

# BM Series

Universal Burst Fire Trigger Module



## CONTACT US:

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## KEY FEATURES:

- ✓ Fires triacs/thyristors up to 440V
- ✓ MONO-LINK™ gate-to-gate firing
- ✓ Zero voltage switching (RFI-free)
- ✓ Opto-isolated output with status LED

## APPLICATIONS:

Ideal for controlling resistive loads such as air curtains, space heaters, furnaces, ovens, and other heating applications.

The **BM1/2/3 Universal Burst Fire Trigger Module** is designed for precise control of resistive heater loads. Its unique MONO-LINK™ gate-to-gate firing eliminates phase timing issues, while the zero-voltage switching reduces radio frequency interference (RFI). The module provides a variable on/off ratio, proportional to the manual or DC input signal.

The **BM1/2/3 module** ensures optimal performance in heating and ventilating systems with high precision and minimal interference.

## TECHNICAL SPECIFICATIONS

Signal span minimum	0 to 2V dc
Signal span maximum	0 to 25V dc
Signal zero offset	0 to 30% of span
dv/dt rating	100V/μs
Max. gate/line voltage	440V ac
Trigger isolation voltage	2500V rms
Trigger output rating	0.8A
Storage temperature	20°C to 85°C
AC input supply	18 to 24V ac/dc @ 65mA
Auxiliary output	5V dc @ 5mA protected
Line frequency	50/60 Hz
Max. ambient temperature	65°C operational
Cycle time base nominal	1 second
Mono-Link fuse	F100mA (HRC)
Manual potentiometer	2, 5 or 10kΩ
Power connections	6.3mm Amp tags



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BMF House - Wight Moss Way,  
Southport Business Park  
Southport PR8 4HQ  
ENGLAND

unitedautomationltd UA\_Limited



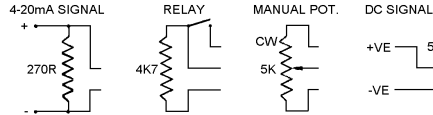
# BM Series

Up to 440V

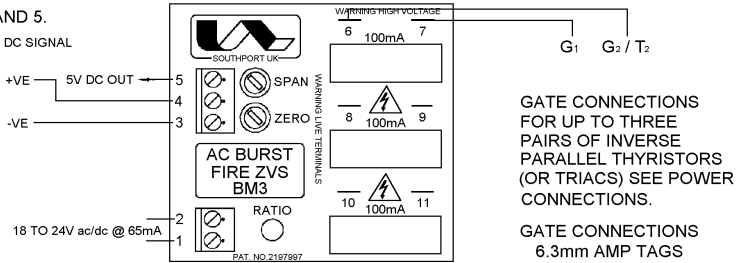
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## INSTALLATION

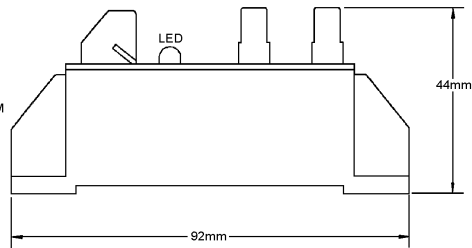
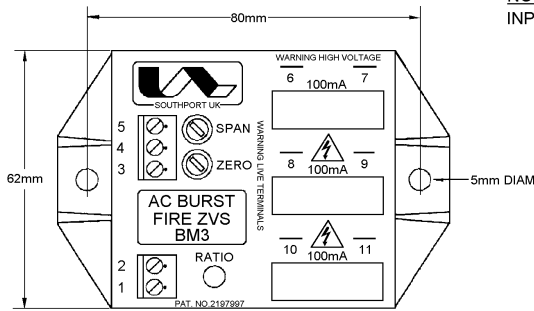
CONTROL OPTIONS FOR TERMINALS 3,4 AND 5.



**WARNING**  
SWITCH OFF SUPPLY BEFORE COMMENCING ANY SERVICE WORK.



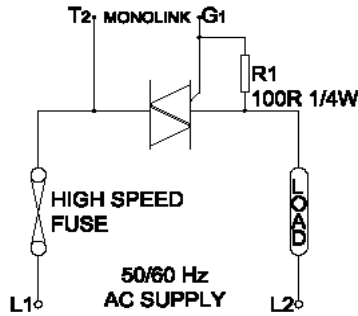
**NOTE**  
INPUT SUPPLY MUST BE ISOLATED FROM SIGNAL.



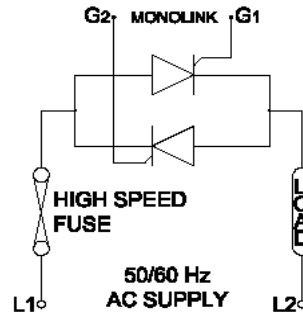
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## CONNECTIONS

### FULL WAVE TRIAC



### FULL WAVE THYRISTOR



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## RECOMMENDATIONS

### FUSING

It is recommended that semiconductor, fast-acting type fuses or circuit breakers (Semiconductor-MCB) be used for unit protection. On initial operation 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.

## DOCUMENTS

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

Code	Identity	Description
X10390	ZSS	Zero and span setup procedure
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
P01.1	COS	UAL Conditions of Sale

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
A403001	Manual (5K) Potentiometer Knob and Leads
T30201	Supply Transformer
Z01062	Heatsink Compound Syringe (Must be applied while fitting)
When ordering a filter, the current at which the FC11AL/2 is to be used at will be required. United Automation can also supply fuses. For more details, please contact us enquiries@united-automation.com	

## PRODUCT CODE AND RELATED PRODUCT CODE

Product Code	Product Description
A32411	BM1 - Three phase - Burst fire Firing circuit
A32413	BM2 - Three phase - Burst fire Firing circuit
A32414	BM3 - Three phase - Burst fire Firing circuit



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