

AC Fan Speed Controller

10A Maximum · FSC10A | Installation and operating instructions

1. Introduction

The FSC10A is a variable phase-angle regulator for 230V single-phase mains-driven inductive loads up to 10A, such as induction motors, fans and pumps. It provides adjustable output and an OFF switch when the potentiometer is fully anti-clockwise. An integral R-C snubber supports inductive-load control. A rear minimum-speed adjuster lets the installer set a minimum output voltage to help prevent a motor running too slowly. The triac is designed to handle high inrush currents.

2. Applications

Suitable for most simple mains-driven motors and fans, provided the motor is compatible with phase-angle / variable-voltage speed control.

3. Features

• Variable 0–98% output	• OFF switch on potentiometer
• Minimum-speed adjuster	• Single-hole fixing
• Rugged construction	• Large triac for inrush protection
• Integrated R-C snubber	

4. Installation and connection

Connect the supply and load terminals as marked. Isolate the supply before installation or servicing.

IMPORTANT MOTOR OPERATING ADVISORY

Do not operate motors below 50% of their rated power using a variable-voltage regulator. Lower settings may cause inadequate torque, stalling or overheating. Confirm compatibility with this type of speed control and follow the motor manufacturer's instructions.

5. Specifications

Maximum RMS on-state current	10A
Minimum operating current	200mA
Triac limiting RMS on-state current	25A
Peak one-cycle surge @ 10ms	250A
Peak one-cycle surge – HS model @ 10ms	300A
I ² t for fusing	112 A ² s
Isolation voltage	2500V RMS
Maximum recommended unit temperature	70°C
Maximum cable temperature	105°C
Mains supply (±10%) @ 50/60Hz	110 or 230V AC

6. Fusing

Semiconductor (fast-acting) fuses or semiconductor-rated MCBs are recommended for protection. Some loads may need an increased factor of safety at switch-on. Refer to the SRA datasheet for further information.

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