



Digital monitoring relay Current monitoring, 22.5 mm from 2-500 mA AC/DC
Overshoot 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..

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| 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 | |

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| 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 value | 0.1 ... 250 mA |
| 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 | |
| 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 |
| 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 | |
| • between input and output | Yes |
| • between the outputs | Yes |
| • between the voltage supply and other circuits | No |

| 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>

last modified:

12/21/2020 