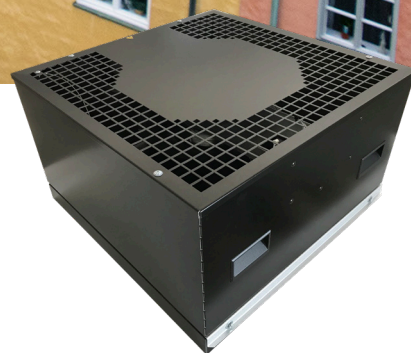




ROOF VENTILATOR CASA F 41-83



Roof ventilator CASA F

Control functions

Basic functions without control system

Without a control system, the ventilator speed can easily be set using the supplied potentiometer. The potentiometer can also be easily removed and replaced by an externally mounted potentiometer if needed

Basic functions with control system

CASA F with built-in control system gives you many more possibilities for different types of control and the external connection of accessories and any external features

Basic functions with control system

Automatic functions

- Speed control
- Constant pressure regulation
- Outdoor temperature compensation (pressure)
- Clock function

External functions

- Normal => stop or normal => low speed
- Normal => High speed
- Alarm relay

Web interface



Administration

Change name and/or password (only applies with use of web interface)/clock



Start/stop

Activation and deactivation of ventilator



Ventilator control %

Setting ventilator speed as a percentage. Settings for Away and Boost mode are programmed in the sub-menu



Pressure control Pa

Setting available static channel pressure



Outdoor temperature compensation

Settings for setpoint compensation of pressure control with regard to outdoor temperature



Boosted ventilation/high speed

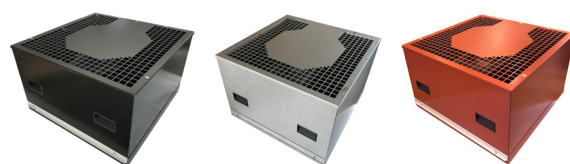
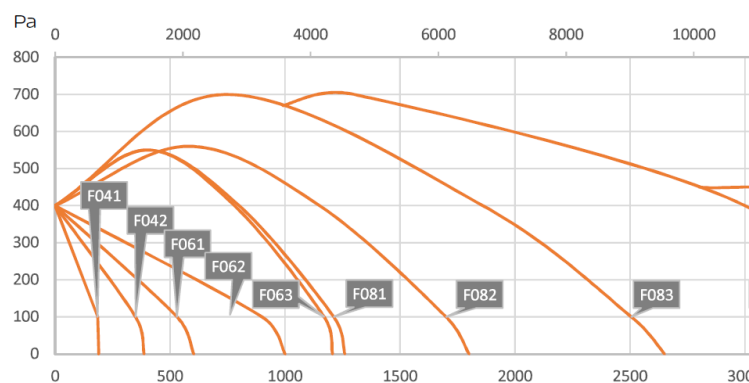
Setting the ventilator mode as a percentage for high speed



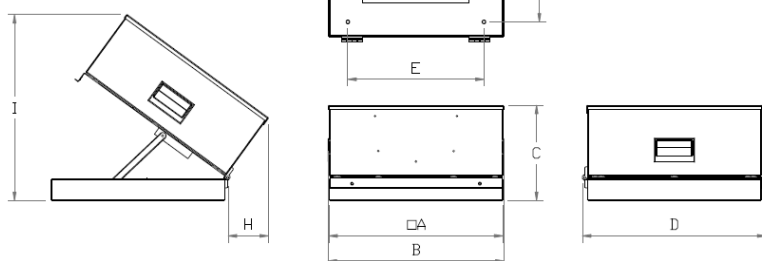
Reduced ventilation/low speed

Setting the ventilator mode as a percentage for low speed

Overview flow range



Dimensions and weight



- Soundproof, direct-drive EC fan with backward-facing blades
- Prepared for control with 0-10 V signal
- Designed for easy replacement of existing roof ventilator
- Easy access for servicing with folding bottom frame
- Inlet cone with take-off point and K-factor (Pcs. 42-83)
- 3 standard colours, black, brick red and aluzinc
- Meets the EU Ecodesign Directive 1253/2014 ErP 2016/2018
- Continuous operation 70°C for one hour
- Can be delivered with built-in pressure and temperature compensation regulation
- WiFi communication for easy adjustment as an accessory

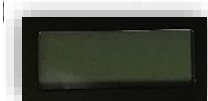
TYPE	A	B	C	D	E	F	G	H	I	WEIGHT	VOLTAGE	RATED CURRENT
CASA F041	415	419	227	437.5	325	345	255	150	505	12	1-phase 230 V	0.8 A
CASA F042	415	419	269	437.5	325	345	255	180	530	14	1-phase 230 V	1.4 A
CASA F061	592	596	354	614.5	450	450	392	260	720	23	1-phase 230 V	1.2 A
CASA F062	592	596	405	614.5	450	450	392	255	770	25	1-phase 230 V	1.65 A
CASA F063	592	596	405	614.5	450	450	392	255	770	28	1-phase 230 V	2.2 A
CASA F081	800	804	420*	825	660	660	600	365	920	48	1-phase 230 V	2.2 A
CASA F082	800	804	459*	825	660	660	600	378	949	55	1-phase 230 V	3.3 A
CASA F083	800	804	495*	825	660	660	600	390	980	60	3-phase 230 V	2.1 A

*Lifting lugs will add +35 mm

User interface

Display

Using a display on the control board and a potentiometer, you can program all functions directly on the ventilator.



Web interface

If you choose WiFi as an accessory, you can program all settings using your phone, tablet or PC. You will see a simple overview menu and can program all your settings without having to go out onto the roof. With the web interface, you also have the option of programming more complex settings for the clock function.

Renovation of apartment building

Systems solution apartment building

CASA F roof ventilator is the best solution when a low noise level and low energy use is required. CASA F is equipped with the latest RadiCal impellers and low energy EC engine, as well as compensation for pressure and flow depending on the outdoor temperature. With the unique WiFi connection, the ventilator can be controlled remotely from the attic or ground level, saving time, reducing the risk of accidents and providing a better working environment.

A large part of the real estate portfolio in Sweden consists of extract air systems with older energy-intensive ventilators with poor performance and lacking modern control equipment. These systems often have high operating costs and are associated with noise and comfort issues. With the Swegon CASA F, we can offer outdoor temperature-compensated pressure regulation, which means that we can control the flow when using kitchen hoods, for example, and in winter, we can reduce the flow to suit a falling outside temperature, which reduces problems with draughts and reduces the energy consumption required for heating.

Noise and comfort

New ventilators are quieter and emit less noise into the surrounding environment.

Smart control functions

WiFi and demand-control through outdoor temperature-compensated pressure regulation via smartphone.

Service

The ventilator is service-friendly and easy to clean thanks to the direct-driven b-wheels and easily accessible via the folding bottom frame.

For ventilator replacement, a review of the whole system should be carried out for the best results:

Installing kitchen hoods with high-level odour extraction, for example Swegon Tango, allows a reduction of the base flow.

Cleaning, sealing or changing duct systems leads to additional energy saving potential

Checking the correct ventilation of extract air in the apartments reduces unnecessary pressure settings and lowers the noise level.

Check the outdoor air sensors and spring valves as needed to ensure proper air supply.

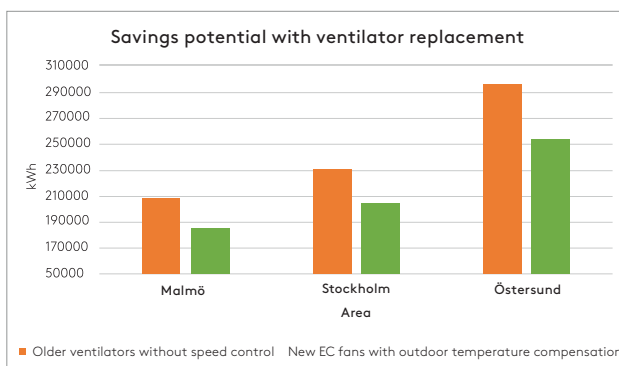
Big savings potential

Old AC fans use a lot of energy. You will save power and gain even more control as soon as you switch. With a new ventilator, you can adjust the flow to the outside temperature, both saving energy and increasing the comfort of the residents.

Maintenance:

During inspections, there is no need to climb onto the roof to control/compensate airflows, which saves both time and money.

In winter, the flow can be reduced to suit the falling outside temperature, which reduces problems with draughts and reduces energy consumption for heating.



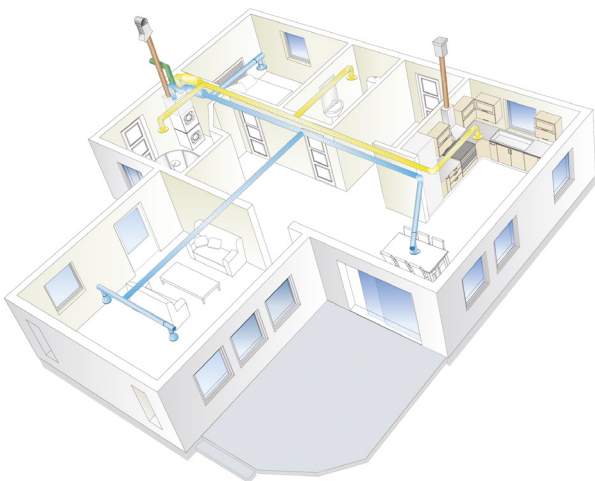
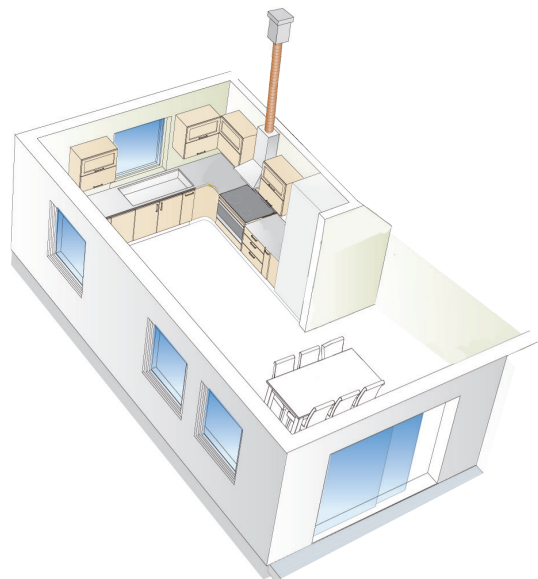
The bars show the energy consumption for an older (25-30 years) AC fan without speed control, compared to a newly installed EC fan with the outdoor temperature compensation function activated for three locations in Sweden

Different combinations in villa installations

Renovation: Roof ventilator + kitchen hood

Using a separate roof ventilator for the kitchen hood ensures that there will be enough power to achieve a good level of odour extraction. Of particular importance is the use of a separate mounted hood over a kitchen island, as it requires a relatively large amount of airflow.

CASA Smart kitchen hoods are connected to the pressure-controlled CASA F roof ventilator. There is also a large selection of other hoods to suit different types of kitchens and fittings that can be connected to the roof ventilator. The kitchen hoods can be assembled integrated in the upper cabinet, between the upper cabinets, placed separately or in ceilings over a kitchen island.



If you are having CASA ventilation control units fitted, there is a very energy-efficient solution with guaranteed humidity and air quality control available.

New production: FTX system + roof ventilator and Swegon kitchen hood

All newly built homes are built with well-insulated building envelopes in order to comply with building requirements regarding energy efficiency. This means that ventilation is more important than before. A controlled and demand-driven airflow is a must in order to not destroy the building with moisture problems from mould and allergies as a consequence. In addition, unpleasant odours from cooking food still need to be evacuated. The challenge is to manage the negative pressure created by the combination of an extremely insulated building shell and negative pressure from the kitchen hood.

By using Swegon CASA products, energy consumption, functionality and comfort are optimised as the products interact with each other.

Example:

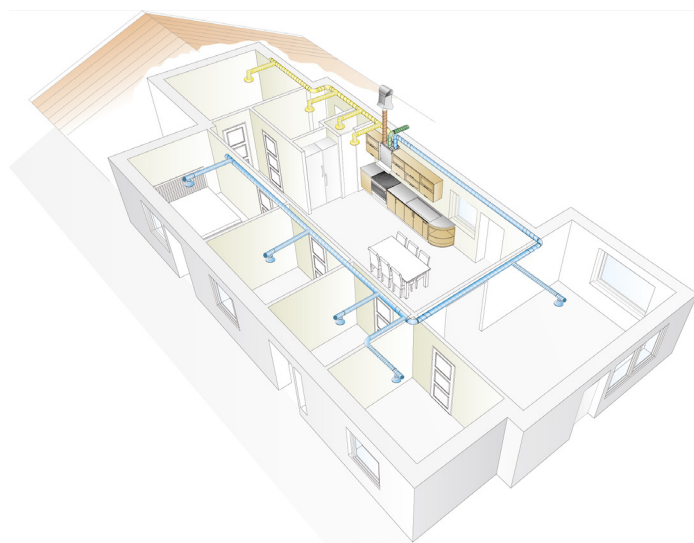
Ventilation takes place through the CASA Smart unit and the CASA Smart kitchen hood is connected to the pressure-controlled roof ventilator, the CASA F. When the kitchen hood is in use, the ventilator speeds up to keep the pressure constant. The ventilation unit then compensates for the negative pressure by increasing the supply airflow and then maintaining the air balance in the house. When the kitchen hood is turned off, the roof ventilator slows down and the unit returns to normal operation. Equipping the unit with a preheating battery also ensures the function (imbalance over the heat exchanger) operates on very cold winter days.

Renovation: FTX system + roof ventilator + kitchen hood

There are different types of ventilation solutions in older houses. Examples of ventilation solutions are natural draught, mechanical extract air ventilation (ventilator on the roof) or FTX (ventilation with recycling).

In the first two cases, it is common for problems to arise after further insulation of the house and changing windows and doors. The house becomes too sealed and problems arise with the formation of negative pressure when the kitchen hood is used.

The Swegon CASA ventilation units have been developed to counteract this by compensating for the extract air flow extracted by the roof ventilator and then maintaining the air balance in the house. The FTX system also has big advantages as it makes it possible to maintain a high level of energy efficiency, comfort and air quality.



Advantages of WiFi and radio communication

CASA F is developed roof ventilator with unique features that make installation, adjustment and operation easier. With WiFi communication, only the mounting and voltage settings need to be carried out on the roof. Control and monitoring setup, adjustment and operation/maintenance can be programmed without going onto the roof. This saves time and money and provides a safer workplace environment for installers, adjusters and caretakers/property managers.

WiFi, wireless connection

A WiFi-enabled ventilator offers easy access to the ventilator's web interface. Each ventilator can be allocated a unique identity and password. The communication is "peer to peer", which means that you don't need internet access to communicate with the ventilator.



Maintenance work

It's not only during the installation process that the CASA F features and accessories save time. During inspections of the ventilation system, it is very easy to disable outdoor temperature compensation in order to check measurements under the right conditions.

- User-friendly web interface
- Time saving
- Safe working environment
- Monitoring and alarm status
- Flexibility

Accessories Overview

IP65 safety switch

The safety switch has a cladding of insulating, impact-resistant and corrosion-resistant material and is tested in accordance with SS 428 06 05 and EN 60947-3, and is also CE-marked and SEMKO-certified. The safety switch is equipped with a lockable side handle and has separate holes for the upwards and downwards entry of wires and comes with an IP65 plug. Nominal continuous power: 16 A



External potentiometer

Rotary potentiometer of 10 kohm for manual speed control of fans with EC integral motors or for other external motor control with input from 0-10 V. Set to 0-100% for manual control signal 0-10 V.



Roof penetration collar

The roof penetration collar is made to fire grade class EI 30 and is delivered at a standard 800 mm in length. Mounting brackets are included. The internal surface finish is manufactured from type-approved synthetic fabric.



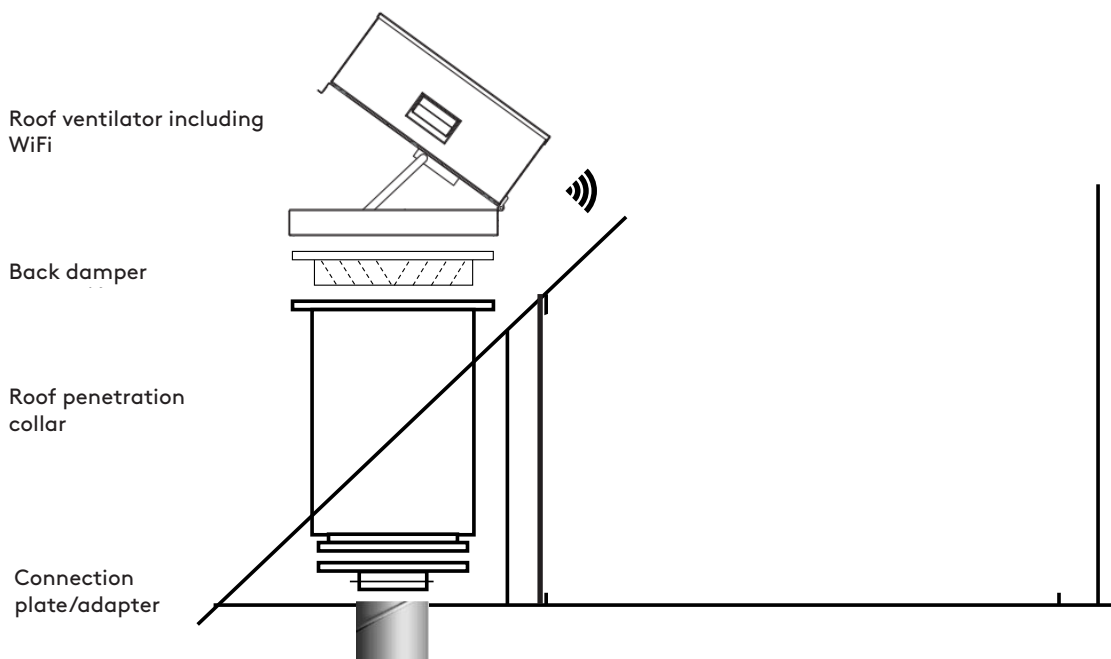
Back damper

The back damper is made of galvanised sheet metal rated corrosion class C3 in accordance with BSK 07 and has the principal purpose of avoiding draughts in the extract air duct in the event of ventilator breakdown.



Connection plate/adaptor

A connection plate/adaptor for mounting at the bottom of the roof penetration collar for connection to the circular duct. Installation examples with input parts.



Yesterday offered lovely weather and a lovely visit with Lennart Risberg from Tyresö housing, where we watched the installation of the new Swegon CASA F roof ventilator. This soundproofed roof ventilator has a built-in EC motor, pressure and temperature regulation equipment. Its unique WiFi solution enables you to connect via smartphone, which means that the ventilator doesn't need to be opened. The facts that the ventilator is quiet and reduces energy costs are obviously positive, but the most important thing that Lennart spoke about is that you can program changes and check the operating status of the ventilator using WiFi. This reduces the risk of accidents and provides a better working environment, as there is no need to climb out onto the roof. Today, we programmed the roof ventilator from a beautiful shady spot under the trees. When there's rain, snow or any other slippery conditions, you can sit comfortably and safely up in the attic and program your settings on your mobile phone.

Kalle Sile'n
Business Development AHU at Swegon Sverige AB