

FSC Series

Analog Single-Phase AC Fan Speed Controller

20250710R1

Technical Catalogue



Havkon FSC Series Analog Fan Speed Controllers are designed for manual and stepless speed control of single-phase AC fan motors supplied with 230 VAC.

Operating on the phase-cut control principle, the device regulates the effective output voltage applied to the motor, enabling precise and smooth adjustment of fan speed.

The FSC Series is used in applications such as duct fans, kitchen hoods, heat recovery units, exhaust systems and general ventilation applications where resistive and inductive loads require manual speed control. Its simple and robust analog design ensures reliable operation, while the wall-mounted construction allows easy integration into standard electrical installations.

With an integrated ON/OFF switch and compact housing design, the FSC Series provides a practical fan speed control solution for both residential and commercial environments. The series is available in 2.5 A, 5 A, and 7.5 A maximum output current versions to meet different capacity requirements.

Features

- Phase-cut analog AC speed control
- 230 VAC single-phase supply
- Stepless manual adjustment
- Compatible with resistive and inductive loads
- Built-in ON/OFF switch
- Screw terminal connection
- Wall-mounted design
- IP20 protection class
- Available in 2.5 A, 5 A and 7.5 A versions

Order Codes

FSC.25A	Maximum Output Current: 2.5 A
FSC.50A	Maximum Output Current: 5.0 A
FSC.75A	Maximum Output Current: 7.5 A

Warnings



Before starting the installation of the device, carefully read the user manual and the warnings below.

The user is responsible for any damage, loss, or personal injury resulting from failure to comply with the warnings in this manual. Do not modify or attempt to repair the device. Any intervention on the device may cause malfunction, damage to the device or the system.

In such cases, the device will be excluded from the warranty coverage.

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Technical Specifications

Electrical Data	Power Supply	230 VAC \pm 10% , 50/60 Hz
	Power Consumption	1 VA
	Output Type	Phase-cut AC output
	Maximum Output Current	2.5 A / 5 A / 7.5 A (model dependent)
	Connection	Screw terminals
Environmental Conditions	Operating Temperature	0 ... +40°C
	Storage Temperature	-25 ... +70°C (without icing and condensation)
	Relative Humidity	0...90 RH (non-condensing)
	Maximum Altitude	2000 m
Functions	Control Method	Manual potentiometer
	Speed Adjustment	Stepless
	Load Compatibility	Resistive and inductive loads
Protection & Standards	Protection Degree	IP 20
	Standard	EN 60529

Enclosure Specifications

Mounting	Wall-mounted
Dimensions	W100xH100xD55mm (Width x Height x Depth)
Weight	FSC.25A: 152 g / FSC.50A: 158 g / FSC.75A: 180 g

Fuse Ratings

FSC.25A	5x20 mm 6 A 250 V Time-lag Glass Fuse
FSC.50A	5x20 mm 10 A 250 V Time-lag Glass Fuse
FSC.75A	5x20 mm 15 A 250 V Time-lag Glass Fuse

Connection

The FSC series is a wall-mounted analog fan speed controller. The device must be installed and operated in accordance with the installation instructions. During installation, ensure that the device is not energized. The unit must be protected against moisture, vibration, and contamination. Observe the specified operating temperature limits. Signal or communication cables that are not connected to the mains must not be routed together with power cables in the same conduit. High-current lines must not pass over or near the device. Installation and electrical connections must be carried out by qualified personnel in accordance with the instructions provided in the user manual. Fuse rating and cable cross-section must be selected according to the load current and operating voltage.

- 1) Supply cables must comply with IEC 60227 or IEC 60245 requirements.
- 2) In accordance with safety regulations, the mains switch must be easily accessible to the operator and clearly marked to indicate its association with the device.

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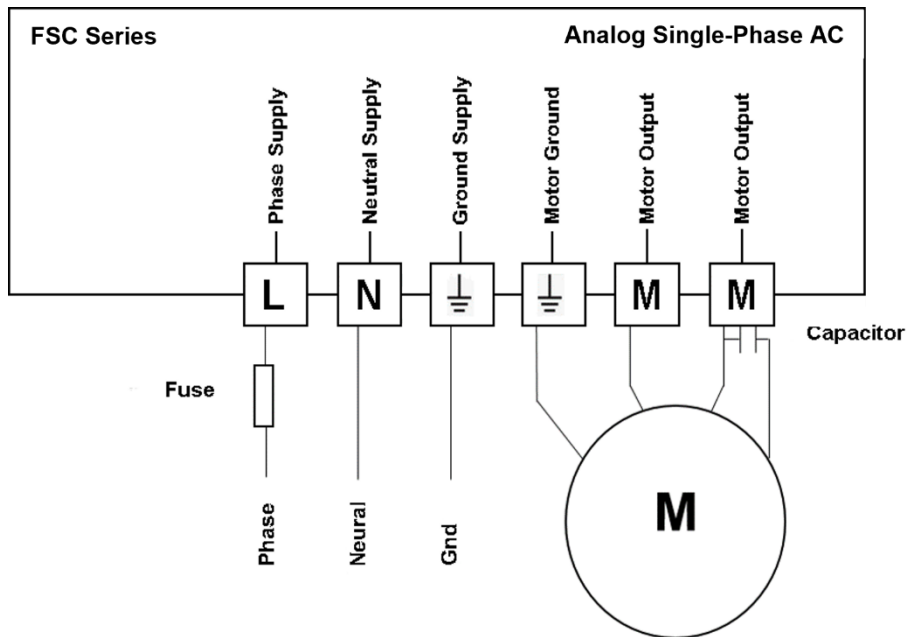
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Wiring Diagram

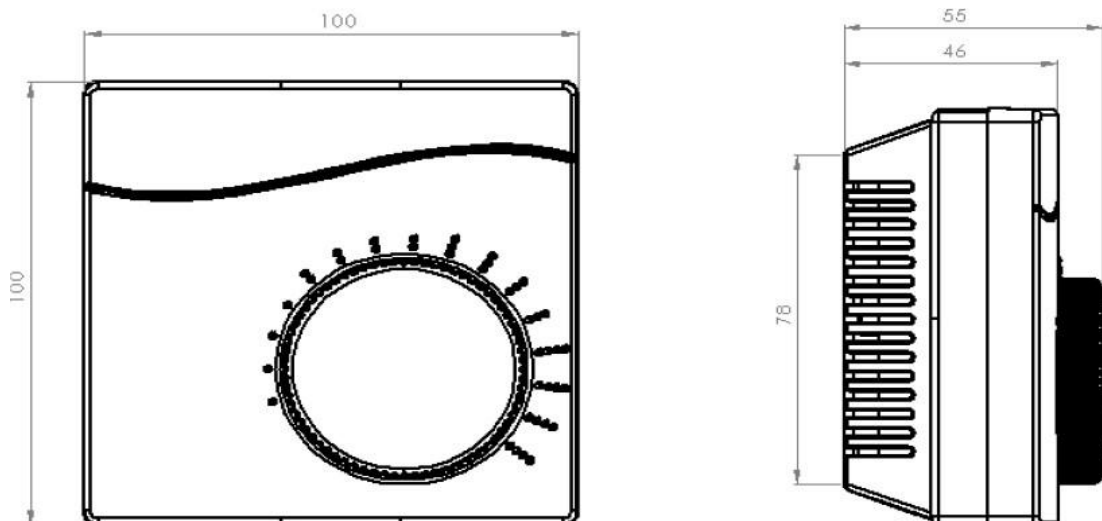
The FSC series analog fan speed controller provides phase-cut voltage control for single-phase AC fan motors. The device must be connected according to the terminal markings shown in the wiring diagram.



If the motor is equipped with a **run capacitor**, it must be connected according to the motor manufacturer's wiring diagram.

- ⚠ The motor must only be connected to the designated output terminals.
- ⚠ Do not connect the supply phase or neutral directly to the motor output terminals.
- ⚠ Install an external fuse according to the specified fuse ratings.

Dimensions



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Mounting Instructions

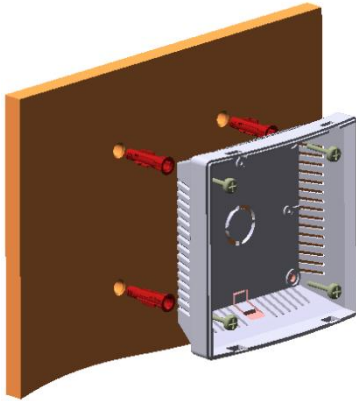


Figure 1.1

Mount the rear cover of the FSC Series Analog Single-Phase AC Fan Speed Controller on a flat surface as shown in Figure 1.1.



Figure 1.2

After completing the electrical connections, position the upper housing by inserting the upper clips into the slots as shown in Figure 1.2.



Figure 1.3

Before closing the upper cover, place the device into the lower clips as shown in Figure 1.3. Then press the upper cover until it locks into place.



Figure 1.4

After installation is completed, the device should appear as shown in Figure 1.4.