

X10261

TRIGGER MODULES | SINGLE PHASE

# FC11BL/2

Up to 25A

Burst Fire Firing Trigger Module

## CONTACT US:

☎ 0044 (0) 1704-516 501

✉ enquiries@united-automation.com

🌐 www.united-automation.com



## KEY FEATURES:

- ✓ **Integrated 25A Triac:**  
Reduces wiring complexity and enhances reliability.
- ✓ **Universal Signal Matching:** Compatible with a wide range of voltage or mA control signals.
- ✓ **Status LED:** Provides clear output level indication for easy monitoring.
- ✓ **No External Filtering Needed:** Simplifies installation and setup.
- ✓ **Energy Efficient:** Consumes less than 2W of power.
- ✓ **Adjustable Soft Start:** Provides smooth power ramp-up, protecting the load from sudden surges.

## APPLICATIONS:

The FC11BL/2 is perfect for controlling heating elements and other loads in environments such as:

- Ovens and Industrial Heaters
- Fish & Chips Shops and Restaurants
- Hospitality Settings
- Quartz Lamps and Heat Lamps
- Moulders and Dryers
- Inductive Loads like Transformers and Motors

The **FC11BL/2 Burst Fire Firing Trigger Module** is a single-phase firing module that simplifies installation by integrating its own power device. This module is designed for controlling heating loads up to 25A when mounted on a suitable heatsink, making it ideal for various industrial and commercial heating applications. The module employs burst firing technology, operating on 1-second nominal time base, with zero-crossing triggered output that ensures a smooth and consistent power delivery. This method guarantees that full sine wave cycles are delivered to the resistive load, minimizing rapid current changes and reducing Radio Frequency Interference (RFI).

The **FC11BL/2 Burst Fire Firing Trigger Module** is a robust and efficient solution for managing heating loads in demanding environments, offering reliable performance with minimal setup requirements.

## TECHNICAL SPECIFICATIONS

Signal span minimum	1.5 to 5V dc
Signal span maximum	5 to 25V dc
Signal zero offset	0 to 25% of span
Signal input resistance	5kΩ ±20%
Manual potentiometer	2, 5 or 10kΩ
Cycle time base	1 sec nominal
I <sup>2</sup> t for fusing (10m sec)	250A <sup>2</sup> s
Max operating temperature	65°C
Isolation voltage	2.2kV rms
AC input power (1 and 2)	12 to 18V ac @ 65mA
Auxiliary output	5V dc
Triac limiting rms current	25A
Line voltage	25V to 250V (50/60 Hz)
Peak one cycle surge	250A
Max. peak voltage	600V
Power consumption	1.7W
Storage temperature	0°C to 85°C
Max. rms on-state current	25A



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

united automation

unitedautomationltd UA\_Limited



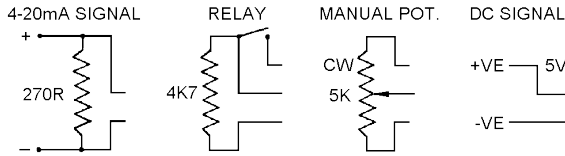
# FC11BL/2

Up to 25A

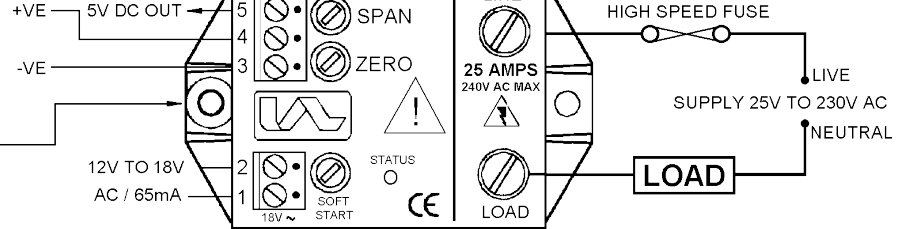
Burst Fire Firing Trigger Module

## INSTALLATION

CONTROL OPTIONS FOR TERMINALS 3,4 AND 5



**WARNING**  
THIS UNIT MUST BE EARTHED



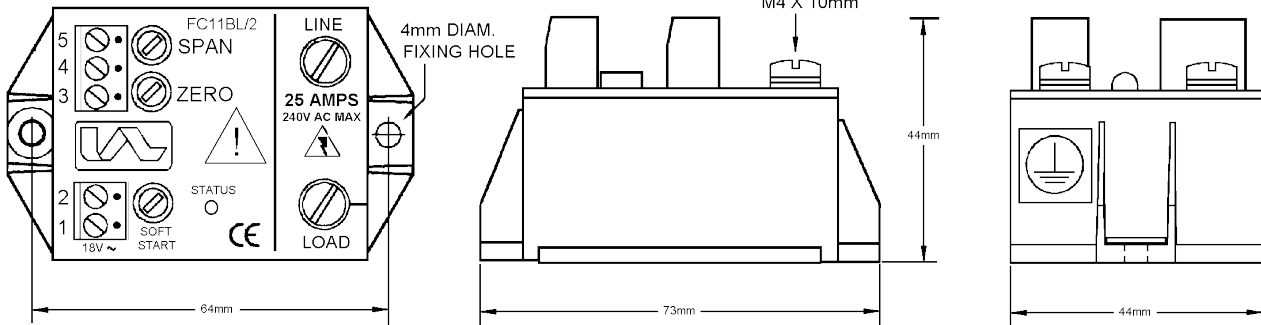
NOTE: AC INPUT MUST BE ISOLATED FROM SIGNAL AND BE IN PHASE WITH LINE VOLTAGE.

ADJUSTABLE  
PHASE ANGLE  
SOFT START

PLAN VIEW

SIDE VIEW  
POWER CONNECTIONS  
M4 X 10mm

END VIEW

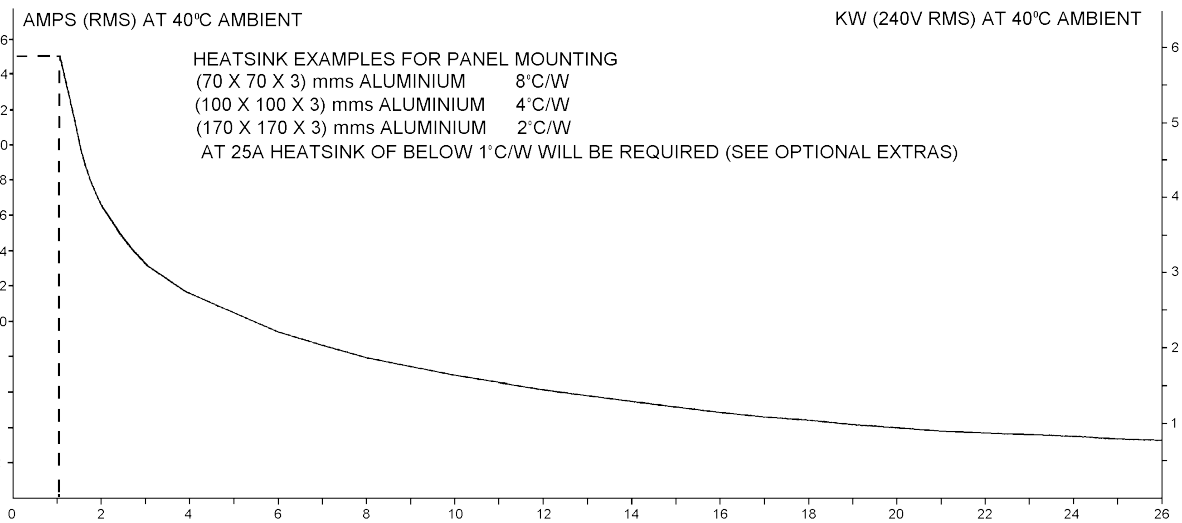


USE HEATSINK COMPOUND FOR EFFECTIVE THERMAL COUPLING

WARNING LIVE TERMINALS

SWITCH OFF MAINS SUPPLY BEFORE COMMENCING ANY SERVICE WORK

## COOLING REQUIREMENTS



THERMAL RESISTANCE OF HEATSINK °C/W

THERMAL DATA

WITH HEATSINK AS SPECIFIED, THE MAXIMUM LOAD CURRENT CAN BE DETERMINED. THIS IS THE MAXIMUM LOAD CURRENT POSSIBLE WITHOUT EXCEEDING THE DEVICE RATINGS.



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



# FC11BL/2

Up to 25A

Burst Fire Firing Trigger Module

## RECOMMENDATIONS

### FUSING

It is recommended to use semiconductor (fast acting) type fuses or circuit breakers (semiconductor-MCB) for 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 further information.

### DOCUMENTS

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
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
Z01062	Heatsink Compound Syringe (Must be applied while fitting)
T30201	Transformer 2VA Dual Primary, Dual Secondary

## PRODUCT CODE AND RELATED PRODUCT CODE

Product Code	Product Description
A32419	FC11BL/2 - Burst Fire Firing Trigger Module



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

united  
automation

[@](#) [f](#) [in](#) [d](#) unitedautomationltd [UA\\_Limited](#)



27 August 2024 | Issue: 11

Page 3 of 3