



BVM420F (Dual) 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 BVM420 series has many other applications.

- ◆ Self powered - monitors its own supply
- ◆ Two Independent channels
- ◆ Separate 'Trip Level' and 'Delay' per channel
- ◆ 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's will indicate whichever channel is affected and if it remains in that state for the duration of its time delay, the appropriate alarm contacts will change over. The red 'Relay' LED's indicate when the appropriate 'Relay' is energised. Whenever the voltage changes from 'Out of Limits' to 'Within Limits', the relevant timer and O/P is reset immediately.

CONNECTIONS

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

Contacts above shown de-energised.

Internal switch settings / channel

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

ORDERING INFORMATION

- BVM420FLH** - - - / - - Low / High (under/over) voltage monitor (i.e. BVM420FLH/12)
BVM420LH - - - - / - - as above but recessed Trip & Delay potentiometers
BVM420FLH - R - / - - Reversed phasing – relay de-energises at the trip point (i.e. BVM400FHR/12)
BVM420FLH - T / - - Through panel mounting case
BVM420FLH - - / 12 12V Lead-Acid battery
BVM420FLH - - / 24 24V Lead-Acid battery
BVM420FLH - - / 09C 9 Cell Nicad battery (nominal 12V system)
BVM420FLH - - / 10C 10 Cell Nicad battery (nominal 12V system)
BVM420FLH - - / 18C 18 Cell Nicad battery (nominal 24V system)
BVM420FLH - - / 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.

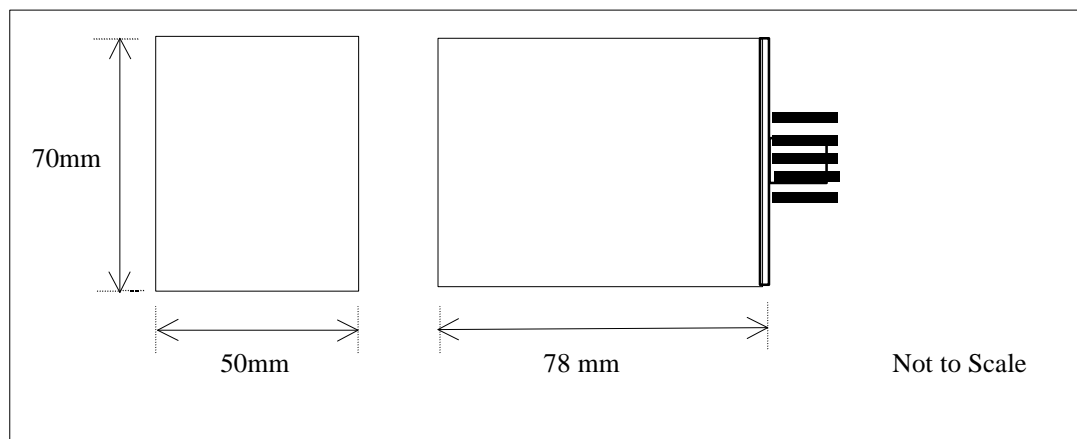
Note 2: Other voltages to order (i.e. 48Vdc, 110Vdc)

Note 3: 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 -10⁰C to +55⁰C
Storage -25⁰C to +70⁰C
- 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 :** 5 Light Emitting Diodes (LED’s) : ‘Power’ (green), ‘Level’ (amber) & ‘Relay’ (red)
- CONTROLS :** Separate (scaled) potentiometers for ‘Trip’ and ‘Delay’ per channel
- 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

Dimensions



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



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