SIEMENS

Data sheet

3UG4501-1AW30



Analog monitoring relay Fill level monitoring Resistance monitoring from 2 to 200 kohm 0vershoot and undershoot 24 to 240 V AC/DC 50 to 60 Hz DC and AC 2-step or 1-step control Tripping delay 0.5 to 10 s 1 change-over contact screw terminal Successor product for 3UG3501

| Figure | similar |
|--------|---------|
| | |

| product brand name | SIRIUS | | | |
|--|--|--|--|--|
| product designation | Level monitoring relay with analog setting | | | |
| product type designation | 3UG4 | | | |
| manufacturer's article number of the optional sensor | 2-pole and 3-pole sensors 3UG3207 | | | |
| General technical data | | | | |
| product function | Monitoring relay for level monitoring | | | |
| display version LED | Yes | | | |
| Apparent power consumption at DC | | | | |
| — at 24 V maximum | 2 V·A | | | |
| — at 240 V maximum | 4 V·A | | | |
| apparent power consumption at AC | | | | |
| — at 24 V maximum | 2 V·A | | | |
| — at 240 V maximum | 4 V·A | | | |
| insulation voltage | | | | |
| for overvoltage category III according to IEC 60664 with degree of pollution 3 rated value | 300 V | | | |
| degree of pollution | 3 | | | |
| type of voltage | | | | |
| of the control supply voltage | AC/DC | | | |
| surge voltage resistance rated value | 4 kV | | | |
| protection class IP | IP20 | | | |
| shock resistance acc. to IEC 60068-2-27 | sinusoidal half-wave 15g / 11 ms | | | |
| vibration resistance acc. to IEC 60068-2-6 | 1 6 Hz: 15 mm, 6 500 Hz: 2g | | | |
| mechanical service life (switching cycles) typical | 10 000 000 | | | |
| electrical endurance (switching cycles) at AC-15 at 230 V typical | 100 000 | | | |
| reference code acc. to IEC 81346-2 | К | | | |
| relative repeat accuracy | 1 % | | | |
| Substance Prohibitance (Date) | 01.05.2012 00:00:00 | | | |
| Product Function | | | | |
| product function | | | | |
| outlet monitoring adjustable | Yes | | | |
| adjustable responsiveness | Yes | | | |
| inlet monitoring adjustable | Yes | | | |
| external reset | Yes | | | |
| Control circuit/ Control | | | | |
| control supply voltage at AC | | | | |
| at 50 Hz rated value | 24 240 V | | | |

| • at 60 Hz rated value | 24 240 V |
|--|---|
| control supply voltage at DC | |
| rated value | 24 240 V |
| operating range factor control supply voltage rated value at DC | |
| • initial value | 0.85 |
| full-scale value | 1.1 |
| operating range factor control supply voltage rated value at AC at 50 Hz | |
| • initial value | 0.85 |
| • full-scale value | 1.1 |
| operating range factor control supply voltage rated value at AC at 60 Hz | 0.05 |
| • initial value | 0.85 |
| full-scale value | 1.1 |
| Measuring circuit | |
| adjustable response delay time when starting | 0.5 10 s |
| when starting with lower or upper limit violation | 0.5 10 s |
| buffering time in the event of power failure minimum | 200 ms |
| physical measuring principle | conductive |
| Precision | |
| relative metering precision | 20 % |
| temperature drift per °C | 1 %/°C |
| Auxiliary circuit | |
| number of NC contacts delayed switching | 0 |
| number of NO contacts delayed switching | 0 |
| number of CO contacts | |
| delayed switching | 1 |
| operating frequency with 3RT2 contactor maximum | 5 000 1/h |
| Outputs | |
| ampacity of the output relay at AC-15 | |
| • at 250 V at 50/60 Hz | 3 A |
| • at 400 V at 50/60 Hz | 3 A |
| ampacity of the output relay at DC-13 | |
| • at 24 V | 1 A |
| • at 125 V | 0.2 A |
| • at 250 V | 0.1 A |
| operational current at 17 V minimum | 5 mA |
| continuous current of the DIAZED fuse link of the output relay | 4 A |
| Electromagnetic compatibility | |
| conducted interference | |
| • due to burst acc. to IEC 61000-4-4 | 2 kV |
| due to conductor-earth surge acc. to IEC 61000-4-5 | 2 kV |
| due to conductor-conductor surge acc. to IEC 61000-4-5 | 1 kV |
| field-based interference acc. to IEC 61000-4-3 | 10 V/m |
| electrostatic discharge acc. to IEC 61000-4-2 | 6 kV contact discharge / 8 kV air discharge |
| Galvanic isolation | |
| galvanic isolation | |
| between input and output | Yes |
| between the outputs | No |
| Connections/ Terminals | |
| product component removable terminal for auxiliary and control circuit | Yes |
| type of electrical connection | screw-type terminals |
| type of connectable conductor cross-sections | |
| • solid | 1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²) |
| finely stranded with core end processing | 1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) |
| at AWG cables solid | 2x (20 14) |
| | |

| at AWG cables stranded | 2x (20 14) | | | |
|--|-------------------------|------------------------------|------------------------|--|
| connectable conductor cross-section | 2X (20 14) | | | |
| solid | 0.5 4 mm² | | | |
| finely stranded with core end processing | 0.5 2.5 mm ² | | | |
| AWG number as coded connectable conductor cross | 0.5 2.5 mm | | | |
| section | | | | |
| • solid | 20 14 | | | |
| stranded | 20 14 | | | |
| tightening torque with screw-type terminals | 0.8 1.2 N·m | | | |
| Installation/ mounting/ dimensions | 0.0 1.2 1111 | | | |
| mounting position | any | | | |
| | - · · · | nting | | |
| fastening method | screw and snap-on mou | nung | | |
| height | - | 92 mm | | |
| width | 22.5 mm | | | |
| depth | 91 mm | | | |
| required spacing | | | | |
| • with side-by-side mounting | | | | |
| — forwards | 0 mm | | | |
| — backwards | 0 mm | | | |
| — upwards | 0 mm | | | |
| — downwards | 0 mm | | | |
| — at the side | 0 mm | | | |
| for grounded parts | | | | |
| — forwards | 0 mm | | | |
| — backwards | 0 mm | | | |
| — upwards | 0 mm | | | |
| — at the side | 0 mm | | | |
| — downwards | 0 mm | | | |
| • for live parts | | | | |
| — forwards | 0 mm | | | |
| — backwards | 0 mm | | | |
| — upwards | 0 mm | | | |
| — downwards | 0 mm | | | |
| — at the side | 0 mm | | | |
| Ambient conditions | • | | | |
| | 2.000 m | | | |
| installation altitude at height above sea level maximum | 2 000 m | | | |
| ambient temperature | -25 +60 °C | | | |
| during operation | | | | |
| • during storage | -40 +80 °C | | | |
| during transport | -40 +80 °C | | | |
| Certificates/ approvals | | | | |
| General Product Approval | EMC | Declaration of Conformity | Test Certificates | |
| | · A | ~ ~ ~ | Special Test Certific- | |
| <u> </u> | | | ate | |
| | RCM | EG-Konf. | | |
| | | | | |
| | | | | |
| Test Certificates Marine / Shipping | other | Railway | | |
| Type Test Certific- ates/Test Report | <u>Confirmation</u> | Vibration and Shock | | |
| LRS DIVIGL | , | | | |
| | | | | |
| Further information | | | | |
| Information- and Downloadcenter (Catalogs, Brochures, |) | | | |
| https://www.siemens.com/ic10 | | | | |

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3UG4501-1AW30

Cax online generator

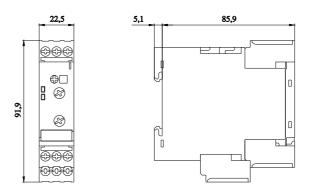
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UG4501-1AW30

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3UG4501-1AW30

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3UG4501-1AW30&lang=en

Characteristic: Derating

https://support.industry.siemens.com/cs/ww/en/ps/3UG4501-1AW30/manual



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