



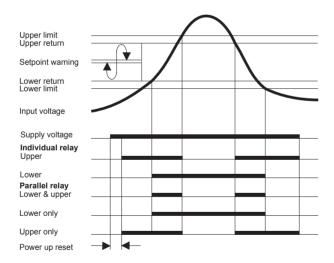
# DC VOLTAGE MONITO-RING RELAY

Type:BMWB

#### **FEATURES**

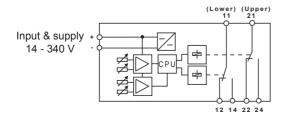
- Includes two relays for use in parallel or for individual under and over voltage signalisation
- Accurateadjustmentforupperlimit,upperreturn, lower limit and lower return by means of multiturn potentiometers
- Easy dipswitch setting selects function as under and over voltage relay, window relay or 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.

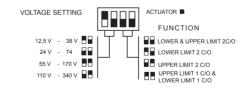
As under voltage relay only, the relays remains energized for input voltages exceeding the upper limit.

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.

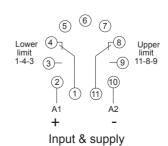
# Application:

Voltage monitoring in UPS, stationary and mobile battery installations.

### PROGRAMMABLE FEATURES



### Socket Mounting



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### **SPECIFICATIONS**

INPUT DC voltage 0 - 340 V

Ranges selectable 14 V - 38 V by dipswitch 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 Typ. ± 0.02 % / °C Temp. dependence

Relay, 2 x 1 C/O, AgNi/Au 6 A, 250 VAC, 1500 W See figure OUTPUT Contact rating

30 million operations Mechanical life

SUPPLY DC voltage direct from input 14 - 340 Volts (Max. 360V) Voltage range

Power consumption Max 3 W

# GENERAL

Temperature range - 25 °C to + 55 °C ambient Up to 90 % RH non-condensing Humidity

Dielectric test voltage Coil to relay contacts 4000 VAC Pole to pole 2500 VAC

Weight Nett. 0.15 kg



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

#### **ORDERING INFORMATION**

EXAMPLE:

TYPE DC voltage monitoring control relay

INPUT AND SUPPLY VOLTAGE 14 V - 340 V DC

ADJUSTMENT Trimpot and dipswitch adj.

HOUSING

Rail mounting Socket Mounting

35 mm. CODE END

SIZE

BMWB F 1434

BMWB 1434

D A 3 C

### **Relay Contacts:**

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

