

### PHASE ANGLE TRIAC FIRING CIRCUIT - X10647.

## **PATFC**



The PATFC is a thick-film hybrid firing circuit, which gives phase control and is therefore useful as a simple proportional control firing circuit for driving an appropriate triac power device to suit most load applications.

## **APPLICATIONS**

- Ovens
- **Electric Furnaces**
- **Heating Tapes**
- **Smelters**
- Quartz Lamps / Heat Lamps
- Moulders
- Dryers
- Stress Relieving
- Space Heating and
- **Heating Mantles**

## **FEATURES**

- Compact thick film technology
- Simple triggering device



### **TECHNICAL SPECIFICATIONS**

12011110/1201 201110/1110110	
Supply voltage	50V to 250V ac @ 50 to 60Hz
Hysteresis (typical)	5%
Power rating	5A (max.).
Controlled conduction angle	10W (min.); 1kW (max.)
Maximum gate current	50mA
Storage temperature	0 to 65°C
Total conduction angle	0 to 160°
]	Further Dimensions
Overall (max.)	18(H) x 11(W) x 4(D) mm
Lead pitch	5 & 2.5mm-pin S.I.L. type
Lead length (max.)	10mm
Lead diameter	0.5mm (typical)
Body length	9mm
Body width	11mm
Body thickness	4mm





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<sup>\*</sup>This is unsuitable for use on inductive loads

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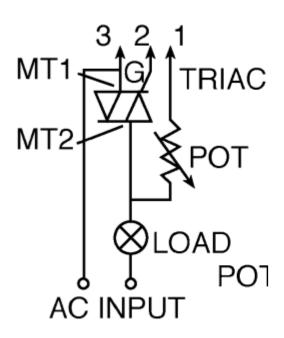


### **PATFC**



## Installation

# **Connections**



### WARNING

This unit requires fusing.

All HAZARDOUS LIVE terminals - isolate supply before commencing any installation work.

### **NOTE**

Front view - Lead connections are right to left (as above photo). Leads 1 to 2 are 2.5mm pitch; leads 2 to 3 are 5mm pitch.

### **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.

### **OPTIONAL EXTRAS**

Product Code	Product Description
A403027	250kΩ Potentiometer

<sup>\*</sup>Heatsinks (Various °C/W ratings to suit application)

### PRODUCT CODE AND RELATED PRODUCT CODE

Product Code	Product Description
D31410	PATFC Angle TRIAC Firing Circuit



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