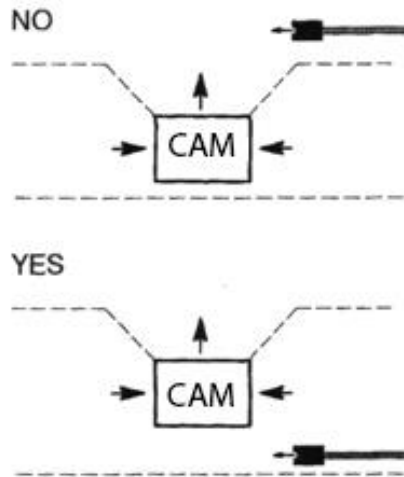


...or introduced by means of a shaft coming from the roof and flexible ducts with a FA7/FA5 located underfloor.

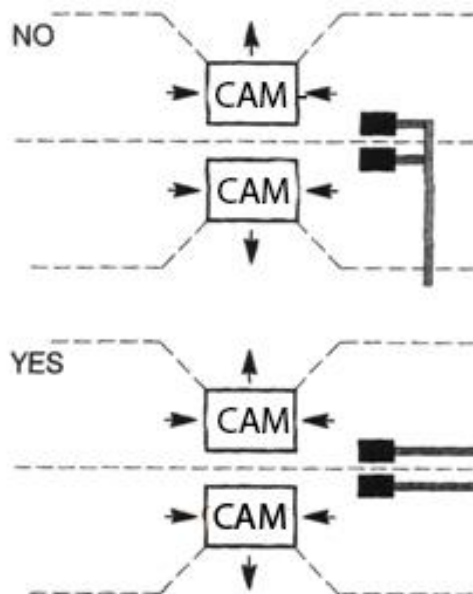


3.5 Installation

The FA7/FA5 must be placed in the return section of the underfloor circuit allowing the outdoor/ return air to mix, in order to avoid the internal space conditions being directly affected by the temperature of the outside air.



Any ducts should run parallel to the underfloor baffle. Any crossing of the underfloor air circuit may affect the CAM performance if the ducts significantly obstruct airflow.



The flexible duct diameter should never exceed the net height of the underfloor void and should avoid crossing the supply air path whenever possible. Attention should be paid to the height of the selected FA7/FA5 unit which should always be lower than the net void height.

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