



FSC 230V, 10A

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.

APPLICATIONS

- Suitable for most simple mains driven motors and fans.

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



TECHNICAL SPECIFICATIONS

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 ² t for fusing	112 A ² 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)	127mm (D) by 72mm (H) by 94mm (W)
Controller Heat Dissipation	1W/A



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Setup and 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

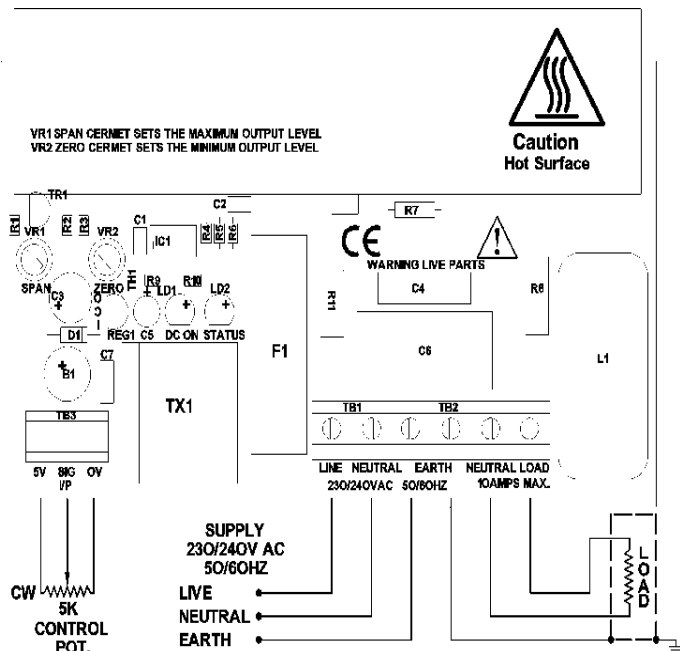
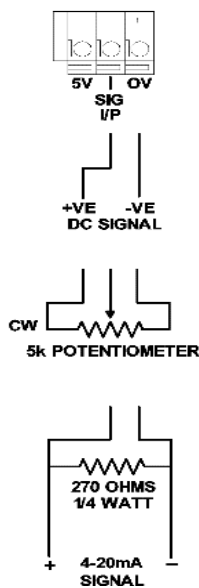
The Span and Zero cermet (VR2 & VR3) allow the user to set the minimum and maximum output voltage in relation to the input signal range [see Typical Control Options].

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.

Installation

CONTROL OPTIONS



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.

Recommendations

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.

Note: FSC230/10 - Custom line voltages are available.



Fan and Pump Speed Controller with Signal Input – X10784.



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PRODUCT CODE AND RELATED PRODUCT CODE

Product Code	Product Description
	230V 10A
A72290	FSC230/10 10A - 2.4kW 230v Fan Control Din Rail with RFI



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