



# BVM400F Battery Voltage Monitor

Genset Controls - Timers - Monitors - Trips - Battery Charging - Spares & Accessories - Custom Products

Although designed to provide Over and Under (Battery) Voltage monitoring in Gen-Set & Battery Charging installations, the BVM400F series has many other applications.

- ◆ Monitors its own supply
- ◆ Integral Timer
- ◆ Scaled potentiometers for 'Level' and 'Delay'
- ◆ Industry standard 8 pin plug-in module



## OPERATION

While connected to a suitable DC supply the green 'Power' led will illuminate. If the DC supply voltage is 'out of limits' the 'Amber' Led will illuminate and if it remains in that state for the duration of the time delay, its alarm contacts will change over. The red 'O/P' led indicates when the appropriate O/P Relay is energised. Whenever the voltage changes from 'Out of Limits' to 'Within Limits', the timer and O/P is reset immediately.

## CONNECTIONS

- 1 relay contacts (c/o)
- 2 + VDC supply
- 3 relay contacts (n/o)
- 4 relay contacts (n/c)
- 5
- 6
- 7 - VDC supply
- 8

Contacts above shown de-energised.

### Internal switch settings

DIP SWITCH	1	2
4 min to 4 hr	off	off
1 sec to 60 sec	on	off
4 sec to 4 min	off	on
30 sec to 30 min	on	on *

### SLIDE SWITCH

'Off' = Energise at trip point \*  
'On' = De-energise at trip point

\* Set, unless specified otherwise

## BUILD OPTIONS

- BVM400FL - - / - - **Low** (under) voltage monitor (i.e. BVM400FL/12)  
 BVM400FH - - / - - **High** (over) voltage monitor (i.e. BVM400FH/12)  
 BVM400F - **R** - / - - **Reversed phasing** – relay de-energises at the trip point (i.e. BVM400FHR/12)  
 BVM400F - - **T** / - - **Through** panel mounting case  
 BVM400F - - - / **12** **12V** Lead-Acid battery  
 BVM400F - - - / **24** **24V** Lead-Acid battery  
 BVM400F - - - / **09C** **9 Cell Nicad** battery (nominal 12V system)  
 BVM400F - - - / **10C** **10 Cell Nicad** battery (nominal 12V system)  
 BVM400F - - - / **18C** **18 Cell Nicad** battery (nominal 24V system)  
 BVM400F - - - / **20C** **20 Cell Nicad** battery (nominal 24V system)

Note 1: Please specify the 'number of cells' and type of battery (Nicad or Lead-Acid) see above.

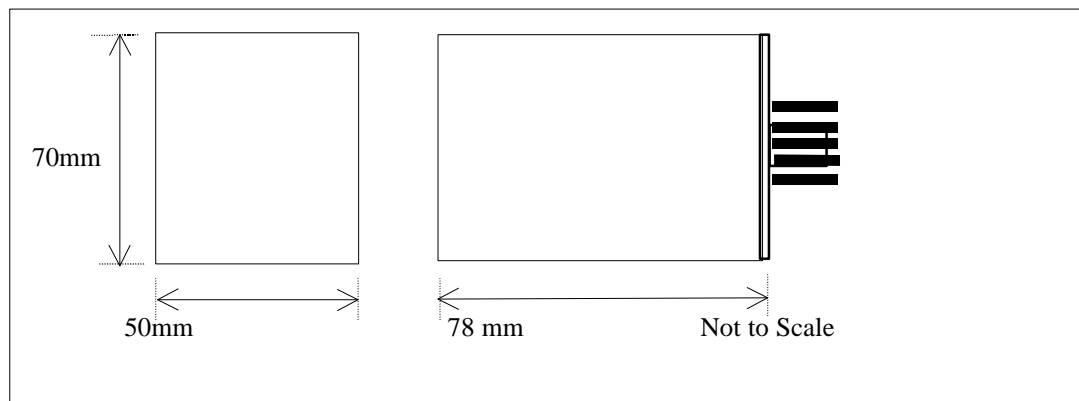
Note 2: Other voltages to order (i.e. 48Vdc, 110Vdc)

Note 2: For 'Customised' versions ---- please contact the Sales Desk for price and delivery.

## SPECIFICATION

- CONSTRUCTION :** Reversed screen-printed “LEXAN” front & side labels.  
Printed Circuit Boards(s) varnished as standard.
- TEMPERATURE :** Operating -10<sup>0</sup>C to +55<sup>0</sup>C  
Storage -25<sup>0</sup>C to +70<sup>0</sup>C
- DIMENSIONS :** 50mm x 70mm Front  
92mm deep - (78 mm to the mounting base)  
70 mm x 53 mm - Panel cut-out ( suffix ‘T’ version only)
- TERMINATIONS :** Industry standard 8 pin relay base.
- INDICATORS :** Light Emitting Diodes (LED’s) : ‘Power’ (green), ‘Level’ (amber) & ‘Relay’ (red)
- CONTROLS :** Front panel (scaled) potentiometers for ‘Level’ and ‘Delay’
- WORKING RANGE :** 9 - 16VDC (12V input) & 18 - 32 VDC (24V input)
- CONTACT RATING :** 5 A / 230 VAC (Resistive ) de-rate to 14% for all inductive loads
- DELAY :** 30s - 30m set at 15m (internal DIP switches for ranges: 60s / 4m / 30m / 4h)
- PHASING :** Energise at trip point, unless specified otherwise (internal slide switch to reverse).
- TRIP LEVEL :** 13.0 - 16.0V set at 14.5 for ‘HI’ Level (unless specified otherwise) on 12V systems  
10.0 - 13.0V set at 11.5 for ‘LO’ Level (unless specified otherwise) on 12V systems  
26.0 - 32.0V set at 29.0 for ‘HI’ Level (unless specified otherwise) on 24V systems  
20.0 - 26.0V set at 23.0 for ‘LO’ Level (unless specified otherwise) on 24V systems
- LEVEL RANGE :** ‘Min’, ‘Max’ and ‘Set’ values for Level and Delay are recorded on the side label
- BATTERY TYPES :** Please specify the ‘number of cells’ if used with **NICAD** batteries.

### Dimensions



**Please refer to our latest Catalogue & Price List for current ‘build options’**



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