## AC Fan Speed Controller 10A Maximum FSC10A



## 1 Introduction

These variable phase angle regulators are robust and enclosed units for 230V up to 10A single phase mains driven inductive loads, such as induction motors, fans & pumps. They give fully adjustable voltage outputs from zero to maximum. These controllers also incorporate an OFF switch when the potentiometer is fully anti-clockwise.

The controller has an integral R-C snubber network for control of inductive loads and a minimum set speed adjuster (at the rear) to allow the designer/installer to fix a minimum output voltage level to prevent a motor being driven too slowly.

The large triac enables the unit to handle high inrush currents with ample safety margin on industrial installations.

### 2 Applications

Suitable for most simple mains driven motors and fans.

#### 3 Features

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

#### 4 Installation

CONNECTION

# THIS UNIT MUST BE FASTENED TO A HEATSINK RATED AT 2°C/W FOR 10A OPERATION. HEATSINK PASTE ESSENTIAL FOR GOOD THERMAL CONTACT.

5 Specifications	
Maximum rms on-state current	10A
Minimum operating current	200mA
Triac limiting rms on state current	25 A
Peak one cycle surge @ 10mS	250 A
Peak one cycle surge HS model @ 10mS	300 A
I <sup>2</sup> t for fusing	112 A <sup>2</sup> s
Isolation voltage	2500V rms
Maximum recommended unit temperature	70ºC
Maximum cable temperature	105ºC
Maximum recommended unit load at 20°C ambient, (without extra heatsink)	7 A
Maximum recommended unit load at 40°C ambient, (without extra heatsink)	5 A
Mains supply +/-10% @ 50/60Hz	110 or 230V ac

#### 6 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 the SRA datasheet for further information.

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