

Basic Range

BU1-DC2-O - DC Overvoltage Relay

Application

Supervision of DC overvoltage

Function

Unit **BU1-DC2-O** is equipped with an overvoltage ($U>$) supervision with adjustable pick-up values, trip delay (t) and hysteresis (DIFF).

The DC voltage measured is constantly compared with the set reference values. Any voltage signal, which exceeds the set reference value for overvoltage, will cause the relay to trip after elapsing of the time delay.

Pick-up of the supervision circuit, is displayed by the flashing LED ($U>$).

At $U>$ tripping LED $U>$ is steady lit.

Technical data

Rated voltage U_n	: 12 V or 24 V
Power consumption	: 3 W
Accuracy	: $\pm 5\%$ of set value
Dropout to pickup ratio	: dependent on the set hysteresis
Dropout time	: 300 ms
Minimum operating delay	: 300 ms

Output relay

Maximum breaking capacity ohmic	: 1250 VA AC/120 W DC
Inductive	: 500 VA AC/75 W DC
Rated current	: 5 A
Making current	: 20 A

System data

Regulations	: VDE 0435 part 303
Temperature range at storage and operation:	: -25°C to 70°C

Mechanical stress

Shock	: class 1 acc. to DIN IEC 255-21-2
Vibration	: class 1 acc. to DIN IEC 255-21-1
Degree of protection unit front	: IP 40 at closed front cover
Weight	: approx. 0.3 kg
Mounting position	: any

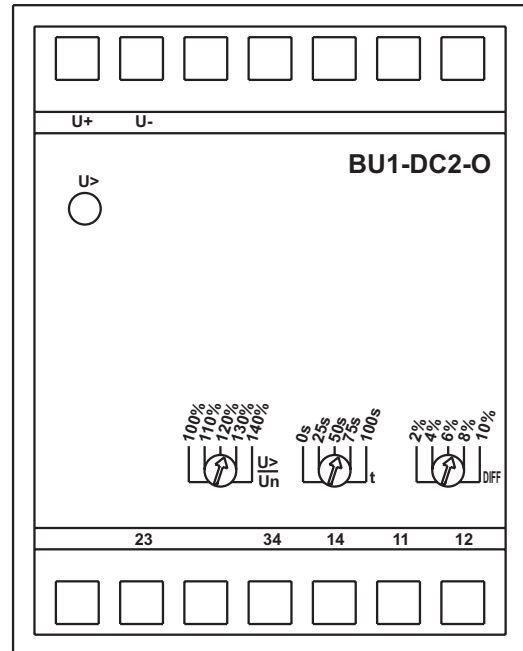


Fig. 1 : Front plate

Unit **BU1-DC2-O** is designed to be fastened onto a DIN rail acc. to DIN EN 50022, same as all units of the BASIC RANGE.

The front panel of the unit is protected with a sealable transparent cover (IP40).

Please remove the transparent cover at the appropriate openings with a screw driver to adjust the relay.

LEDs

LED $U>$ indicates tripping at overvoltage (steady light)
Pick-up is indicated by flashing LED ($U>$).

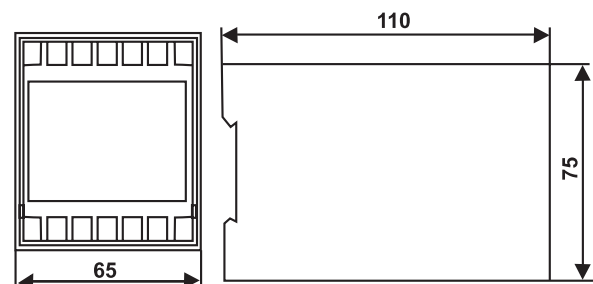


Fig. 2 : Dimensional drawing BU1-DC2-O

Auxiliary voltage supply

Unit **BU1-DC2-O** needs no separate auxiliary voltage supply. The supply voltage can be formed directly from the measuring quantity.

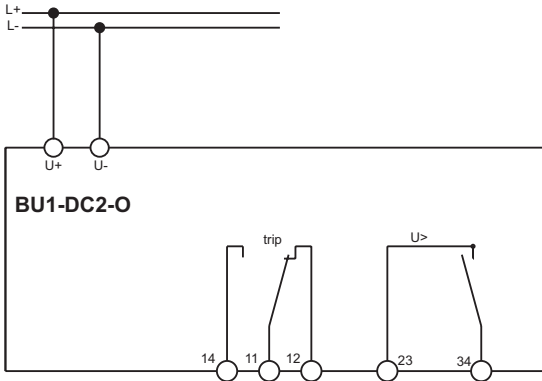
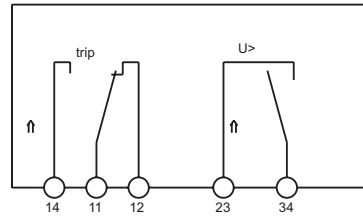
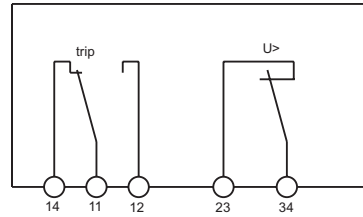


Fig. 3. Connection diagram



Trouble free operation



Overvoltage

Fig. 4: Contact positions

Connecting terminals

The connection up to a maximum of $2 \times 2.5 \text{ mm}^2$ cross-section conductors is possible. For this procedure the transparent cover of the unit has to be removed.

Setting ranges

U> : 1.0 - 1.4 Un
 t : 0 - 100 s
 DIFF : 2 - 10 %

Order key

BU1-DC2-O	
Rated voltage 12 V	12
Rated voltage 24 V	24

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