



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



Monitoring Relays DC Under Voltage Type DUA52

CARLO GAVAZZI



- DC undervoltage monitoring relay
- Measuring if power supply is below the set level
- Measures its 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 setpoint

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 | Supply : 12/24 VDC | Supply: 48 VDC |
|----------|--------|-----------------|---------------------|---------------------|
| DIN-rail | SPDT | 8 to 28 VDC | DUA 52 C 724 | |
| DIN-rail | SPDT | 38 to 58 VDC | | DUA 52 C 748 |

Input Specifications

| | |
|-----------------------------------|---|
| Input (voltage level) | Terminals A1, A2 Measures its own power supply |
| Measuring ranges Direct | Level 38 to 58 VDC 8 to 28 VDC |
| 48 VDC | |
| 12 to 24 VDC | |

Output Specifications

| | |
|---|---|
| Output Rated insulation voltage | SPDT relay 250 VAC |
| Contact ratings (AgSnO ₂) Resistive loads AC 1 DC 12 Small inductive loads AC 15 DC 13 | μ 5 A @ 250 VAC 5 A @ 24 VDC 2.5 A @ 250 VAC 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 Rated impulse withstand volt. | 2 kVAC (rms) 4 kV (1.2/50 μs) |

Supply Specifications

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

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 | 17.5 x 81 x 67.2 mm |
| Material | PA66 or Noryl |
| Weight | Approx. 75 g |
| Screw terminals | |
| Tightening torque | Max. 0.5 Nm acc. to IEC 60947 |
| Product standard | EN 60255-6 |
| Approvals | UL, CSA |
| CE Marking | L.V. Directive 2006/95/EC EMC Directive 2004/108/EC |
| EMC Immunity | According to EN 60255-26 According to EN 61000-6-2 |
| Emissions | According to EN 60255-26 According to EN 61000-6-3 |

Mode of Operation

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

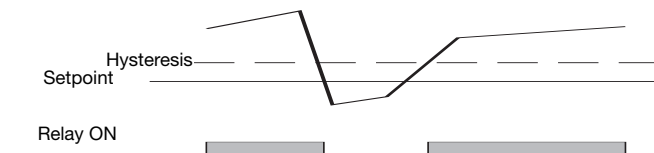
The output is energized when the measured voltage

Range and Level Setting

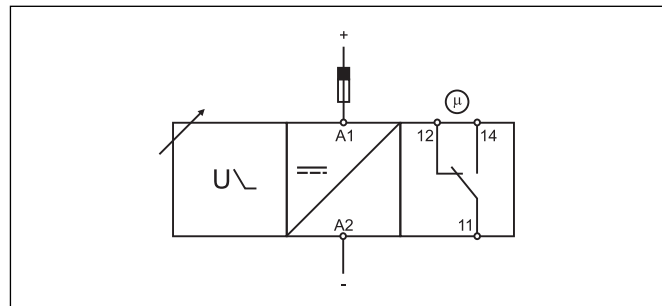
Selection of level: Lower knob: Setting of hysteresis on relative scale

Centre knob: Setting of level on absolute scale.

Operation Diagram



Wiring Diagram



Dimensions

