

# MULTI-MODE MAINS MODULE BURST FIRED OR PHASE ANGLE

ZAX27A

X10646

#### INTRODUCTION

The ZAX27A provides accurate and precise mains control in both burst fire or phase angle control modes of operation. This printed circuit board firing circuit is capable of driving an external triac or thyristor pair power devices for any load rating. Additional features also include an uncommitted op-amp, which may be used as an error amplifier or comparator for or closed loop (feedback) control,

### **APPLICATIONS**

Virtually all resistance heaters including ovens, electric furnaces, moulders, dryers, smelters, heating tapes, stress relieving, space heating and heating mantles. This is unsuitable for use on inductive loads.

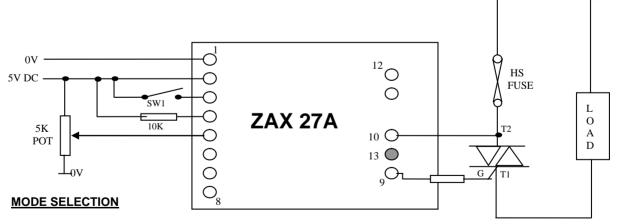
#### **MAIN FEATURES**

- Dual mode control capability.
   (phase angle OR burst fire)
- Soft start delay function
- Output overload & temperature protection
- Current limit
- Microprocessor control compatibility
- 5KV input and supply isolation
- Suitable for slave firing triacs or SCR pairs



#### **INSTALLATION**

## Connections Shown For Manual Control



SW1 (ON) = Phase Angle SW1 (OFF) = Burst Fire

#### **WARNING**

- 1. This unit requires fusing. This should be a fast acting semiconductor-type (FF5A) fuse placed in series with the 'LIVE' (240V input) supply lead.
- 2. All HAZARDOUS LIVE terminals isolate supply before commencing any installation work.

#### **SPECIFICATIONS**

High voltage side Low voltage side

5V Mains voltage 230V ac ± 10% @ 50Hz Supply voltage

Supply current 30mA (max.) Supply current 30mA (max.)

Max. RMS Load current Control input range 0 to 1V or 0 to 5V 5A (max.).

Load power range 10W (min.); 1KW (max.) Inhibit high logic >4V 90°C Over temp. shut down Inhibit low logic <3V 60°C Over temp. reset Supply voltage rejection 0.5%/V

**Isolation Classification** Class II Temperature coefficient ≤0.25%/°C  $2.5 \text{mm}^2$ Max. Cable entry Operating temperature 0 to +65°C

**Dimensions** 

Overall (Max.) 21mm (H), excluding leads x 33mm (W) x 33mm (D)

#### **FUSING:**

A semiconductor (fast acting) type fuse 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". These phase angle controllers need a suitable remote filter. For information see recommendation section and contact our sales desk.

#### RECOMMENDATIONS AND SAFETY GUIDELINES

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

CODE **IDENTITY DESCRIPTION** X20008 ZAX27A Multi-mode mains module - Instruction manual Filtering recommendation - addressing EMC Directive X10229 RFI X10213 ITA Interaction, uses for phase angle and for burst fire control. SRA Safety requirements - addressing the Low Voltage Directive X10255

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 number: ZAX27A



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**ENGLAND** 

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