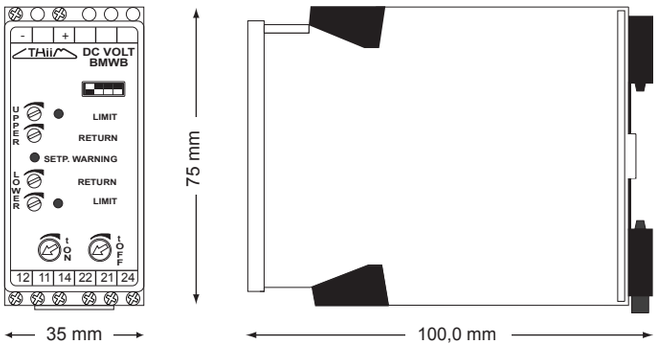


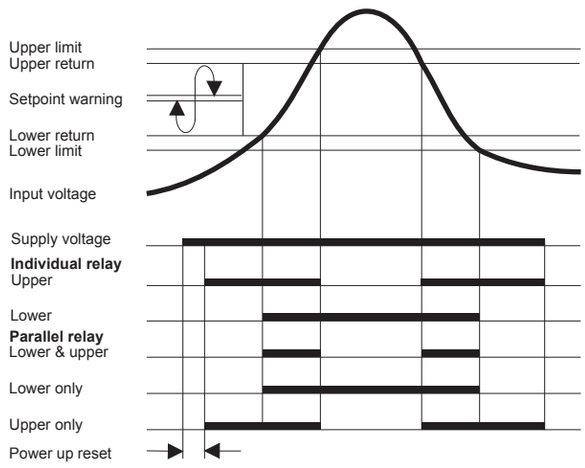
DC VOLTAGE MONITORING RELAY

Type:BMWB

FEATURES

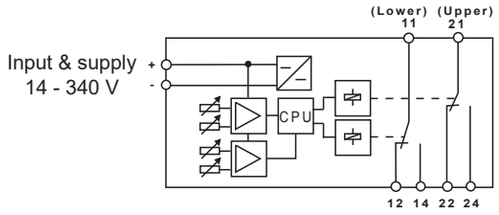
- **Includes two relays for use in parallel or for individual under and over voltage signalisation**
- **Accurateadjustmentforupperlimit,upperreturn, lower limit and lower return by means of multiturn potentiometers**
- **Easy dipswitch setting selects function as under and over voltage relay, window relay or under or over voltage relay only**
- **LEDs indicate the state of the input**
- **LED indicates the state of the relay**
- **LEDs indicate when the timing function is active**

FUNCTION DIAGRAM



CONNECTION DIAGRAM

Rail mounting



Description:

BMWB is a combined over and/or under voltage relay.
The voltage relay is designed for precise monitoring of a wide range of DC voltages from 14V to 340V.
With a build in high efficiency switch mode power supply, the BMWB is able to cover the whole measuring range without the need of an external supply.
The BMWB can by means of dipswitches be set to work as a relay for monitoring under voltage and over voltage with two individual C/O contacts, or the contacts can be paralleled and the BMWB be used as a window discriminator relay where both C/O contacts are in the powerless position outside the window.
With the paralleled relays the BMWB can be set to only register under or over voltage.

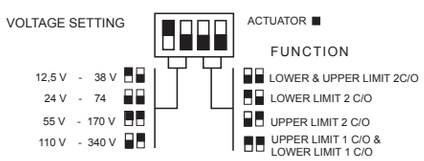
Operation:

When the supply voltage is applied, the - power up reset - period begins. If a voltage within the allowed voltage range is applied to the input, the internal relay pulls in at the end of the reset period.
If the input voltage exceeds the adjusted upper or lower limit, the corresponding relay or both relays drops out.
If the input voltage comes between the upper return and the lower return, the relay pulls in.
As under voltage relay only, the relays remains energized for input voltages exceeding the upper limit.
As over voltage relay only, the relay remains energized for input voltage under the lower range limit, until it drops out due to power loss at inputs below 14 V.

Application:

Voltage monitoring in UPS, stationary and mobile battery installations.

PROGRAMMABLE FEATURES



LED explanation:

Setpoint warning LED:	
LED off	Upper limit & lower limit OK
Constant red	Upper limit & lower limit inversed
Upper limit LED:	
Pulses Green / Red	Relay going towards Off (21-22 closing)
Pulses Green / LED off	Relay going towards On (22-24 closing)
Constant Green	Relay On
Constant Red	Relay Off, input beyond upper limit
LED off	Relay Off
Lower limit LED:	
Pulses Green / Red	Going towards Off (11-12 closing)
Pulses Green / LED off	Going towards On (12-14 closing)
Constant Green	Relay On
Constant Red	Relay Off, input beyond lower limit
LED off	Relay Off

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SPECIFICATIONS

INPUT	DC voltage 0 - 340 V	
Ranges selectable by dipswitch	14 V - 38 V 24 V - 74 V 55 V - 170 V 110 V - 340 V	
Differential	Adjustable within upper and lower limit	
PERFORMANCE PARAMETERS		
TIMING		
Response time	Approx. 200 msec.	
Time range during run	Separate On and Off delay 0 - 10 sec. adjustable	
ELECTRICAL		
Temp. dependence	Typ. ± 0.02 % / °C	
OUTPUT	Relay, 2 x 1 C/O, AgNi/Au	
Contact rating	6 A, 250 VAC, 1500 W See figure	
Mechanical life	30 million operations	
SUPPLY	DC voltage direct from input	
Voltage range	14 - 340 Volts (Max. 360V)	
Power consumption	Max 3 W	
GENERAL		
Temperature range	- 25 °C to + 55 °C ambient	
Humidity	Up to 90 % RH non-condensing	
Dielectric test voltage	Coil to relay contacts	4000 VAC
	Pole to pole	2500 VAC
Weight Nett.	0.15 kg	

CE

	International Standards
EMC directive 89/336:	EN50081 - Emission
	EN50082 - Immunity
Low voltage directive 73/23:	EN60255 - Electrical Relays

ORDERING INFORMATION

EXAMPLE: BMWB 1434 D A 3 C

TYPE
DC voltage monitoring control relay — BMWB

INPUT AND SUPPLY VOLTAGE
14 V - 340 V DC — 1434

ADJUSTMENT
Trimpot and dipswitch adj. — D

HOUSING
Rail mounting — A

SIZE
35 mm. — 3

CODE END — C

Relay Contacts:

Max. breaking capacity
A - resistive load DC
B - resistive load AC