



# 25A VARIABLE BURST FIRED AC REGULATOR

**BVR -series**  
**X10212**

## INTRODUCTION

The BVR-25 series is a powerful OEM 25A ac energy regulator for proportional linear manual control of resistive loads using burst fire control – this is principally variable on/off bursts of complete main cycles of energy, coincident with mains zero crossover. A 50% on/off setting with a light bulb as a load would show even on/off flashes.

The unit comprises of a high current triac (power device) mounted on an integral heatsink controlled by a populated PCB with fuse and connection terminals, all enclosed, for simple connection, maintenance and installation.

## APPLICATIONS

Virtually all resistance heaters including ovens, electric furnaces, moulders, dryers, smelters, heating tapes, stress relieving, space heating and heating mantles. Not suitable for use on lighting and inductive loads.

## FEATURES

- Integral high speed fuse
- Built in heatsink & mounting plate
- Radio Frequency Interference (RFI) free
- Single entry cable gland
- Control knob and dial supplied
- 110V or 230V models available

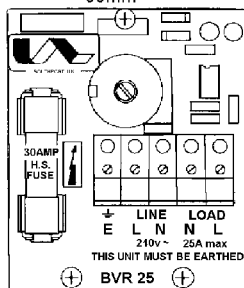
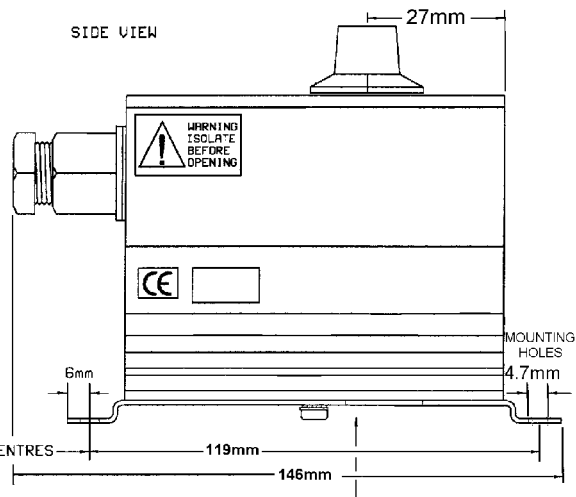
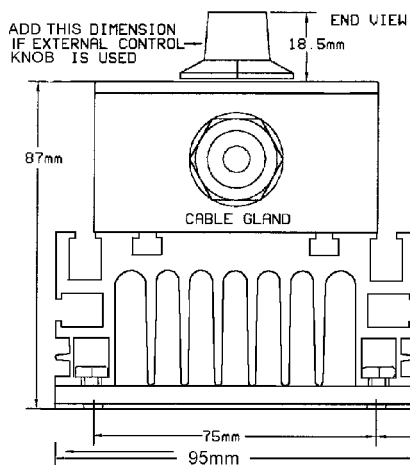
RoHS Compliant  
Directive  
2002/95/EC

Photo shows complete unit with open lid



## INSTALLATION

### Fixing/Mounting/Dimensions



### CONNECTIONS

(EARTH BONDING - DO NOT REMOVE)

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

**WARNING**  
SWITCH OFF MAINS BEFORE COMMENCING ANY  
SERVICE WORK  
THIS UNIT MUST BE EARTHED  
USING MOUNTING BASE PLATE

## SPECIFICATIONS

Mains voltage	110 or 230V ac $\pm 10\%$	Min. Load current	200mA
Frequency	50-60 Hz	Isolation voltage	2500V rms
Max. RMS Load current	25A.	I <sup>2</sup> t for SCR fusing	250A <sup>2</sup>
Integral Triac	41A (600v)	Replacement Fuse	30A 660V SCR type
Main control signal	Integral 220K pot.	Offstate dv/dt	500V/ $\mu$ s
Peak cycle surge	250A	Max operating temp	65°C
Heatsink	1.3°C/Watt	Storage temp.	0°C to +65°C
Isolation Classification	Class II	Max. Cable entry	2.5mm <sup>2</sup>

## FUSING:

A semiconductor (fast acting) type fuse (stock code F11307) is supplied as standard 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. For spares or replacements contact our sales desk.

## CE MARKING

This product family carries a "CE marking". For information see recommendation section and contact our sales desk.

## RECOMMENDATION

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

CODE	IDENTITY	DESCRIPTION
X10213	ITA	Interaction, uses for phase angle and for burst fire control.
X10255	SRA	Safety requirements - addressing the Low Voltage Directive including :- Thermal data/cooling ; "Live" parts warning & Earth requirements; Fusing recommendations.
AP02/4	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.E. wiring regulations (BS7671) by suitably qualified / trained personnel. The regulations contain important requirements regarding safety of electrical equipment. (For International standards refer to I.E.C. directive IEC950).

## ORDER CODE:

*State part ref.:* for 110V ac supply - **BVR1-25A** - 110V, 25A  
for 230V ac supply - **BVR2-25A** - 230V, 25A  
*Includes control knob, BVR dial & 65mm long Pot spindle (to be cut to suit)*

*Spares:* F11307 – 30A, 660V HS (SCR type) ferrule fuse (10mm  $\varnothing$  x 38mm long)



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Page No. 2 of 2

Issue 3

Date 15/08/06



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