



## 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.

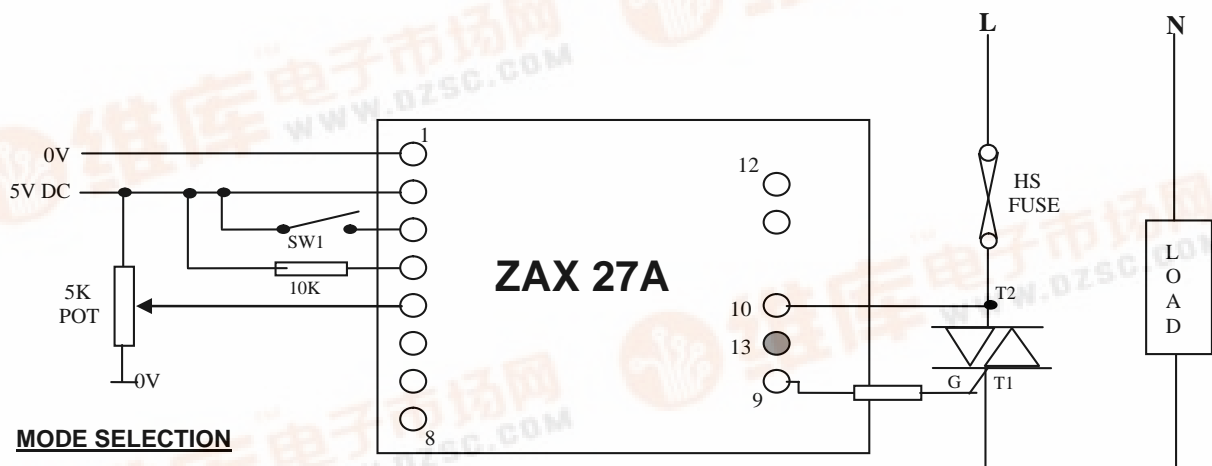
### MAIN FEATURES

- 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



#### MODE SELECTION

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**

Mains voltage	230V ac $\pm 10\%$ @ 50Hz
Supply current	30mA (max.)
Max. RMS Load current	5A (max.).
Load power range	10W (min.); 1KW (max.)
Over temp. shut down	90°C
Over temp. reset	60°C
Isolation Classification	Class II
Max. Cable entry	2.5mm <sup>2</sup>

### **Low voltage side**

Supply voltage	5V
Supply current	30mA (max.)
Control input range	0 to 1V or 0 to 5V
Inhibit high logic	>4V
Inhibit low logic	<3V
Supply voltage rejection	0.5%/V
Temperature coefficient	$\leq 0.25\%/^{\circ}\text{C}$
Operating temperature	0 to +65°C

### **Dimensions**

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

<b>CODE</b>	<b>IDENTITY</b>	<b>DESCRIPTION</b>
X20008	ZAX27A	Multi-mode mains module – Instruction manual
X10229	RFI	Filtering recommendation - addressing EMC Directive
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 number: **ZAX27A***



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