



PHASE ANGLE TRIAC FIRING CIRCUIT

PATFC
X10647

INTRODUCTION

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

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.

RoHS Compliant
Directive
2002/95/EC

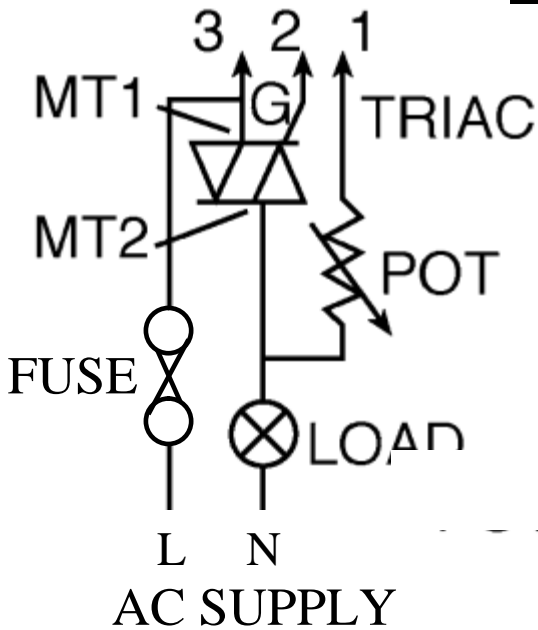
FEATURES & USE

- Compact thick film technology
- Simple triggering device
- Requires additional:-
 - Potentiometer
 - Triac power device
 - Heatsink (for use with triac)



INSTALLATION

Connections



WARNING

1. This unit requires fusing.
2. 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.

Back view - has flat face and silk screen print.

SPECIFICATIONS

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°

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

Additional requirements

Potentiometer (not supplied)	250K, 1W
Triac (not supplied)	(contact technical sales)
Heatsink (not supplied)	(contact technical sales)

FUSING:

A semiconductor (fast acting) type fuses should be used as remote failsafe device 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.

RECOMMENDATION

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

CODE	IDENTITY	DESCRIPTION
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: **PATFC**
Optional extras: 250K, 1W potentiometer
Heatsinks (various °C per Watt ratings to suit application)
Triac power devices
(contact our technical sales desk for more information)



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