

Current and Voltage Controls

DC Under Voltage Control

Type EUG

CARLO GAVAZZI



- DC low voltage monitoring of batteries
- Measures if power supply is above set level
- Measures on own power supply
- Measuring range: 8 - 28 VDC
- Adjustable hysteresis: 5 - 50%
- Output: 5 A, SPDT
- For mounting on DIN-rail in accordance with DIN/EN 50 022
- 22.5 mm housing
- LED-indication for relay and power supply ON

Product Description

The EUG is a voltage monitoring relay that measures on its own power supply. The measuring range is 8-28 VDC. It has separate potentiometer for setpoint and hysteresis. Application can be monitoring of back-up batteries, batteries on diesel-generator sets and the like.

Ordering Key EUG C 724

Housing _____
 Function _____
 Type _____
 Output _____
 Power supply _____

Type Selection

Mounting	Output	Measuring range	Supply: 12 - 24 VDC
For DIN-rail	SPDT	8 - 28 V	EUG C 724

Input Specifications

Input	Through terminals A1 & A2	Measures on own power supply
Measuring range	8 - 28 VDC	

Supply Specifications

Power supply	Overvoltage cat. III (IEC 60664) (IEC 60038)
Rated operational voltage	12 - 24 VDC, -35/+25%
Through pins A1 & A2	724
Dielectric voltage	None
Rated impulse withstand voltage	1 kV (1.2/50 μ s)
Rated operational power	12 VDC: 0.7 W 24 VDC: 2.5 W

Output Specifications

Output	SPDT relay
Rated insulation voltage	250 VAC (contact/elect.)
Contact ratings (AgCdO)	μ (micro gap)
Resistive loads	AC 1 5 A, 250 VAC DC 1 5 A, 24 VDC
Small inductive loads	AC 15 2 A, 250 VAC DC 13 3 A, 24 VDC
Mechanical life	$\geq 40 \times 10^6$ operations
Electrical life	$\geq 10^5$ operations (at max. load)
Operating frequency	≤ 7200 operations/h
Dielectric strength	
Dielectric voltage	2 kVAC (rms)
Rated impulse withstand volt.	4 kV (1.2/50 μ s)

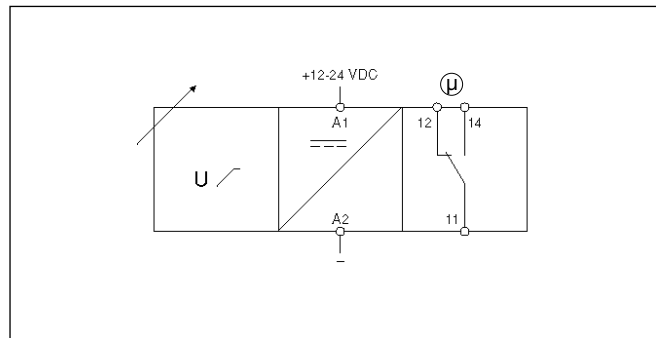
General Specifications

Power ON delay	< 200 ms
Reaction time	$\tau < 5$ ms worst case reaction time may be up to $5 \times \tau$.
Accuracy	Setpoint $\pm 10\%$ of setting Hysteresis $\pm 10\%$ Temperature drift $\leq 0.2\%/^{\circ}C$ ($\leq 0.11\%/^{\circ}F$)
Indication for	Power supply ON LED, green Output ON LED, yellow
Environment	Degree of protection IP 20 Pollution degree 3 Operating temperature -20° to $+50^{\circ}C$ (-4° to $+122^{\circ}F$) Storage temperature -50° to $+85^{\circ}C$ (-58° to $+185^{\circ}F$)
Weight	125 g
Screw terminals	Tightening torque Max. 0.5 Nm acc. to IEC 60947
Approvals	UL, CSA, SEV

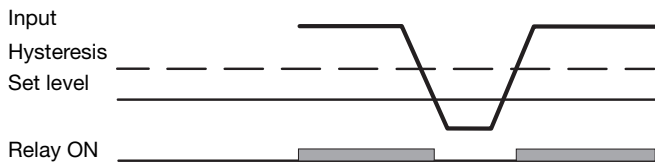
Mode of Operation

The output is energized when the measured voltage is rising to a value that is above setpoint value plus hysteresis, and is deenergized when the measured voltage drops below the setpoint value.

Wiring Diagram



Operation Diagram



Level Setting

Upper knob: Hysteresis setting on absolute scale (5-50%) of level.

Lower knob: Level setting on absolute scale (8-28 VDC).