SIEMENS

product brand name

Data sheet 3UG4621-1AA30

SIRIUS



Digital monitoring relay Current monitoring, 22.5 mm from 2-500 mA AC/DC 0vershoot and undershoot Supply voltage: 24 V AC/DC 50 to 60 Hz DC and AC without galvanic isolation to measuring circuit ON delay and noise pulses delay 0.1 to 20 s Hysteresis 0.1 to 250 mA 1 change-over contact with or without fault buffer screw terminal Successor product for 3UG3521-1AC...

| product brand name | SIRIUS |
|--|---|
| product designation | Current monitoring relay with digital setting |
| product type designation | 3UG4 |
| General technical data | |
| product function | Current monitoring relay |
| design of the display | LCD |
| insulation voltage for overvoltage category III according to IEC 60664 | |
| with degree of pollution 3 rated value | 690 V |
| degree of pollution | 3 |
| surge voltage resistance rated value | 4 kV |
| maximum permissible voltage for safe isolation | |
| between auxiliary and auxiliary circuit | 300 V |
| between control and auxiliary circuit | 300 V |
| protection class IP | IP20 |
| shock resistance according to IEC 60068-2-27 | sinusoidal half-wave 15g / 11 ms |
| vibration resistance according 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 |
| thermal current of the switching element with contacts maximum | 5 A |
| reference code according to IEC 81346-2 | K |
| relative repeat accuracy | 1 % |
| Substance Prohibitance (Date) | 05/01/2012 |
| Product Function | |
| product function | |
| overcurrent detection 1 phase | Yes |
| overcurrent detection 3 phase | No |
| undercurrent detection 1 phase | Yes |
| undercurrent detection 3 phases | No |
| overcurrent detection DC | Yes |
| undercurrent detection DC | Yes |
| current window recognition DC | Yes |
| voltage window recognition 1 phase | No |
| voltage window recognition 3 phase | No |
| adjustable open/closed-circuit current principle | Yes |
| external reset | Yes |
| • auto-RESET | Yes |
| Supply voltage | |

| type of voltage of the supply voltage | AC/DC |
|---|---|
| supply voltage 1 at AC | |
| at 50 Hz rated value | 24 V |
| ● at 50 Hz | 20.4 26.4 V |
| at 60 Hz rated value | 24 V |
| ● at 60 Hz | 20.4 26.4 V |
| supply voltage 1 at DC | 20.4 26.4 V |
| supply voltage 1 at DC rated value | 24 V |
| Measuring circuit | |
| type of current for monitoring | AC/DC |
| measurable current | 0.003 0.6 A |
| measurable line frequency | 40 500 Hz |
| adjustable current response value current | |
| • 1 | 0.003 0.5 A |
| • 2 | 0.003 0.5 A |
| adjustable response delay time | |
| when starting | 0.1 20 s |
| with lower or upper limit violation | 0.1 20 s |
| adjustable switching hysteresis for measured current | 0.1 250 mA |
| value | |
| buffering time in the event of power failure minimum | 10 ms |
| accuracy of digital display | +/-1 digit |
| relative temperature-related measurement deviation | 5 % |
| internal resistance of the measuring circuit | 500 mΩ |
| Precision | |
| relative metering precision | 5 % |
| temperature drift per °C | 0.1 %/°C |
| Auxiliary circuit | 5 /b. 0 |
| number of NC contacts delayed switching | 0 |
| | |
| number of NO contacts delayed switching number of CO contacts delayed switching | 0 |
| | 5 000 1/h |
| operating frequency with 3RT2 contactor maximum | 3 000 1/II |
| Main circuit | , |
| number of poles for main current circuit | 1 |
| operating voltage rated value | 24 24 V |
| 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 | 0.005 A |
| continuous current of the DIAZED fuse link of the output relay | 4 A |
| Electromagnetic compatibility | |
| conducted interference | |
| due to burst according to IEC 61000-4-4 | 2 kV |
| due to conductor-earth surge according to IEC 61000-4-5 | 2 kV |
| due to conductor-conductor surge according to IEC 61000-4-5 | 1 kV |
| field-based interference according to IEC 61000-4-3 | 10 V/m |
| electrostatic discharge according to IEC 61000-4-2 | 6 kV contact discharge / 8 kV air discharge |
| Galvanic isolation | |
| design of the electrical isolation | Protective separation |
| galvanic isolation | |
| | |
| | Yes |
| between input and output | Yes Yes |
| | Yes Yes No |

| Connections/ Terminals product component removable terminal for main circuit product component removable terminal for auxiliary and control circuit | Yes Yes |
|---|------------------------------------|
| circuit product component removable terminal for auxiliary | Yes |
| | Yes |
| | |
| type of electrical connection | |
| for main current circuit | screw-type terminals |
| for auxiliary and control circuit | 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 | |
| • solid | 0.5 4 mm² |
| finely stranded with core end processing | 0.5 2.5 mm² |
| AWG number as coded connectable conductor cross section | |
| • solid | 20 14 |
| stranded | 20 14 |
| tightening torque with screw-type terminals | 0.8 1.2 N·m |
| Installation/ mounting/ dimensions | |
| mounting position | any |
| fastening method | snap-on mounting |
| 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 | |
| installation altitude at height above sea level maximum | 2 000 m |
| ambient temperature | |
| during operation | -25 +60 °C |
| during operation during storage | -40 +85 °C |
| during storage during transport | -40 +85 °C |
| Certificates/ approvals | |
| Octanicates/ approvais | |
| General Product Approval | EMC Declaration of Conformity |

Confirmation











Test Certificates Marine / Shipping other Railway

Special Test Certificate

Type Test Certificates/Test Report





Confirmation Vibration and Shock

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=3UG4621-1AA30

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UG4621-1AA30

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

https://support.industry.siemens.com/cs/ww/en/ps/3UG4621-1AA30

 $Image\ database\ (product\ images,\ 2D\ dimension\ drawings,\ 3D\ models,\ device\ circuit\ diagrams,\ EPLAN\ macros,\ ...)$

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3UG4621-1AA30&lang=en

Characteristic: Derating

https://support.industry.siemens.com/cs/ww/en/ps/3UG4621-1AA30/manual

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