X10806 **Fan Speed Controllers**

FSC5-5A

5A, 1.1kW, 230V Enclosed DIN Rail Fan Speed Controller

CONTACT US: 0044 (0) 1704-516 501 enquiries@united-automation.com www.united-automation.com

KEY FEATURES:

- Versatile Control \checkmark Signal Options: Accommodates various industrial needs
- ✓ DIN Rail Enclosed: Easy and secure installation
- LED Indicators: Power ✓ and status indicators for quick diagnostics
- Phase Angle Mode with Soft-Start: Ensures smooth power delivery and equipment protection
- **Integrated Protection:** \checkmark Mains fuse and Class A RFI filter for reliable operation

APPLICATIONS:

- Ideal for controlling fan \geq motors.
- Suitable for small transformers and resistive loads such as heaters.
- Perfect for industrial \geq processes requiring smooth power control.

The FSC5-5A Fan Speed Controller is a powerful and versatile solution for managing single-phase 230V fan loads up to 5A. Designed for industrial and commercial applications, this 1.1KW controller provides smooth, proportional control of fan motors, small transformers, and resistive loads like heaters. Its phase-angle mode operation, combined with a soft-start feature, ensures precise and reliable performance. Housed in a DIN rail enclosure, the FSC5-5A is easy to install and maintain, making it an ideal choice for a wide range of HVAC and process control systems.

Optimise your HVAC and process control systems with the FSC5-5A Fan Speed Controller-reliable, efficient, and easy to install.

TECHNICAL SPECIFICATIONS	
Mains Voltage	230V ac +10% - 6%
Signal Span Minimum	0 to 5V dc
Signal Span Maximum	0 to 25V dc
Signal Zero Offset	0-30% of Span
Signal Input	0-5Vdc/factory default
Manual Potentiometer	5K
Soft Start Time Constant	1 second fixed
Isolation Voltage	2500V RMS
Auxiliary Output	5V dc
Triac Limiting RMS Current	16A
Peak Single Cycle Surge Current	150A
Max. Peak Voltage	600V
Current Rating	5A
Replacement Fuse	8A 32mm FF
Storage Temperature	-20°C to 85°C
Max. Working Temperature	75°C heatsink
Dimer	nsions
Enclosure with Heatsink	W72 x H113 x D68mm

YOU MUST READ THIS BEFORE INSTALLATION

ELECTRICAL SAFETY 4

WARNING: RISK OF ELECTRIC SHOCK Always consult the Installation & Maintenance Instructions before connecting this product to the power supply. WARNING: Disconnect Power Before Ser Before Servicing Ensure the electrical supply is safely disconnected before connecting to any supply, load, or control terminals



WARNING: Installation by Qualified Personnel Only

ħ

This product must only be installed or fitted by a competent, qualified installer familiar with the relevant electrical standards and installation practices

INSTALLATION REQUIREMENTS

(a)USER RESTRICTIONS

WARNING: Not for Use by Vulnerable Individuals This product is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they are supervised or instructed by a person responsible for their safety.

USAGE ENVIRONMENT WARNING: Industrial Use Only This is an industrial-grade product and is not intended for household use

HOT SURFACE WARNING

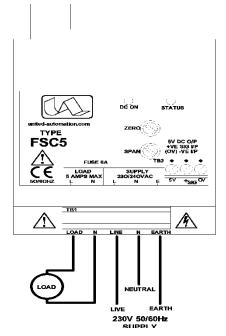
WARNING: Hot Surfaces On certain models, surfaces marked with this symbol become hot during use. Avoid direct contact and follow all thermal safety precautions.

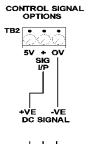
FSC5-5A

5A, 1.1kW, 230V

Enclosed DIN Rail Fan Speed Controller

INSTALLATION - CONNECTIONS









WARNING! Isolate supply when

carrying out any servicing work on this controller.

COOLING REQUIREMENTS

The heatsink rating for the standard controller is designed for natural cooling. If the controller is installed within an enclosure or cabinet, it is crucial to ensure adequate ventilation or to install forced cooling systems. When thermal trips are included, it is recommended that they be wired in line with the signal to automatically shut off power in the event of overheating.

Special attention is required for unusual heating loads, such as those involving Molybdenum, Platinum, or Tungsten, which typically exhibit a 10:1 hot-to-cold resistance ratio. These materials can draw significantly higher currents when cold. Transformers and other inductive loads also experience surge starting currents and must be paired with the correct type of phase-angle firing circuit. Such surge-prone loads should be specified at the time of ordering to ensure that appropriate slow-start mechanisms or higher-rated units are supplied to meet specific requirements.

Note: The unit is factory-set for manual control or 0-5V DC input. For 4-20mA control, a 270 Ω resistor must be fitted across the '+' and '0V' terminals, and the zero and span adjusters will need recalibration.

RECOMMENDATIONS

FUSING

It is recommended to use semiconductor (fast acting) type fuses or circuit breakers (Semiconductor - MCB) for unit protection. On initial switch on some loads may need an increased Factor of Safety (F of S) for unit and/or device protection. See SRA datasheet for information.

CE Marking

This product family carries a "CE marking". The 1.1KW phase angle controller may require a suitable remote filter. For information see the recommendation section and contact our sales desk. (See Declaration of Conformity).



BMF House - Wight Moss Way, Southport Business Park Southport PR8 4HQ ENGLAND, UNITED KINGDOM Contact Us: ೨ 0044 (0) 1704-516 501 ⊠ enquiries@united-automation.com ♦ www.united-automation.com



Page 2 of 3

FSC5-5A

5A, 1.1kW, 230V

Enclosed DIN Rail Fan Speed Controller

DOCUMENTS

 Other documents available on request, which may be appropriate for your application:

 Code
 Identity
 Description

 X10229
 RFI
 Filter recommendations: Addressing the EMC Directive

 X10213
 ITA
 Interaction: Uses for phase angle and for burst fire control

 X10255
 SRA
 Safety Requirements: Addressing the Low Voltage Directive (LVD) including, Thermal Data/Cooling, Live Parts Warning, Earthing Requirements and Fusing Recommendations

It is recommended that installation and maintenance of this equipment should be done with reference to the current edition of the I.E.T. regulations (BS7671) by suitably qualified/trained personnel. The regulations contain important requirements regarding the safety of electrical equipment. For International standards refer STANDARDS on D of C.

OPTIONAL EXTRAS

Product Code	Product Description
-	270R ¼ W Resistor
A403001	Manual (5K) Potentiometer Knob and Leads

PRODUCT CODE AND RELATED PRODUCT CODE		
Product Code	Product Description	
A72297	FSC5-5A, 1.1kW, 230V - Enclosed DIN Rail Fan Speed Controller	



BMF House - Wight Moss Way, Southport Business Park Southport PR8 4HQ ENGLAND, UNITED KINGDOM Contact Us: ೨ 0044 (0) 1704-516 501 ⊠ enquiries@united-automation.com ♥ www.united-automation.com



Page 3 of 3