

## 10A Fan and Pump Speed Controller with Signal Input

### FEATURES

- Standard Din Rail mount
- Phase angle control
- Integral Protection
- Built in snubber network
- Input signal or Potentiometer (0-5/0-10VDC 4-20mA)
- Output power span and zero (Min Speed Set)
- Power and status LEDs
- Up to 10A Load
- Built in Heatsink



### DESCRIPTION

This variable phase-angle regulator has been designed for 230V, 10A single phase mains driven inductive loads, such as induction motors, fans and pumps giving fully adjustable voltage outputs from zero to maximum.

The controller has an integrated RC snubber network for control of inductive loads and a zero set speed adjuster to allow the designer/installer to fix a maximum and 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.

### SPECIFICATION

Mains supply +/- 10% @ 50Hz	230VAC
Maximum rms on-state current	10A
Minimum operating current	200mA
Triac limiting rms on state current	25A
Peak one cycle surge @ 10mS	250A
I <sup>2</sup> t for fusing	112 A <sup>2</sup> s
Isolation voltage	2500V rms
Maximum recommended unit temperature	70°C
Minimum Signal Range	0-4V dc
Maximum Signal Range	0-25V dc
Signal zero offset (Min Speed)	+60% and -40% of Span
Manual potentiometer	5kΩ Typical
Signal input resistance	5kΩ ("V" Signal), 250Ω ("mA" Signal) ±10%
Trigger isolation voltage	2500V ac (RMS)
Trigger pulse rating	250mA in to 10Ω
Storage temperature	0°C to +65°C
Max ambient operating temperature	70°C
Dimensions (Inc DIN Enclosure)	122mm (D) by 70mm (H) by 56mm (W)
Controller Heat Dissipation	1W/A

### APPLICATION

Suitable for most simple mains driven motors and fans.

## SETUP & OPERATION

### INPUT SIGNAL TERMINALS (5V, SIG I/P & 0V)

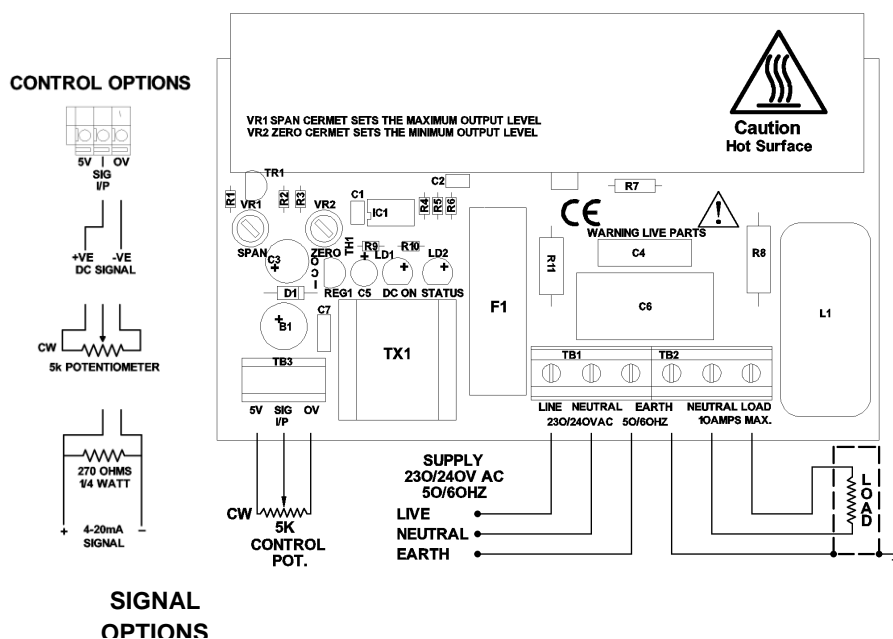
The FSC230/10 supports the industry-standard signals inputs of 0-5V/0-10Vdc and 4-20mA signal or a manual potentiometer.

### SPAN AND ZERO ADJUSTMENT

The Span and Zero cermet (VR2 & VR3) allow the user to set the minimum and maximum output voltage in relation to the input signal range [see *Typical Control Options*].

### LED INDICATORS

The FSC230/10 has two LED indicators. The green 'DC ON' is lit when power is supplied to the FSC230/10 and the red 'STATUS' illuminate proportionally in respect to the output.



## SAFETY RECOMMENDATIONS

### INSTALLATION

It is recommended that installation and maintenance of this equipment should be carried out by suitably qualified/trained personnel with reference to the current edition of the I.E.E. wiring regulations (BS7671). The regulations contain important requirements regarding the safety of electrical equipment. For International Standards refer to I.E.C./ Directive IEC 950.

### WARNING

1. LIVE terminals – Isolate supply before commencing any installation work.
2. Unit must be secured on symmetrical 35mm DIN rail DIN rail using the DIN-Housing Supplied.

## ORDERING INFORMATION

Part No: FSC230/10  
Stock Code: A72290

NOTES \*Custom line voltages are available on request

Southport Business Park, Wight Moss Way, Southport, PR8 4HQ

Tel: +44 (0)1704 516500 Fax: +44(0)1704 516501

Email: sales@united-automation.com Web: www.united-automation.com