SIEMENS

## Data sheet 3UG4511-1BN20



Figure similar

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

| | |
|---|---|
| **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 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 |
| **thermal current of the switching element with contacts maximum** | 5 A |
| **reference code acc. to IEC 81346-2** | K |
| **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** | |


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| | |
|---|---|
| **control supply voltage at AC** | |
| ● at 50 Hz rated value | 160 ... 260 V |
| ● at 60 Hz rated value | 160 ... 260 V |
| **operating range factor control supply voltage rated value at AC at 50 Hz** | |
| ● initial value | 1 |
| ● full-scale value | 1 |
| **operating range factor control supply voltage rated value at AC at 60 Hz** | |
| ● initial value | 1 |
| ● full-scale value | 1 |
| **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 |
| **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 | Yes |
| ● between the voltage supply and other circuits | Yes |
| **Connections/ Terminals** | |
| product function 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 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 |
| ● connectable conductor cross-section finely stranded with core end processing | 0.5 ... 2.5 mm² |
| ● AWG number as coded connectable conductor cross section solid | 20 ... 14 |
| ● AWG number as coded connectable conductor cross section stranded | 20 ... 14 |
| ● tightening torque with screw-type terminals | 0.8 ... 1.2 N·m |


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| 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 |
| ● ambient temperature during storage | -40 ... +85 °C |
| ● ambient temperature during transport | -40 ... +85 °C |

**Certificates/ approvals**

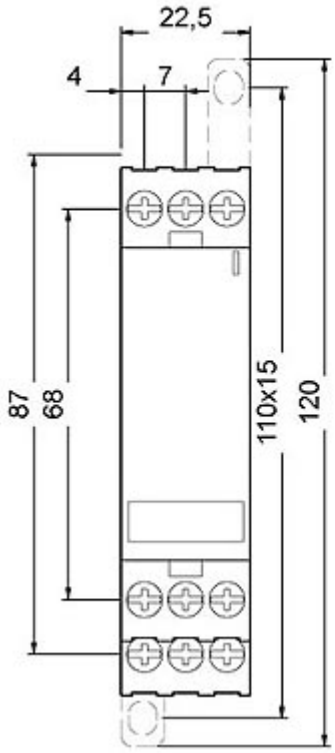
| General Product Approval | EMC | Declaration of Conformity | Test Certificates |
|---|---|---|---|
| CCC, UL, RCM, EG-Konf. | | Miscellaneous | Special Test Certificate |

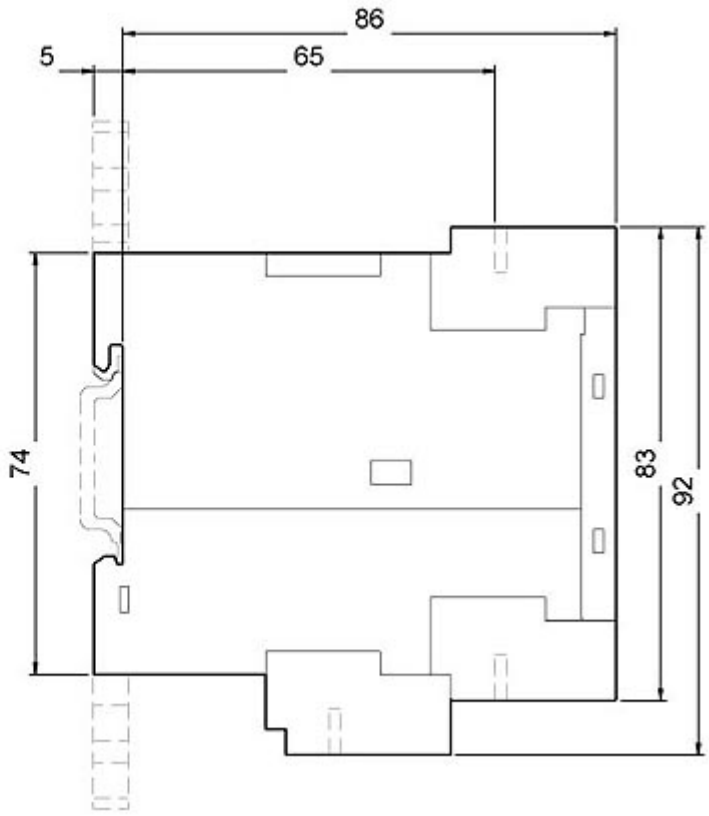
| Test Certificates | Marine / Shipping | other | Railway |
|---|---|---|---|
| Type Test Certificates/Test Report | LRS, DNV GL | Confirmation | Vibration and Shock |

**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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