

# X10208 – AVR

## 25A Variable Phase Angle Regulator

Issue 8



### 1 Interaction/Introduction

This fully-variable, powerful, phase-angle regulator is a manually controlled, robust, compact, enclosed unit for direct or transformer-coupled, single-phase loads. The high current TRIAC, fuse terminals and all main parts are enclosed and mounted on an integral heatsink to ensure long life with reliable high ambient temperature operation. The large TRIAC enables the unit to handle high in-rush currents with ample safety margin on industrial installations.

### 2 Applications

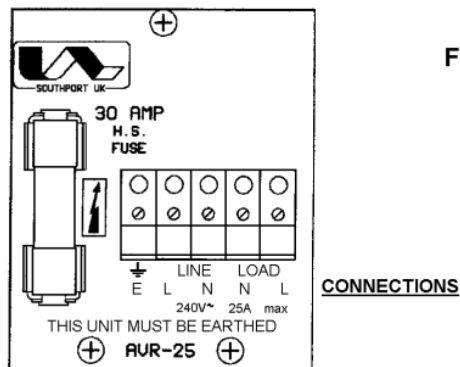
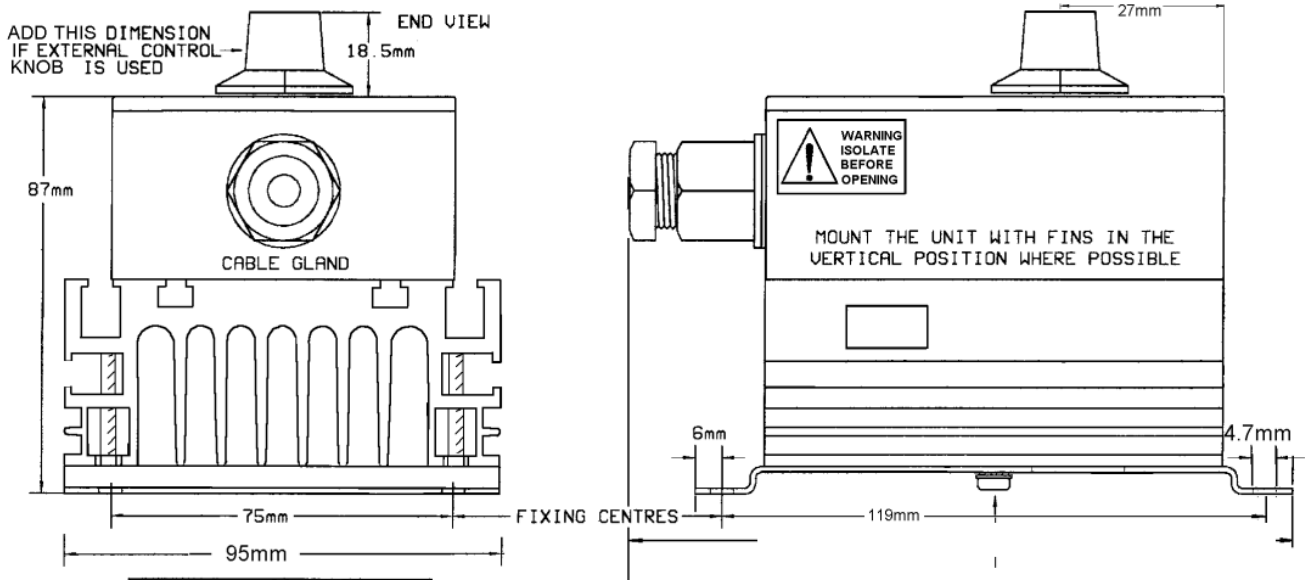
Suitable for conventional, resistive-heating elements including ovens, moulders, dryers, and some inductive loads e.g., transformers and motors.

### 3 Features

- Integrated high-speed fuse
- Heatsink is built-in
- High in-rush capability
- Single-entry cable gland
- Control knob and dial supplied



### 4 Installation



**FOR OPTIMUM PERFORMANCE AND HEAT DISSIPATION  
THE UNIT SHOULD BE MOUNTED VERTICALLY**

**WARNING  
SWITCH OFF MAINS BEFORE COMMENCING  
ANY SERVICE WORK**



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Page 1 of 2  
Issue: 8

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### 5 Technical Specifications

<b>Mains Voltage</b>	110 or 230V AC $\pm$ 10% @ 50/60Hz	<b>Isolation Classification</b>	Class II
<b>Min. load current</b>	200mA	<b>Isolation voltage</b>	2500V rms
<b>Max. rms current</b>	25A	<b>I<sup>2</sup>t for SCR fusing</b>	250A <sup>2</sup> s
<b>Man control</b>	220k $\Omega$ potentiometer	<b>Off-state dv/dt</b>	500V/ $\mu$ s
<b>Peak one cycle surge</b>	250A	<b>Storage temp.</b>	-20°C to +85°C
<b>Heatsink</b>	1.3°C/W	<b>Max. cable entry</b>	2.5mm <sup>2</sup>
<b>Max. operating temp</b>	65°C	<b>Min. level set</b>	0-50% Via cermet
<b>Replacement fuse</b>	30A 660V SCR type		

### 6 Fusing

It is recommended to use semiconductor (fast acting) type fuses or circuit breakers (semiconductor - MCB) for unit protection. Integrated fuse included (see SRA datasheet for further information).

### 7 CE Marking

This product family carries a “CE marking”. These phase angle controllers need a suitable remote filter. For information see recommendation section and contact our sales desk (see Declaration of Conformity).

### 8 Recommendations & Safety Requirements

Other documents available on request, which may be appropriate for your applications.

Code	Identity	Description
X10229	RFI	Filtering 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
X10378	ILR	Inductive loads remedy sheet for use with Phase angle controllers
P01.1	COS	UAL Conditions of Sale

**Note:** It is recommended that installation and maintenance of this equipment should be done with reference to the current edition of the I.E.T (formally I.E.E.) regulations (BS7671) by suitably qualified/trained personnel. The regulations contain important requirements regarding installation and safety of electrical equipment.

Specific installers should refer to local and national regulations.

### 9 Order Code

<b>State Part Number</b>	AVR (A15201 = 230V) (A15101 = 110V)
<b>Optional Extras</b>	F-series filter Note: When ordering a filter, the current at which the AVR is to be used at will be required



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