

Voltage Comparator DC

FUV 1

Version02 31.10.2007



FEATURES

- DC voltage comparator
- Delayed output relay report
- LED display
- Solid construction

Fig. 1

1.0 RANGE OF APPLICATION

The voltage comparator FUV1 has been developed for the monitoring of the voltage equality of two batteries. Voltage differences - caused by, for example, cell closure in one of the batteries - result in triggering of the alarm signal relay. The output relay does not respond to temporary voltage dips. Any alternating current that interferes with the direct current of the battery - due, for example, to residual ripples from a charging device - is filtered out. Only the direct current is monitored. Special designs for batteries with different number of cells are possible

2.0 MODE OF OPERATION AND FUNCTION

The FUV1 should be connected in accordance with the pin configuration (fig. 2).

The FUV1 is ready for use immediately after application of the battery voltage. If the voltage difference is greater than the set switching point, then the output relay will become operative after the internal delay time sequence is completed. The red LED display responds immediately. The alarm signal relay functions on the working current principle.

The output relay returns to its original position as soon as the voltage difference has ceased.

3.0 PIN CONFIGURATION

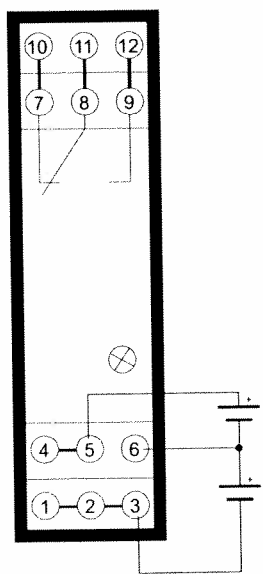


Fig. 2

4.0 DIMENSIONED DRAWING

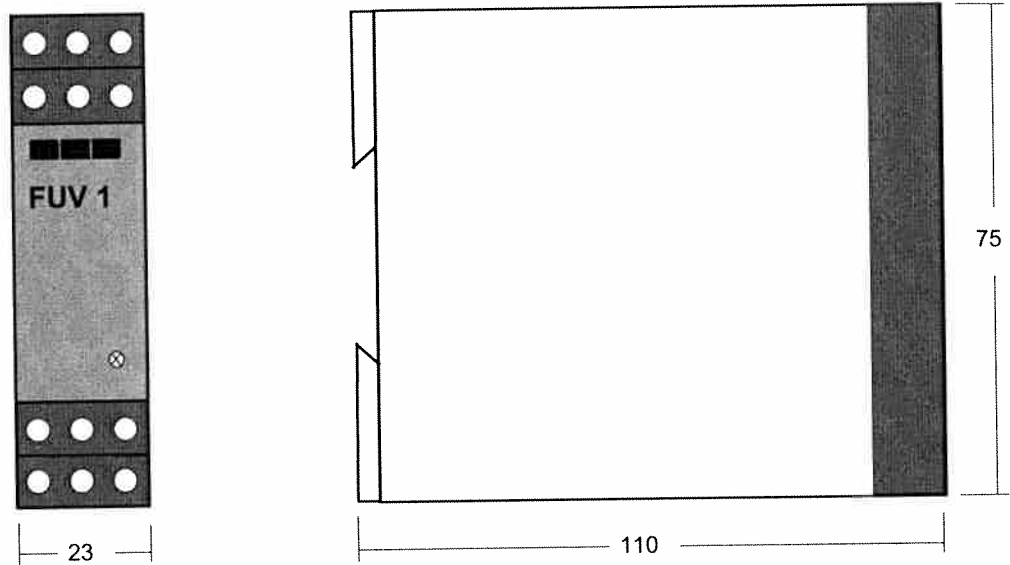


Fig. 3

5.0 SPECIFICATIONS

Measuring voltage	9,5 – 18 VDC	to terminal 6 - 3
	19 – 36 VDC,	to terminal 5 - 3
Diffusion voltage	adjustable 0,6V – 6,8V	factory setting 1,0VDC
Power consumption	Ca. 35 mA	
Release delay	25 – 45 s	factory setting 30s
Relay output	230 V AC/DC; 2 A	
Voltage dip	<2 s to 5 V,	no output relay decrease
Test voltage	2,5 kV	
Ambient temperature	0 ... +50 °C	
Housing	plastic Makrolon 8020 grey / VDE 0100 / VBG4	
Measurements	W23 x H75 x D110 mm	
Mounting	on rails to DIN EN 50022	
Protection class	IP 20	
Weight	120 g	
Assembling position	arbitrary	
Regulations	VDE 0160 / EN50178 VDE 0435 part 303 VDE 0110 IEC 255-6	

Subject to technical alterations!