



DIGITAL MONITORING RELAY VOLTAGE MONITORING, 22.5MM FROM 0.1 TO 60V AC/DC OVERSHOOT AND UNDERSHOOT SUPPLY VOLTAGE: AC/DC 24V DC AND AC 50 TO 60 HZ NO GALVANIC ISOLATION FROM MEASURING CIRCUIT INTERF. PEAK DELAY 0.1 TO 20S HYSTERESIS 0.01 TO 30V 1 CO CONTACT W. OR W/O ERROR LOG SCREW TERMINAL REPLACEMENT PRODUCT FOR 3UG3531-1AC..

| | | |
|---|----|--------------------------|
| Product function | | Voltage monitoring relay |
| Measuring circuit: | | |
| Type of voltage / for monitoring | | AC/DC |
| Number of poles / for main current circuit | | 1 |
| Measurable line frequency | Hz | 500 ... 40 |
| Measurable voltage | | |
| • for AC | V | 0.1 ... 60 |
| Adjustable voltage range | V | 0.1 ... 60 |
| Adjustable response delay time | | |
| • with lower or upper limit violation | s | 0.1 ... 20 |
| Response time / maximum | ms | 450 |
| Relative metering precision | % | 5 |
| Precision of digital display | | +/-1 digit |
| Relative temperature-related measurement deviation | % | 0.1 |
| Relative repeat accuracy | % | 1 |
| General technical details: | | |
| Design of the display | | LCD |
| Product function | | |
| • tension window recognition of 1 phase | | Yes |
| • tension window recognition of 3 phases | | No |

| | | |
|--|----|---|
| <ul style="list-style-type: none"> • tension window recognition DC • overvoltage recognition of 1 phase • overvoltage recognition of 3 phases • overvoltage recognition DC • undervoltage recognition of 1 phase • undervoltage recognition of 3 phases • undervoltage recognition DC • reset external • self-reset • open-circuit or closed-circuit current principle | | Yes |
| | | Yes |
| | | No |
| | | Yes |
| | | Yes |
| | | No |
| | | Yes |
| | | Yes |
| | | Yes |
| | | Yes |
| Starting time / after the control supply voltage has been applied | ms | 1,000 |
| Type of voltage / of the controlled supply voltage | | AC/DC |
| Control supply voltage | | |
| <ul style="list-style-type: none"> • at 50 Hz / at AC <ul style="list-style-type: none"> • rated value | V | 24 ... 24 |
| <ul style="list-style-type: none"> • at 60 Hz / at AC <ul style="list-style-type: none"> • rated value | V | 24 ... 24 |
| <ul style="list-style-type: none"> • for DC <ul style="list-style-type: none"> • rated value | V | 24 ... 24 |
| Operating range factor control supply voltage rated value | | |
| <ul style="list-style-type: none"> • at 50 Hz <ul style="list-style-type: none"> • for AC | | 0.85 ... 1.15 |
| <ul style="list-style-type: none"> • at 60 Hz <ul style="list-style-type: none"> • for AC | | 0.85 ... 1.15 |
| <ul style="list-style-type: none"> • for DC | | 0.85 ... 1.15 |
| Impulse voltage resistance / rated value | kV | 4 |
| Recorded real power | W | 2 |
| Protection class IP | | IP20 |
| Electromagnetic compatibility | | IEC 60947-1 / IEC 61000-6-2 / IEC 61000-6-4 |
| Resistance against vibration / according to IEC 60068-2-6 | | 1 ... 6 Hz: 15 mm, 6 ... 500 Hz: 2g |
| Resistance against shock / according to IEC 60068-2-27 | | sinusoidal half-wave 15g / 11 ms |
| Installation altitude / at a height over sea level / maximum | m | 2,000 |
| Maximum permissible voltage for safe disconnection | | |
| <ul style="list-style-type: none"> • between control and auxiliary circuit | V | 300 |
| <ul style="list-style-type: none"> • between auxiliary circuit and auxiliary circuit | V | 300 |
| Conductor-bound parasitic coupling BURST / according to IEC 61000-4-4 | | 2 kV |
| Conductor-bound parasitic coupling conductor-earth SURGE / according to IEC 61000-4-5 | | 2 kV |
| Conductor-bound parasitic coupling conductor-conductor SURGE / according to IEC 61000-4-5 | | 1 kV |

| | | |
|--|-----|---|
| Electrostatic discharge / according to IEC 61000-4-2 | | 6 kV contact discharge / 8 kV air discharge |
| Field-bound parasitic coupling / according to IEC 61000-4-3 | | 10 V/m |
| Insulation voltage / for overvoltage category III according to IEC 60664 / with degree of pollution 3 / rated value | V | 690 |
| Ambient temperature | | |
| • during operating | °C | -25 ... +60 |
| • during storage | °C | -40 ... +85 |
| • during transport | °C | -40 ... +85 |
| Design of the electrical isolation | | Safe isolation |
| Galvanic isolation | | |
| • between entrance and outlet | | Yes |
| • between the outputs | | Yes |
| • between the voltage supply and other circuits | | No |
| Mechanical operating cycles as operating time / typical | | 10,000,000 |
| Electrical operating cycles as operating time / at AC-15 / at 230 V / typical | | 100,000 |
| Operating cycles / with 3RT2 contactor / maximum | 1/h | 5,000 |

Mechanical design:








| | | |
|--|----|------|
| Width | mm | 22.5 |
| Height | mm | 92 |
| Depth | mm | 91 |
| mounting position | | any |
| Distance, to be maintained, to earthed part | | |
| • forwards | mm | 0 |
| • backwards | mm | 0 |
| • sideways | mm | 0 |
| • upwards | mm | 0 |
| • downwards | mm | 0 |
| Distance, to be maintained, to the ranks assembly | | |
| • forwards | mm | 0 |
| • backwards | mm | 0 |
| • sideways | mm | 0 |
| • upwards | mm | 0 |
| • downwards | mm | 0 |
| Distance, to be maintained, conductive elements | | |
| • forwards | mm | 0 |
| • backwards | mm | 0 |
| • sideways | mm | 0 |
| • upwards | mm | 0 |

| | | |
|---|-----|--|
| Type of mounting | | snap-on mounting |
| Product function / removable terminal for auxiliary and control circuit | | Yes |
| Design of the electrical connection | | screw-type terminals |
| Type of the connectable conductor cross-section | | 1x (0.5 ... 4 mm ²), 2x (0.5 ... 2.5 mm ²) |
| <ul style="list-style-type: none"> • solid • finely stranded <ul style="list-style-type: none"> • with wire end processing • for AWG conductors <ul style="list-style-type: none"> • solid • stranded | | 1x (0.5 ... 2.5 mm ²), 2x (0.5 ... 1.5 mm ²) |
| Tightening torque | | |
| <ul style="list-style-type: none"> • with screw-type terminals | N-m | 1.2 ... 0.8 |

Outputs:

| | | |
|--|----|---|
| Number of NO contacts / delayed switching | | 0 |
| Number of NC contacts / delayed switching | | 0 |
| Number of change-over switches / delayed switching | | 1 |
| Operating current / at 17 V / minimum | mA | 5 |
| Continuous current / of the DIAZED fuse link of the output relay | A | 4 |
| Thermal current / of the contact-affected switching element / maximum | A | 5 |

Certificates/approvals:

| General Product Approval | | | EMC | Test Certificates |
|--|---|--|---|--|
|  CCC |  GOST |  UL |  C-TICK | Special Test Certificate |
| Shipping Approval | | | other | |
|  DNV |  GL |  LRS | Declaration of Conformity | other |

Further information:

Information- and Downloadcenter (Catalogs, Brochures,...)

<http://www.siemens.com/industrial-controls/catalogs>

Industry Mall (Online ordering system)

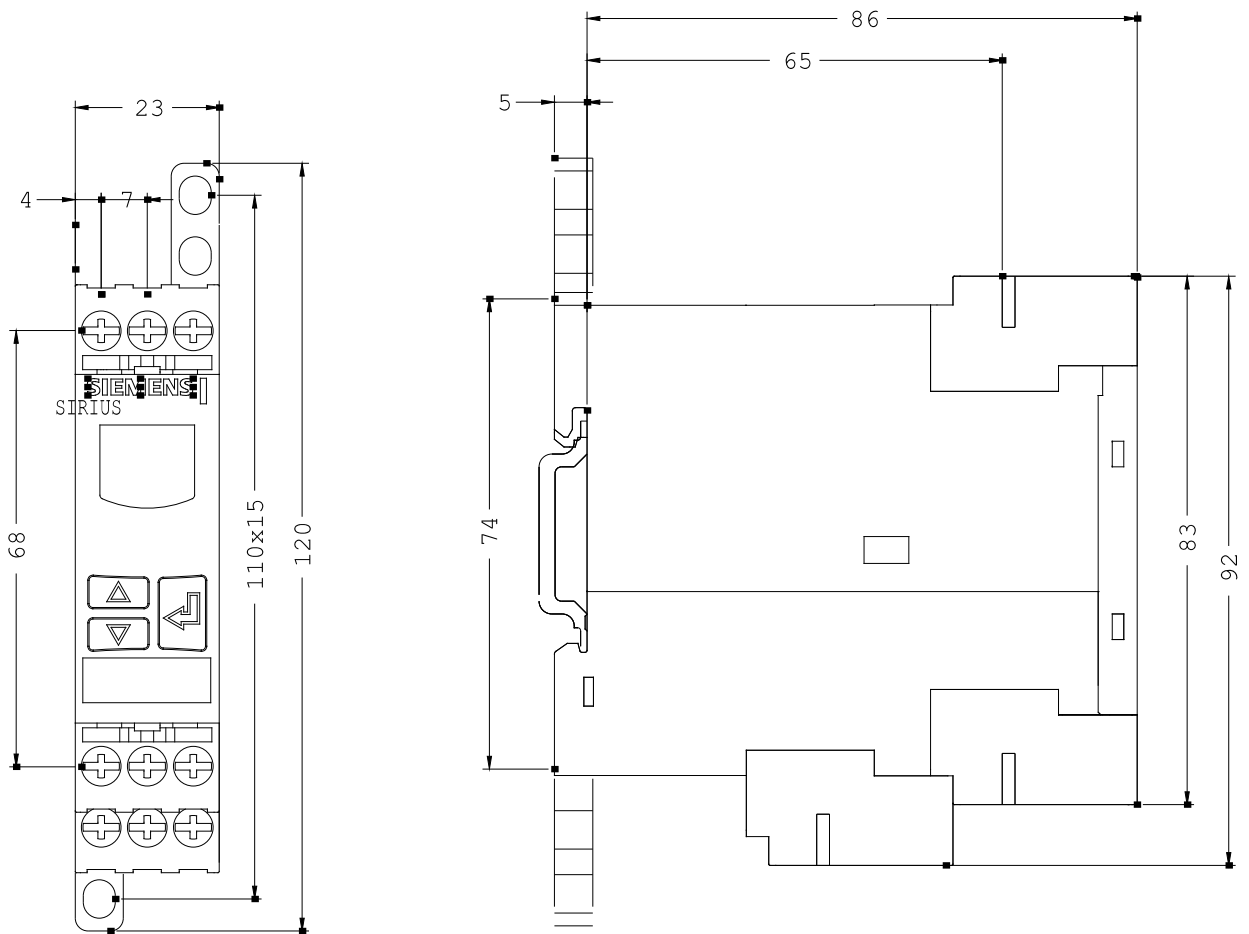
<http://www.siemens.com/industrial-controls/mall>

Cax online generator:

<http://www.siemens.com/cax>

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

<http://support.automation.siemens.com/WWW/view/en/3UG4631-1AA30/all>



last change:

Feb 18, 2013