

3 PHASE BURST FIRING 0-40°C / 0-150°C TEMPERATURE CONTROLLER

BMT-3A

X10298

INTRODUCTION

This microprocessor based dual range temperature control module incorporates the unique MONO-LINK™ - Gate to Gate firing feature which uses single path hard firing for each phase thyristor pair eliminating cathode firing connections. The burst firing circuit prevents fast changes in load current thus inhibiting Radio Frequency Interference.

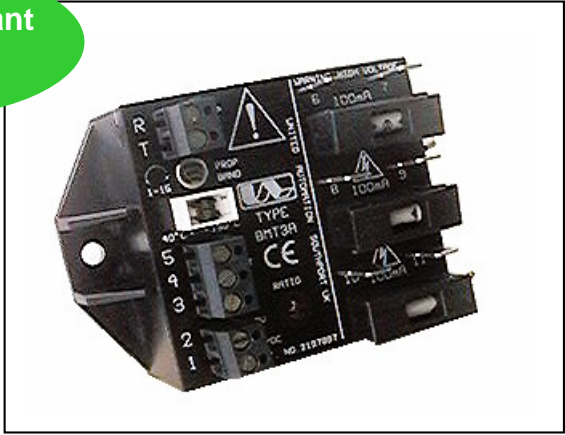
APPLICATIONS

Virtually all resistive heater load, (within temperature limitations) including air temperature controls, space heating, drying and other heating and ventilating applications.

FEATURES :

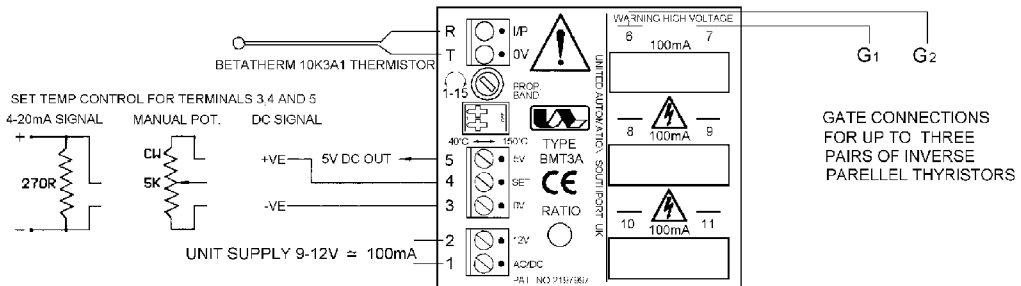
- Zero volts switching (RFI free).
- MONO-LINK™ - Gate to Gate firing
- Power ratio indicator.
- No phase timing or matching required.
- Temperature feedback via thermistor.
- Dual temperature range (panel Dials supplied)

RoHS Compliant
Directive
2002/95/EC



INSTALLATION

DIMENSIONS AND CONNECTIONS



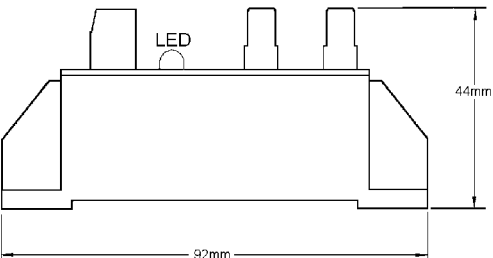
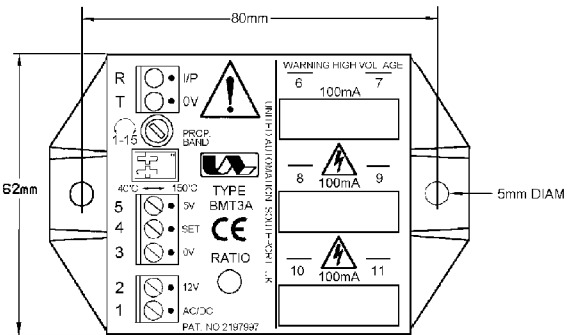
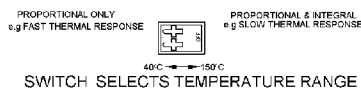
WARNING

SWITCH OFF SUPPLY BEFORE COMMENCING ANY SERVICE WORK.

NOTE

AC INPUT SUPPLY MUST BE ISOLATED FROM SIGNAL

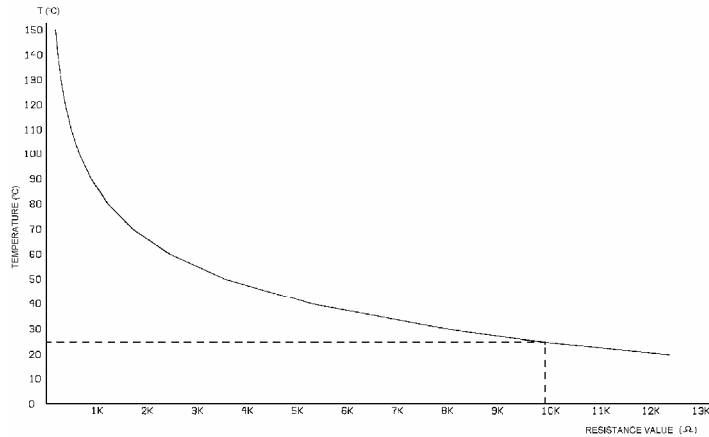
THERMAL RESPONSE TIMES



MONO LINK IS A TRADEMARK OF UNITED AUTOMATION LTD. UK.PATENT. NO. 2197997

INSTALLATION

RESISTANCE / TEMPERATURE CURVE FOR BETATHERM 10K3A1 SENSOR



SPECIFICATIONS

Set Temperature pot	5K	Temperature control options	0-40°C or 0-150°C
Thermistor 10K3A1	0-150°C	Input supply	10 to 18V ac/dc @ 100mA
Cycle time base	1s nominal	Line voltage	110V to 440V +/-10%
Trigger output I Max	800mA	Line frequency	50/60 Hz
Isolation voltage	5KV	Integral gate fuses	F100mA ceramic (HRC)
Unit operating temp	0 to 65°C	Max. Peak voltage	600V
Unit storage temp	-20 to 85°C	Prop band	1-15%

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 unit protection. Appropriate protection for unit supply (HRC F1A). See SRA Datasheet for further information

CE MARKING

This product family carries a "CE marking". For information see recommendation section and contact our sales desk. (See the Declaration of Conformity).

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 (LVD) 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 current edition of the I.E.E. 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 IEC 950).

ORDER CODE:

State part number: BMT-3A (complete with 1-each front panel label (0-40°C & 0-150°C Dial)

Optional extras include: Supply transformer, Power stack, and Betatherm 10K3A1 thermistor.



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