



Analog monitoring relay Phase sequence monitoring 3 x 160...260 V
50...60 Hz AC 2 change-over contacts screw terminal Successor product
for 3UG3511-1BQ50

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| product brand name | SIRIUS |
| product designation | Network monitoring relay with analog setting |
| design of the product | 1 function |
| product type designation | 3UG4 |
| General technical data | |
| product function | Phase monitoring relay |
| display version LED | Yes |
| insulation voltage for overvoltage category III according to IEC 60664 | |
| • with degree of pollution 3 rated value | 690 V |
| degree of pollution | 3 |
| type of voltage | |
| • for monitoring | AC |
| • of the control supply voltage | AC |
| surge voltage resistance rated value | 6 kV |
| 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 |
| Substance Prohibitance (Date) | 05/01/2012 |
| Product Function | |
| product function | |
| • undervoltage detection | No |
| • overvoltage detection | No |
| • phase sequence recognition | Yes |
| • phase failure detection | No |
| • asymmetry detection | No |
| • overvoltage detection 3 phase | No |
| • undervoltage detection 3 phases | No |
| • voltage window recognition 3 phase | No |
| • adjustable open/closed-circuit current principle | No |
| • auto-RESET | Yes |
| Control circuit/ Control | |
| control supply voltage at AC | |
| • at 50 Hz rated value | 160 ... 260 V |

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| <ul style="list-style-type: none"> • at 60 Hz rated value | 160 ... 260 V |
| operating range factor control supply voltage rated value at AC at 50 Hz | |
| <ul style="list-style-type: none"> • initial value | 1 |
| <ul style="list-style-type: none"> • full-scale value | 1 |
| operating range factor control supply voltage rated value at AC at 60 Hz | |
| <ul style="list-style-type: none"> • initial value | 1 |
| <ul style="list-style-type: none"> • full-scale value | 1 |
| Measuring circuit | |
| measurable voltage at AC | 260 ... 160 V |
| Auxiliary circuit | |
| number of NC contacts delayed switching | 0 |
| number of NO contacts delayed switching | 0 |
| number of CO contacts delayed switching | 2 |
| operating frequency with 3RT2 contactor maximum | 5 000 1/h |
| Main circuit | |
| number of poles for main current circuit | 3 |
| 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 | 3 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 | 6 kV contact discharge / 8 kV air discharge |
| Galvanic isolation | |
| galvanic isolation | |
| <ul style="list-style-type: none"> • between input and output | Yes |
| <ul style="list-style-type: none"> • between the outputs | Yes |
| <ul style="list-style-type: none"> • between the voltage supply and other circuits | Yes |
| 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 | |
| <ul style="list-style-type: none"> • solid | 1x (0.5 ... 4 mm ²), 2x (0.5 ... 2.5 mm ²) |
| <ul style="list-style-type: none"> • finely stranded with core end processing | 1x (0.5 ... 2.5 mm ²), 2x (0.5 ... 1.5 mm ²) |
| <ul style="list-style-type: none"> • at AWG cables solid | 2x (20 ... 14) |
| <ul style="list-style-type: none"> • at AWG cables stranded | 2x (20 ... 14) |
| connectable conductor cross-section | |
| <ul style="list-style-type: none"> • solid | 0.5 ... 4 mm ² |
| <ul style="list-style-type: none"> • finely stranded with core end processing | 0.5 ... 2.5 mm ² |
| AWG number as coded connectable conductor cross section | |
| <ul style="list-style-type: none"> • solid | 20 ... 14 |
| <ul style="list-style-type: none"> • stranded | 20 ... 14 |
| tightening torque with screw-type terminals | 0.8 ... 1.2 N·m |
| Installation/ mounting/ dimensions | |
| mounting position | any |

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| fastening method | snap-on mounting |
| height | 92 mm |
| width | 22.5 mm |
| depth | 91 mm |
| required spacing | |
| <ul style="list-style-type: none"> • with side-by-side mounting <ul style="list-style-type: none"> — forwards 0 mm — backwards 0 mm — upwards 0 mm — downwards 0 mm — at the side 0 mm • for grounded parts <ul style="list-style-type: none"> — forwards 0 mm — backwards 0 mm — upwards 0 mm — at the side 0 mm — downwards 0 mm • for live parts <ul style="list-style-type: none"> — forwards 0 mm — backwards 0 mm — upwards 0 mm — downwards 0 mm — at the side 0 mm | |

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| Ambient conditions | |
| installation altitude at height above sea level maximum | 2 000 m |
| ambient temperature | |
| <ul style="list-style-type: none"> • during operation -25 ... +60 °C • during storage -40 ... +85 °C • during transport -40 ... +85 °C | |

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| Certificates/ approvals | |
| General Product Approval | EMC Declaration of Conformity |

[Confirmation](#)



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| Test Certificates | Marine / Shipping | other | Railway |
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[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=3UG4511-1BN20>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UG4511-1BN20>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3UG4511-1BN20>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3UG4511-1BN20&lang=en

Characteristic: Derating

<https://support.industry.siemens.com/cs/ww/en/ps/3UG4511-1BN20/manual>

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