

Monitoring Relays DC Under Voltage Type DUA52

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- DC undervoltage monitoring relay
- Measuring if power supply is below the set level
- Measures on own power supply
- Measuring ranges: 8 - 28 V DC and 38 - 58 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

DUA52 is a voltage monitoring relay that measure its own power supply. The measuring ranges are 8-28 VDC and 38-58 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.

Ordering Key

DUA 52 C 724

Housing _____
Function _____
Type _____
Item number _____
Output _____
Power supply _____

Type Selection

Mounting	Output	Measuring range: 8 to 28V	Measuring range: 38 to 58V
DIN-rail	SPDT	DUA 52 C 724	DUA 52 C 748

Input Specifications

Input		A1, A2
Own power supply	748	48V DC
	724	12 to 24V DC
Measuring ranges	Level	
	724	8 to 28 V
	748	38 to 58 V

Output Specifications

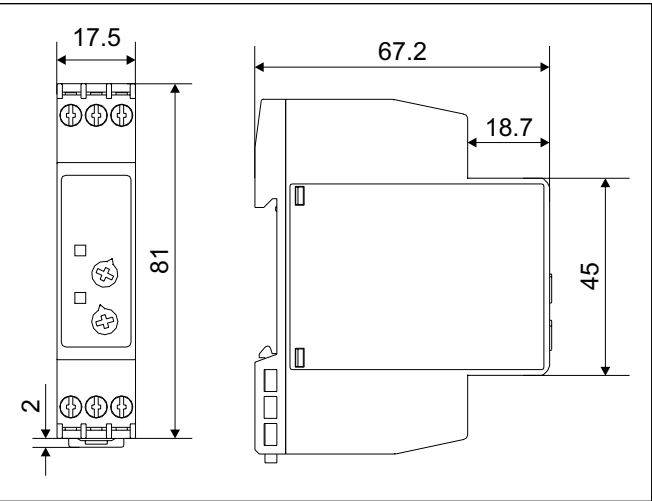
Output	SPDT relay
Rated insulation voltage	250 VAC
Contact ratings (AgSnO ₂)	μ
Resistive loads AC 1	5 A @ 250 VAC
DC 12	5 A @ 24 VDC
Small inductive loads AC 15	2.5 A @ 250 VAC
DC 13	2.5 A @ 24 VDC
Mechanical life	≥ 30 x 10 ⁶ operations
Electrical life	≥ 10 ⁵ operations (at 8 A, 250 V, cos φ = 1)
Operating 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	Overvoltage cat. III (IEC 60664, IEC 60038)	
Rated operational voltage through terminals: A1 and A2	724 748	8 to 28 VDC 38 to 58 VDC None
Dielectric voltage		
Dielectric voltage Supply to output		2 kV
Rated operational power		1.5 W

Dimensions



General Specifications

Power ON delay	< 200 ms
Reaction time	(input signal variation from -20% to +20% or from +20% to -20% of set value)
Alarm ON delay	< 200 ms
Alarm OFF delay	< 200 ms
Accuracy	(15 min warm-up time)
Temperature drift	± 1000 ppm/°C
Alarm delay	± 10% on set value ± 50 ms
Repeatability	± 0.5% on full-scale
Indication for	
Power supply ON	LED, green
Output relay ON	LED, yellow
Environment	
Degree of protection	IP 20
Pollution degree	3
Operating temperature	-20 to 60°C, R.H. < 95%
Storage temperature	-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

Range and Level Setting

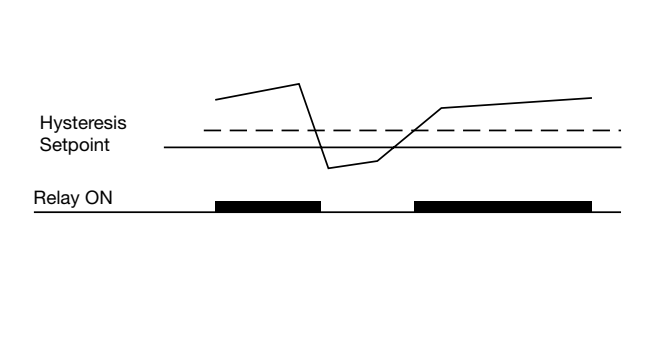
Selection of level:	Lower knob: Setting of hysteresis on rela- tive scale
Centre knob:	Setting of level on absolute scale.

Mode of Operation

DUA52 monitors the DC value of its own power supply. is rising above the setpoint plus hysteresis, and is de-energized when the measured voltage drops below the setpoint value.

The output is energized when the measured voltage

Operation Diagram



Wiring Diagram

