

Basic Range

BU1-DC2-UO- DC Voltage Relay

Application

Supervision of DC voltages

Function

Unit BU1-DC2-UO is required with on over (U $>$) and undervoltage supervision (U $<$) with separate adjustable pickup values, common trip delay (t) and hysteresis (DIFF).

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

Pickup of supervision circuit, either U $>$ or U $<$, is displayed by the corresponding flashing LED.

At undervoltage tripping LED U $<$ extinguishes.

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

Technical data

Rated voltage Un	: 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

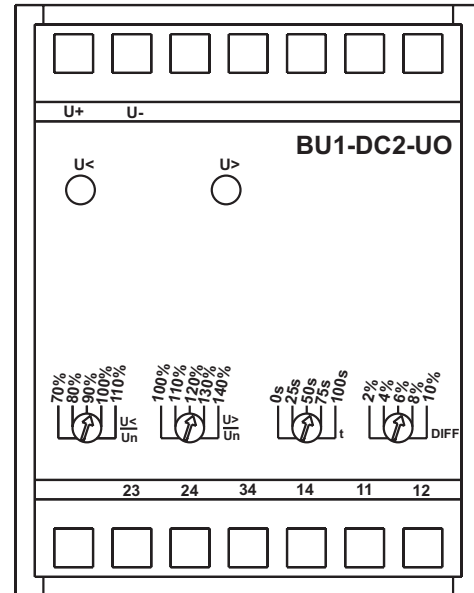


Fig. 1 : Front plate

The unit BU1-DC2-UO is designed to be fastened onto a DIN rail acc. to DIN EN 50022 same as all units of the BASIC RANGE.

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

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

LEDs

LED U $<$ is used to indicate trouble free operation with steady light. LEDs U $>$ and U $<$ indicate pickup of the relay by flashing.

At overvoltage tripping LED U $<$ extinguishes. LED U $>$ indicates tripping at over voltage (steady light).

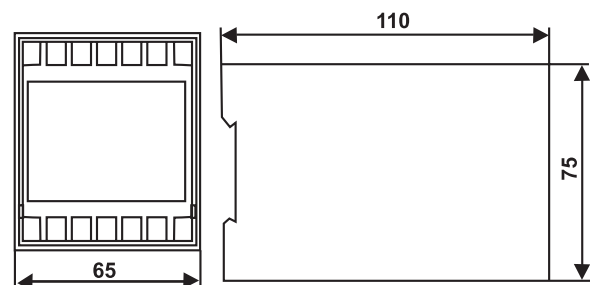


Fig. 2 : Dimensional drawing BU1-DC2-UO

Auxiliary voltage supply

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

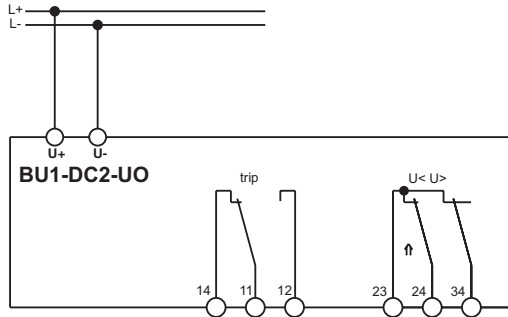
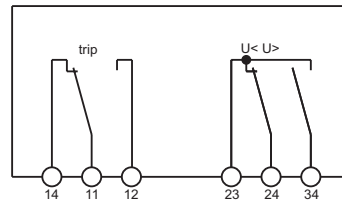
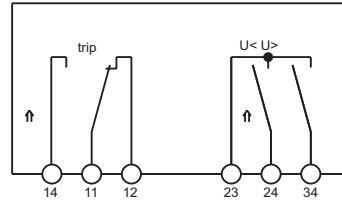


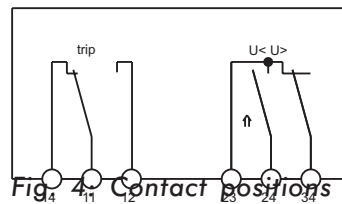
Fig. 3. Connection diagram



Unit dead or under voltage



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< : 0.7-1.1 Un
 U> : 1.0-1.4 Un
 t : 0 - 100 s
 DIFF : 2-10%

Order key

<i>BU1-DC2-UO</i>	
Rated voltage 12 V	12
Rated voltage 24 V	24



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