SIEMENS

## Data sheet 3UG4631-2AW30

Digital monitoring relay Voltage monitoring, 22.5 mm from 0.1-60 V AC/DC 0vershoot and undershoot 24 to 240 V AC/DC 50 to 60 Hz DC and AC Noise pulses delay 0.1 to 20 s Hysteresis 0.1 to 30 V 1 change-over contact with or without fault buffer spring-type connection system

| | |
|---|---|
| **product brand name** | SIRIUS |
| **product designation** | Voltage monitoring relay with digital setting |
| **product type designation** | 3UG4 |
| **General technical data** | |
| **product function** | Voltage 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 |
| **type of voltage** | |
| ● for monitoring | AC/DC |
| ● of the control supply voltage | AC/DC |
| **surge voltage resistance rated value** | 4 kV |
| **maximum permissible voltage for protective separation** | |
| ● 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 (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)** | 05/01/2012 |
| **Product Function** | |
| **product function** | |
| ● undervoltage detection | Yes |
| ● overvoltage detection | Yes |
| ● overvoltage detection 1 phase | Yes |
| ● overvoltage detection 3 phase | No |
| ● overvoltage detection DC | Yes |
| ● undervoltage detection 1 phase | Yes |
| ● undervoltage detection 3 phases | No |
| ● undervoltage detection DC | Yes |
| ● voltage window recognition 1 phase | Yes |
| ● voltage window recognition 3 phase | No |
| ● voltage window recognition DC | Yes |
| ● adjustable open/closed-circuit current principle | Yes |

| | |
|---|---|
| ● external reset | Yes |
| ● auto-RESET | Yes |
| **Control circuit/ Control** | |
| **control supply voltage at AC** | |
| ● at 50 Hz rated value | 24 ... 240 V |
| ● 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** | |
| ● initial value | 0.85 |
| ● full-scale value | 1.1 |
| **operating range factor control supply voltage rated value at AC at 50 Hz** | |
| ● initial value | 0.85 |
| ● full-scale value | 1.1 |
| **operating range factor control supply voltage rated value at AC at 60 Hz** | |
| ● initial value | 0.85 |
| ● full-scale value | 1.1 |
| **Measuring circuit** | |
| **measurable line frequency** | 40 ... 500 Hz |
| **measurable voltage at AC** | 0.1 ... 60 V |
| **measurable voltage at DC** | 0.1 ... 60 V |
| **adjustable response delay time** | |
| ● with lower or upper limit violation | 0.1 ... 20 s |
| **accuracy of digital display** | +/-1 digit |
| **relative temperature-related measurement deviation** | 0.1 % |
| **Precision** | |
| **relative metering precision** | 5 % |
| **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 |
| ampacity of the output relay at AC-15 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 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 | Yes |
| **Connections/ Terminals** | |
| **product component removable terminal for auxiliary and control circuit** | Yes |

| | |
|---|---|
| **type of electrical connection** | spring-loaded terminals |
| **type of connectable conductor cross-sections** | |
| ● solid | 2x (0.25 ... 1.5 mm²) |
| ● finely stranded with core end processing | 2 x (0.25 ... 1.5 mm²) |
| ● finely stranded without core end processing | 2x (0.25 ... 1.5 mm²) |
| ● for AWG cables solid | 2x (24 ... 16) |
| ● for AWG cables stranded | 2x (24 ... 16) |
| **connectable conductor cross-section** | |
| ● solid | 0.25 ... 1.5 mm² |
| ● finely stranded with core end processing | 0.25 ... 1.5 mm² |
| ● finely stranded without core end processing | 0.25 ... 1.5 mm² |
| **AWG number as coded connectable conductor cross section** | |
| ● solid | 24 ... 16 |
| ● stranded | 24 ... 16 |
| **Installation/ mounting/ dimensions** | |
| **mounting position** | any |
| **fastening method** | snap-on mounting |
| **height** | 94 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 |
| — 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 |

**Certificates/ approvals**

| General Product Approval | | | | EMC | Declaration of Conformity |
|---|---|---|---|---|---|
| CCC | Confirmation | UL | EAC | RCM | UKCA |

| Declaration of Conformity | Test Certificates | | Marine / Shipping | | other |
|---|---|---|---|---|---|
| CE EG-Konf. | Special Test Certificate | Type Test Certificates/Test Report | Lloyd's Register LRS | BMPEL | Confirmation |

## Railway

Vibration and Shock

## Further information

**Siemens has decided to exit the Russian market (see here).**
https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business

**Siemens is working on the renewal of the current EAC certificates.**
Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

**Information on the packaging**
https://support.industry.siemens.com/cs/ww/en/view/109813875

**Information- and Downloadcenter (Catalogs, Brochures,…)**
https://www.siemens.com/ic10

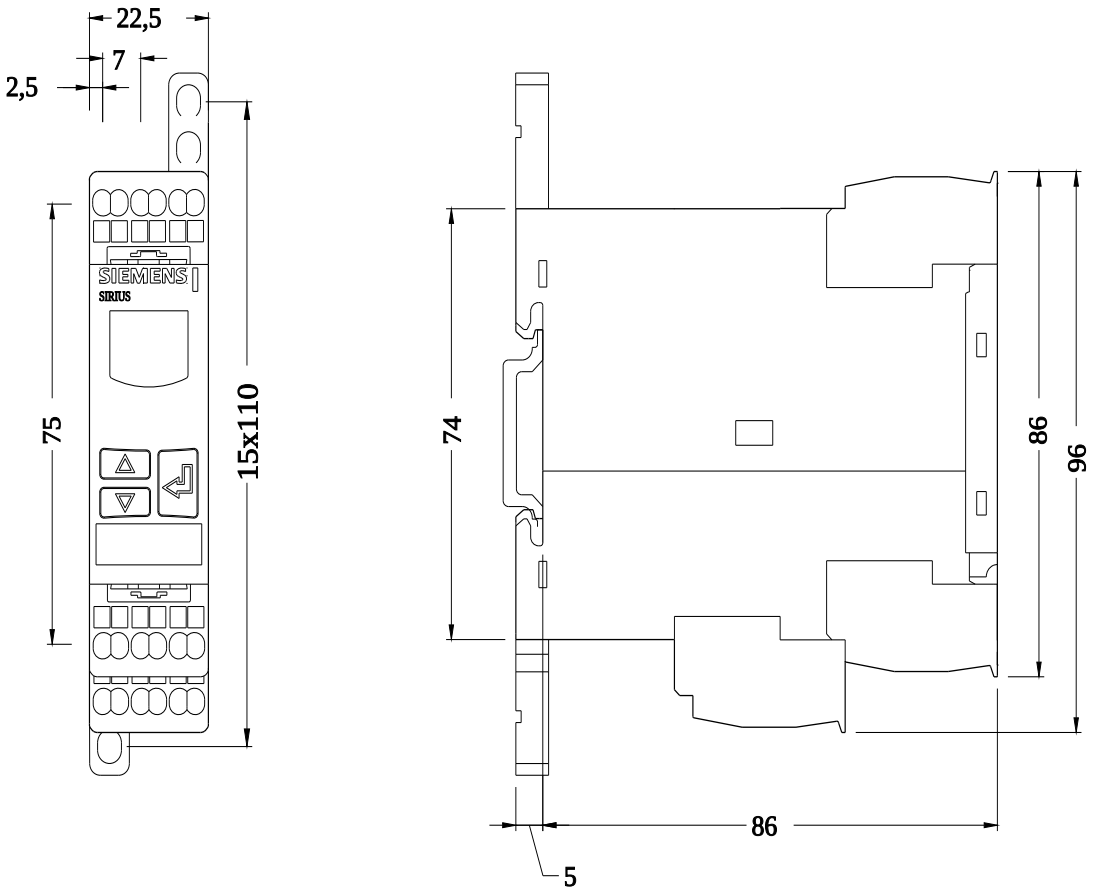
**Industry Mall (Online ordering system)**
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3UG4631-2AW30

**Cax online generator**
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UG4631-2AW30

**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**
https://support.industry.siemens.com/cs/ww/en/ps/3UG4631-2AW30

**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)**
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3UG4631-2AW30&lang=en

**Characteristic: Derating**
https://support.industry.siemens.com/cs/ww/en/ps/3UG4631-2AW30/manual




**last modified:** 11/29/2022