

# X10224 – MAT

## Manual Phase Angle TRIAC Trigger Module

### Issue 5



#### 1 Introduction

The MAT is a variable phase-angle TRIAC trigger module. It is a compact, safe, and tamperproof unit capable of driving all typical TRIACs on 230/110V ac regulator circuits. The unit has a manual control potentiometer and minimum output trimmer built in an industrial panel mounting enclosure.

#### 2 Applications

Suitable for most ac resistive or inductive loads via a TRIAC, on single phase to neutral supplies, within voltage limits.

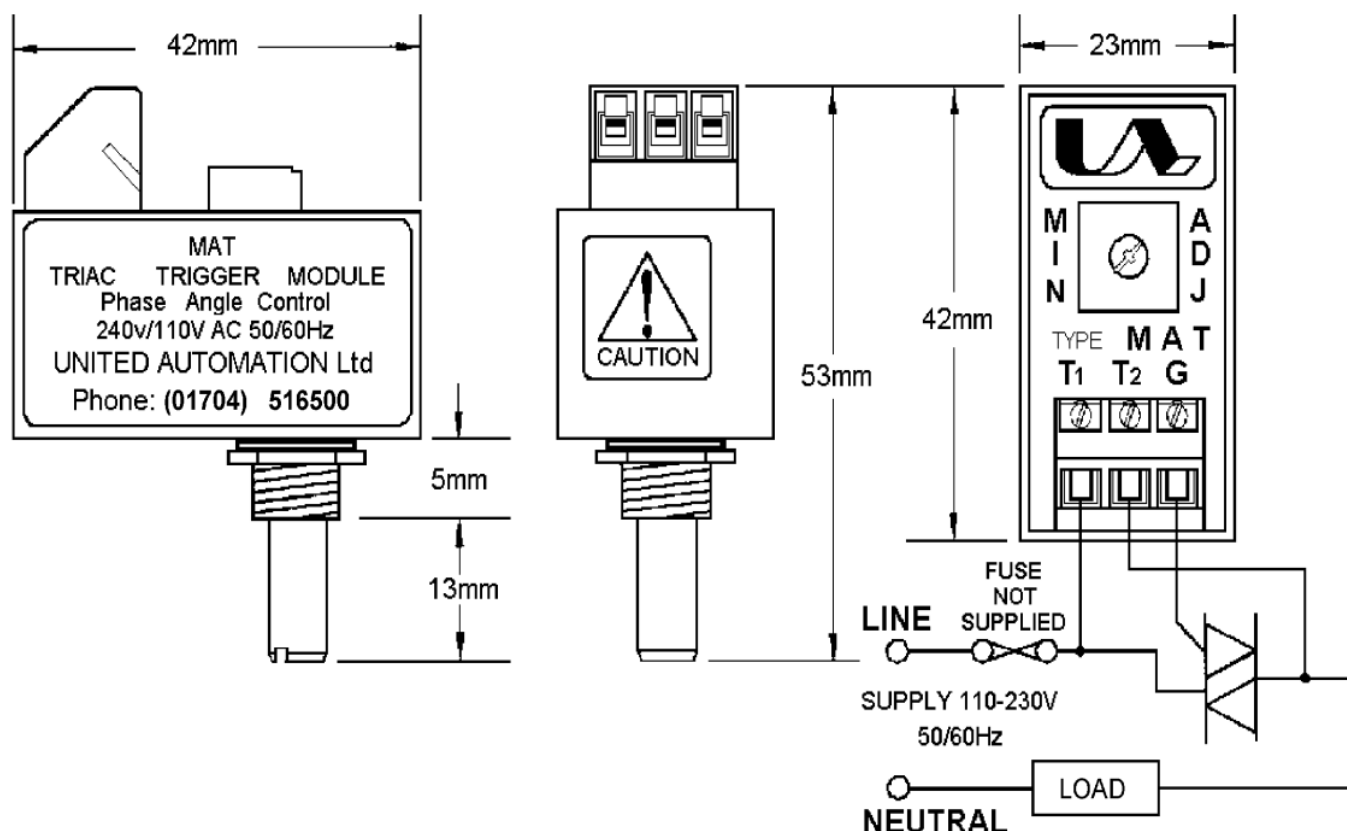
#### 3 Features

- Compact and easy to use
- Solid state reliability
- Single hole panel mounting
- Minimum offset
- Highly efficient



#### 4 Installation

##### DIMENSIONS AND CONNECTIONS



**WARNING: LIVE TERMINALS** – Switch off mains supply before commencing any service work

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#### 5 Technical Specifications

AC System Line Voltage	110/230V $\pm$ 10%
Line Frequency	50/60Hz
Minimum Offset at 110V	0-50%
Minimum Offset at 230V	0-50%
Conduction Phase Angle Typical	0-160°
Controlled Phase Angle Typical	30-160°
Isolation Voltage	2500V RMS
Maximum Leakage Current	6mA
Storage Temperature	0-85°C
Operating Temperature	0-65°C
Mounting Hole Diameter	10mm

#### 6 Fusing

It is recommended to use semiconductor fast acting type fuses or circuit breakers (Semiconductor-MCB) for unit/device protection. On initial 'switch on' some loads may need an increased Factor of Safety (F of S) for unit and/or device protection. (See the SRA Datasheet for further information).

#### 7 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. (See Declaration of Conformity).

#### 8 Recommendations & Safety Requirements

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

Code	Identity	Description
X10229	RFI	Filtering Recommendation: 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
X10378	ILR	Inductive loads remedy sheet for use with phase angle controllers
P01.1	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.T. (formally I.E.E.) regulations (BS7671) by suitably qualified/trained personnel. The regulations contain important requirements regarding installation and safety of electrical equipment. Specific installers should refer to local and national regulations.

#### 9 Order Code

State Part Number	MAT
Optional Extras	TRIAC
	Heatsink Assembly



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