



!!! product phase-out !!! the preferred successor is 3UG5625-1CW30 digital monitoring relay for residual current monitoring (with current transformer 3UL23) adjustment range 0.03...40 A separate for warning threshold and trip value supply voltage 24 ... 240 V AC/DC, 50 .. 60 Hz ON-delay and tripping delay 0.1 to 20 s shutdown hysteresis up to 50% warning hysteresis 5% fixed width 22.5 mm, 2 changeover contacts with or without fault buffer screw terminal

| | |
|---|---|
| product brand name | SIRIUS |
| product designation | Residual current monitoring relay with digital setting |
| product type designation | 3UG4 |
| General technical data | |
| product function | for three-phase supplies |
| design of the display | LCD |
| insulation voltage | |
| • rated value | 300 V |
| • 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 | |
| • of the enclosure | IP20 |
| • of the terminal | 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 (operating cycles) typical | 10 000 000 |
| electrical endurance (operating 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) | 02/14/2013 |
| SVHC substance name | Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol - 119-47-1 |
| Weight | 0.165 kg |
| Product Function | |
| product function | |
| • residual current display | Yes |
| • error memory | Yes |
| • overcurrent detection 1 phase | Yes |
| • undercurrent detection 1 phase | No |
| • adjustable open/closed-circuit current principle | Yes |
| • external reset | Yes |
| • auto-RESET | No |
| • manual RESET | No |
| Control circuit/ Control | |
| control supply voltage at AC | |

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|---|----------------|
| <ul style="list-style-type: none"> • at 50 Hz rated value | 24 ... 240 V |
| <ul style="list-style-type: none"> • 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 | |
| <ul style="list-style-type: none"> • initial value | 0.85 |
| <ul style="list-style-type: none"> • full-scale value | 1.1 |
| operating range factor control supply voltage rated value at AC at 50 Hz | |
| <ul style="list-style-type: none"> • initial value | 0.85 |
| <ul style="list-style-type: none"> • full-scale value | 1.1 |
| operating range factor control supply voltage rated value at AC at 60 Hz | |
| <ul style="list-style-type: none"> • initial value | 0.85 |
| <ul style="list-style-type: none"> • full-scale value | 1.1 |
| Measuring circuit | |
| type of current for monitoring | AC |
| measurable current | 10 mA ... 43 A |
| measurable line frequency | 16 ... 400 Hz |
| adjustable operating delay time | 0.1 ... 20 s |
| adjustable current response value current | |
| <ul style="list-style-type: none"> • 1 | 30 mA ... 40 A |
| <ul style="list-style-type: none"> • 2 | 30 mA ... 40 A |
| adjustable response delay time | 0 ... 20 s |
| adjustable response delay time when starting | 0.1 ... 20 s |
| buffering time in the event of power failure minimum | 10 ms |
| accuracy of digital display | +/-1 digit |
| Precision | |
| relative metering precision | 5 % |
| temperature drift per °C | 0.1 %/°C |
| Communication/ Protocol | |
| protocol is supported IO-Link protocol | No |
| Auxiliary circuit | |
| number of NC contacts for auxiliary contacts | 0 |
| number of NC contacts delayed switching | 0 |
| number of NO contacts for auxiliary contacts | 0 |
| number of NO contacts delayed switching | 0 |
| number of CO contacts | |
| <ul style="list-style-type: none"> • for auxiliary contacts | 2 |
| <ul style="list-style-type: none"> • delayed switching | 2 |
| operating frequency with 3RT2 contactor maximum | 5 000 1/h |
| Main circuit | |
| type of voltage | AC/DC |
| operating voltage rated value | 24 ... 240 V |
| operating frequency rated value | 16 ... 400 Hz |
| ampacity of the output relay at AC-15 | |
| <ul style="list-style-type: none"> • at 250 V at 50/60 Hz | 3 A |
| <ul style="list-style-type: none"> • at 400 V at 50/60 Hz | 0 A |
| ampacity of the output relay at DC-13 | |
| <ul style="list-style-type: none"> • at 24 V | 1 A |
| <ul style="list-style-type: none"> • at 125 V | 0.2 A |
| <ul style="list-style-type: none"> • 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 | |
| <ul style="list-style-type: none"> • due to burst according to IEC 61000-4-4 | 2 kV |
| <ul style="list-style-type: none"> • due to conductor-earth surge according to IEC 61000-4-5 | 2 kV |
| <ul style="list-style-type: none"> • 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 | 4 kV contact discharge / 8 kV air discharge |
| Galvanic isolation | |
| design of the electrical isolation | galvanic isolation |
| galvanic isolation | |
| • between input and output | Yes |
| • between the outputs | Yes |
| • between the voltage supply and other circuits | No |
| Electrical Safety | |
| protection class IP on the front according to IEC 60529 | IP20 |
| Connections/ Terminals | |
| product component removable terminal for auxiliary and control circuit | Yes |
| type of electrical connection | screw terminal |
| type of connectable conductor cross-sections | |
| • solid | 1x (0.5 ... 4.0mm ²), 2x (0.5 ... 2.5 mm ²) |
| • finely stranded with core end processing | 1x (0.5 ... 2.5 mm ²), 2x (0.5 ... 1.5 mm ²) |
| • for AWG cables solid | 2x (20 ... 14) |
| • for AWG cables stranded | 2x (20 ... 14) |
| connectable conductor cross-section | |
| • solid | 0.5 ... 4 mm ² |
| • finely stranded with core end processing | 0.5 ... 2.5 mm ² |
| 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 | screw and snap-on mounting onto 35 mm DIN rail |
| height | 102 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 storage | -40 ... +85 °C |
| • during transport | -40 ... +85 °C |
| Environmental footprint | |
| Environmental Product Declaration (EPD) | Yes |
| global warming potential [CO ₂ eq] total | 17.1 kg |
| global warming potential [CO ₂ eq] during manufacturing | 4.44 kg |

| | |
|---|----------|
| global warming potential [CO2 eq] during operation | 13.7 kg |
| global warming potential [CO2 eq] after end of life | -1.06 kg |

Approvals Certificates

| | |
|--------------------------|-----|
| General Product Approval | EMV |
|--------------------------|-----|



| | | | |
|-----|-------------------|-------|---------|
| EMV | Test Certificates | other | Railway |
|-----|-------------------|-------|---------|

[KC](#)

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



[Confirmation](#)

[Special Test Certificate](#)

Environment



[Environmental Confirmations](#)

Further information

Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

Information for data generation and storage

<https://support.industry.siemens.com/cs/ww/en/view/109995012>

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=3UG4625-1CW30>

Cax online generator

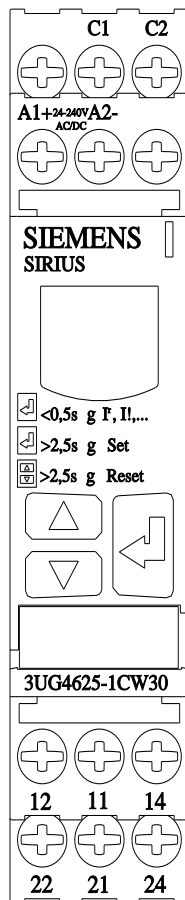
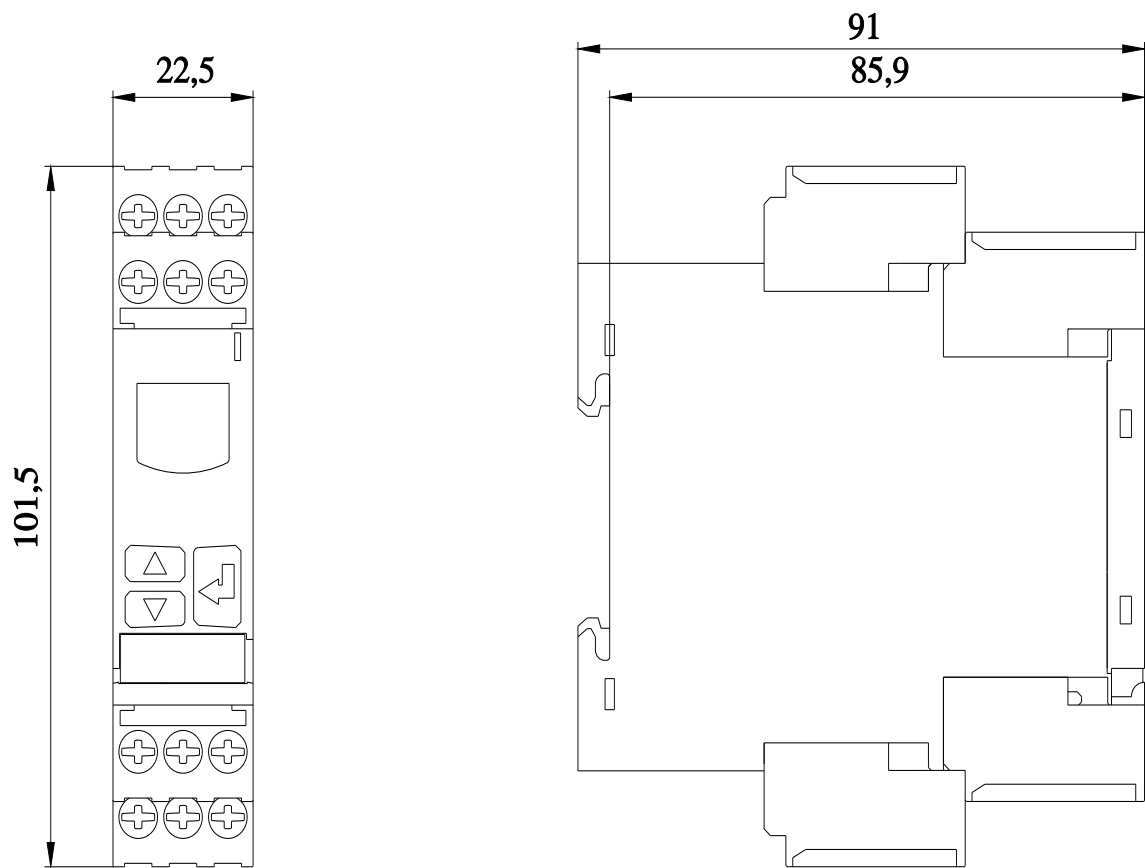
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UG4625-1CW30>

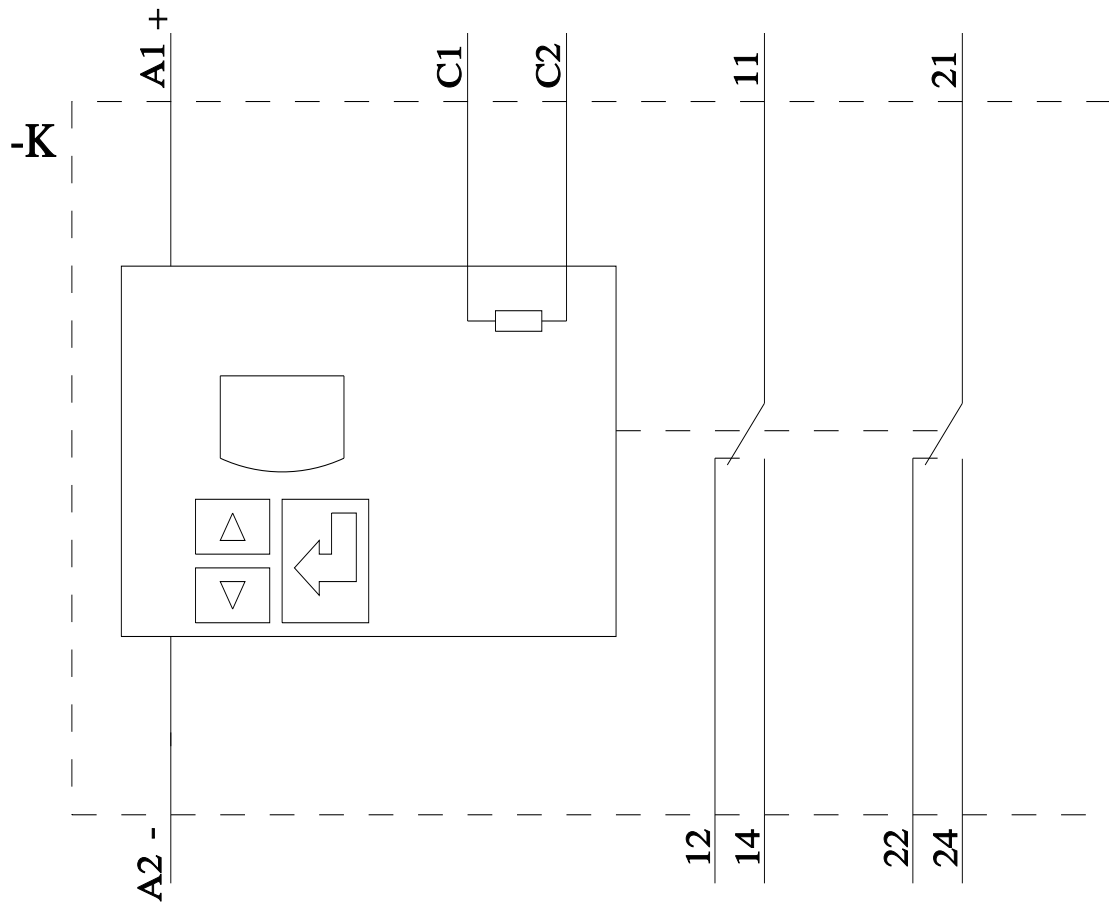
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3UG4625-1CW30>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3UG4625-1CW30&lang=en





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