

Monitoring Relays DC Under Voltage Type DUA52



- 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

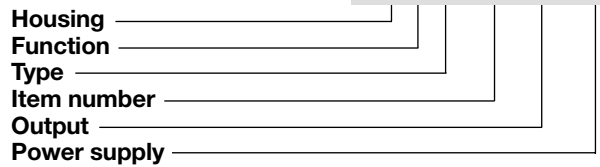
Product Description

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



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

Output Specifications

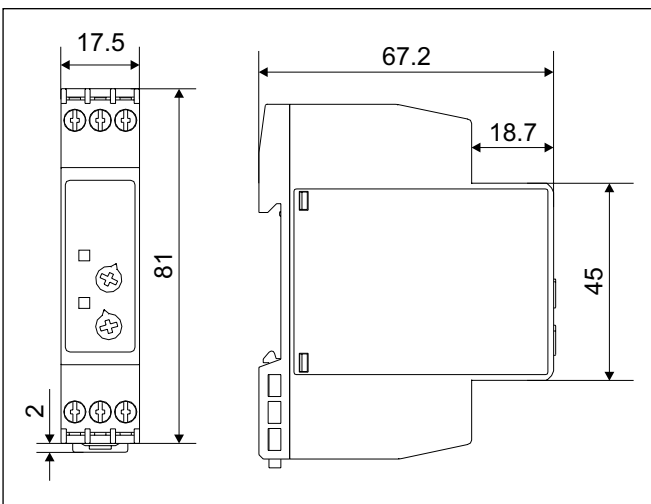
Output	SPDT relay
Rated insulation voltage	250 VAC
Contact ratings (AgSnO₂)	μ
Resistive loads	AC 1
	DC 12
Small inductive loads	AC 15
	DC 13
Mechanical life	≥ 30 x 10 ⁶ operations
Electrical life	≥ 10 ⁵ operations (at 8 A, 250 V, cos φ = 1)
Operating frequency	≤ 7200 operations/h
Dielectric strength	
Dielectric voltage	2 kVAC (rms)
Rated impulse withstand volt.	4 kV (1.2/50 μs)



Supply Specifications

Power supply	Overvoltage cat. III (IEC 60664, IEC 60038)	
Rated operational voltage through terminals:		
A1 and A2	724	8 to 28 VDC
	748	38 to 58 VDC
Dielectric voltage		None
Dielectric voltage	2 kV	
Supply to output		
Rated operational power	1.5 W	

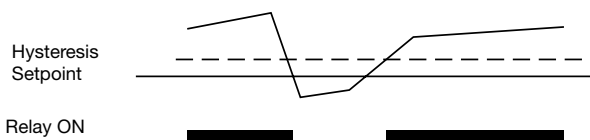
Dimensions



Range and Level Setting

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

Operation Diagram



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

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 set-point value.

The output is energized when the measured voltage

Wiring Diagram

