

BVR02

Voltage Monitoring Relay 12V/24V



- DC undervoltage monitoring relay
- Measuring if power supply is below the set level
- Measures on own power supply
- Measuring range: 8 - 28 V DC
- Adjustable hysteresis: 4 to 50%
- Output: 5 A SPDT NE relay
- For mounting on DIN-rail in accordance with DIN/EN 50 022
- 17.5 mm housing (DIN 43880)
- LED indication for relay and power supply ON

Product Description

BVR02 is a voltage monitoring relay that measures its own power supply. The measuring range 8-28 VDC. It has separate potentiometers for setpo-

int and hysteresis. Typical applications are monitoring of backup batteries, batteries on diesel generator sets and the like.

Type Selection

Mounting	Output	Measuring range: 8 to 28V
DIN-rail	SPDT	

Input Specifications

Input	Level
Own power supply	A1, A2 12 to 24V DC
Measuring ranges	8 to 28 V

Output Specifications

Output	SPDT relay
Rated insulation voltage	250 VAC
Contact ratings (AgSnO ₂)	μ
Resistive loads	AC 1 DC 12
Small inductive loads	AC 15 DC 13
Mechanical life	≥ 30 x 10 ⁶ operations
Electrical life	≥ 10 ⁵ operations (at 8 A, 250 V, cos φ = 1)
Operating frequency	≤ 7200 operations/h
Dielectric strength	
Dielectric voltage	2 kVAC (rms)
Rated impulse withstand volt.	4 kV (1.2/50 μs)

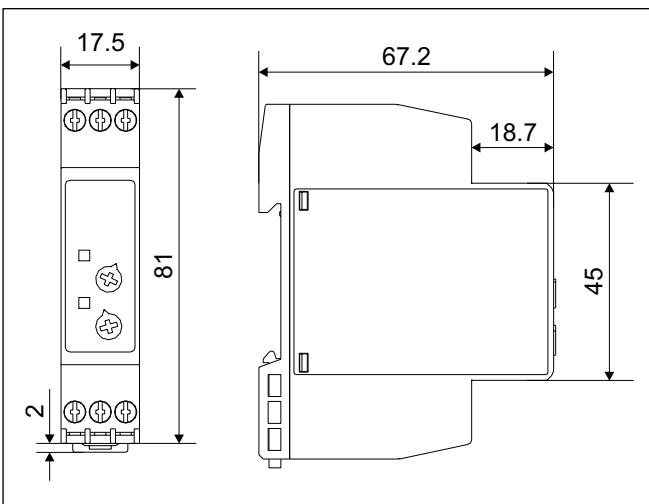
Supply Specifications

Power supply Rated operational voltage through terminals: A1 and A2	Overvoltage cat. III (IEC 60664, IEC 60038) 8 to 28 VDC
Dielectric voltage	None
Dielectric voltage Supply to output	2 kV
Rated operational power	1.5 W

General Specifications

Power ON delay	< 200 ms
Reaction time Alarm ON delay Alarm OFF delay	(input signal variation from -20% to +20% or from +20% to -20% of set value) < 200 ms < 200 ms
Accuracy Temperature drift Alarm delay Repeatability	(15 min warm-up time) ± 1000 ppm/°C ± 10% on set value ± 50 ms ± 0.5% on full-scale
Indication for Power supply ON Output relay ON	LED, green LED, yellow
Environment Degree of protection Pollution degree Operating temperature Storage temperature	IP 20 3 -20 to 60°C, R.H. < 95% -30 to 80°C, R.H. < 95%
Housing dimensions DIN-rail version	17.5 x 81.5 x 67 mm
Weight	Approx. 75 g
Screw terminals Tightening torque	Max. 0.5 Nm acc. to IEC 60947
Approvals	UL, CSA
CE Marking	Yes

Dimensions



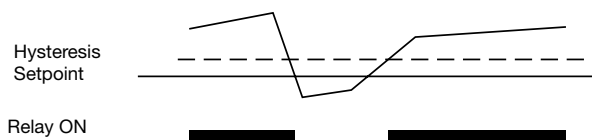
Range and Level Setting

Selection of level:	Lower knob: Setting of hysteresis on relative scale
Centre knob:	Setting of level on absolute scale.

Mode of Operation

BVR02 monitors the DC value of its own power supply. The output is energized when the measured voltage is rising above the setpoint plus hysteresis, and is de-energized when the measured voltage drops below the setpoint value.

Operation Diagram



Wiring Diagram

