



Digital monitoring relay Voltage monitoring, 22.5 mm from 17-275 V AC/DC  
 Overshoot and undershoot self-supplied Noise pulses delay 0.1 to 20 s  
 Hysteresis 0.1 to 150 V 1 changeover contact spring-type connection  
 system spring-type connection system

|  |   |
|--|---|
| <b>product brand name</b>  | SIRIUS  |
| <b>product designation</b>   | Voltage monitoring relay with digital setting |
| <b>product type designation</b>  | 3UG4  |
| <b>General technical data</b>  |   |
| <b>product function</b>  | Voltage monitoring relay                      |
| <b>design of the display</b>   | LCD   |
| insulation voltage for overvoltage category III according to IEC 60664 |   |
| • with degree of pollution 3 rated value                               | 690 V   |
| <b>type of voltage</b>   |   |
| • for monitoring   | AC/DC   |
| • of the control supply voltage  | AC/DC   |
| <b>surge voltage resistance rated value</b>                            | 4 kV  |
| <b>maximum permissible voltage for safe isolation</b>                  |   |
| • between auxiliary and auxiliary circuit                              | 300 V   |
| • between control and auxiliary circuit                                | 300 V   |
| <b>protection class IP</b>   | 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                                       |
| <b>reference code according to IEC 81346-2</b>                         | K   |
| <b>relative repeat accuracy</b>  | 1 %   |
| <b>Substance Prohibittance (Date)</b>                                  | 05/01/2012                                    |
| <b>Product Function</b>  |   |
| <b>product function</b>  |   |
| • 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   |
| <b>Control circuit/ Control</b>   |   |
| <b>control supply voltage at AC</b>   |   |
| • at 50 Hz rated value  | 17 ... 275 V                                |
| • at 60 Hz rated value  | 17 ... 275 V                                |
| <b>control supply voltage at DC</b>   |   |
| • rated value   | 17 ... 275 V                                |
| <b>operating range factor control supply voltage rated value at DC</b>          |   |
| • initial value   | 1   |
| • full-scale value  | 1   |
| <b>operating range factor control supply voltage rated value at AC at 50 Hz</b> |   |
| • initial value   | 1   |
| • full-scale value  | 1   |
| <b>operating range factor control supply voltage rated value at AC at 60 Hz</b> |   |
| • initial value   | 1   |
| • full-scale value  | 1   |
| <b>Measuring circuit</b>  |   |
| <b>measurable line frequency</b>  | 500 ... 40 Hz                               |
| <b>measurable voltage at AC</b>   | 275 ... 17 V                                |
| <b>measurable voltage at DC</b>   | 17 ... 275 V                                |
| <b>adjustable response delay time</b>   |   |
| • when starting   | 0.1 ... 20 s                                |
| • with lower or upper limit violation   | 0.1 ... 20 s                                |
| <b>accuracy of digital display</b>  | +/-1 digit                                  |
| <b>relative temperature-related measurement deviation</b>                       | 0.1 %                                       |
| <b>Precision</b>  |   |
| <b>relative metering precision</b>  | 5 %   |
| <b>Auxiliary circuit</b>  |   |
| number of NC contacts delayed switching   | 0   |
| number of NO contacts delayed switching   | 0   |
| number of CO contacts delayed switching   | 1   |
| <b>operating frequency with 3RT2 contactor maximum</b>                          | 5 000 1/h                                   |
| <b>Main circuit</b>   |   |
| <b>number of poles for main current circuit</b>                                 | 1   |
| <b>operational current at 17 V minimum</b>                                      | 5 mA  |
| <b>continuous current of the DIAZED fuse link of the output relay</b>           | 4 A   |
| <b>Electromagnetic compatibility</b>  |   |
| <b>conducted interference</b>   |   |
| • 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  |
| <b>field-based interference according to IEC 61000-4-3</b>                      | 10 V/m                                      |
| <b>electrostatic discharge according to IEC 61000-4-2</b>                       | 6 kV contact discharge / 8 kV air discharge |
| <b>Galvanic isolation</b>   |   |
| <b>design of the electrical isolation</b>                                       | Protective separation                       |
| <b>galvanic isolation</b>   |   |
| • between input and output  | Yes   |
| • between the outputs   | Yes   |
| • between the voltage supply and other circuits                                 | No  |
| <b>Connections/ Terminals</b>   |   |
| <b>product component removable terminal for auxiliary and control circuit</b>   | Yes   |
| <b>type of electrical connection</b>  | spring-loaded terminals                     |
| <b>type of connectable conductor cross-sections</b>                             |   |
| • solid   | 2x (0.25 ... 1.5 mm <sup>2</sup> )          |

|  |  |
|--|--|
| <ul style="list-style-type: none"> <li>finely stranded with core end processing</li> <li>finely stranded without core end processing</li> <li>at AWG cables solid</li> <li>at AWG cables stranded</li> </ul> | <p>2 x (0.25 ... 1.5 mm<sup>2</sup>)</p> <p>2x (0.25 ... 1.5 mm<sup>2</sup>)</p> <p>2x (24 ... 16)</p> <p>2x (24 ... 16)</p> |
| <b>connectable conductor cross-section</b> <ul style="list-style-type: none"> <li>solid</li> <li>finely stranded with core end processing</li> <li>finely stranded without core end processing</li> </ul>    | <p>0.25 ... 1.5 mm<sup>2</sup></p> <p>0.25 ... 1.5 mm<sup>2</sup></p> <p>0.25 ... 1.5 mm<sup>2</sup></p>                     |
| <b>AWG number as coded connectable conductor cross section</b> <ul style="list-style-type: none"> <li>solid</li> <li>stranded</li> </ul>   | <p>24 ... 16</p> <p>24 ... 16</p>  |

**Installation/ mounting/ dimensions**

|   |   |
|---|---|
| <b>mounting position</b>  | any   |
| <b>fastening method</b>   | snap-on mounting  |
| <b>height</b>   | 94 mm   |
| <b>width</b>  | 22.5 mm   |
| <b>depth</b>  | 91 mm   |
| <b>required spacing</b> <ul style="list-style-type: none"> <li>with side-by-side mounting <ul style="list-style-type: none"> <li>forwards</li> <li>backwards</li> <li>upwards</li> <li>downwards</li> <li>at the side</li> </ul> </li> <li>for grounded parts <ul style="list-style-type: none"> <li>forwards</li> <li>backwards</li> <li>upwards</li> <li>at the side</li> <li>downwards</li> </ul> </li> <li>for live parts <ul style="list-style-type: none"> <li>forwards</li> <li>backwards</li> <li>upwards</li> <li>at the side</li> </ul> </li> </ul> | <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> |

**Ambient conditions**

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

**Certificates/ approvals**

|                                 |            |                                  |
|---------------------------------|------------|----------------------------------|
| <b>General Product Approval</b> | <b>EMC</b> | <b>Declaration of Conformity</b> |
|---------------------------------|------------|----------------------------------|

[Confirmation](#)



|                          |                          |              |                |
|--------------------------|--------------------------|--------------|----------------|
| <b>Test Certificates</b> | <b>Marine / Shipping</b> | <b>other</b> | <b>Railway</b> |
|--------------------------|--------------------------|--------------|----------------|

[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



[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=3UG4633-2AL30>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UG4633-2AL30>

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

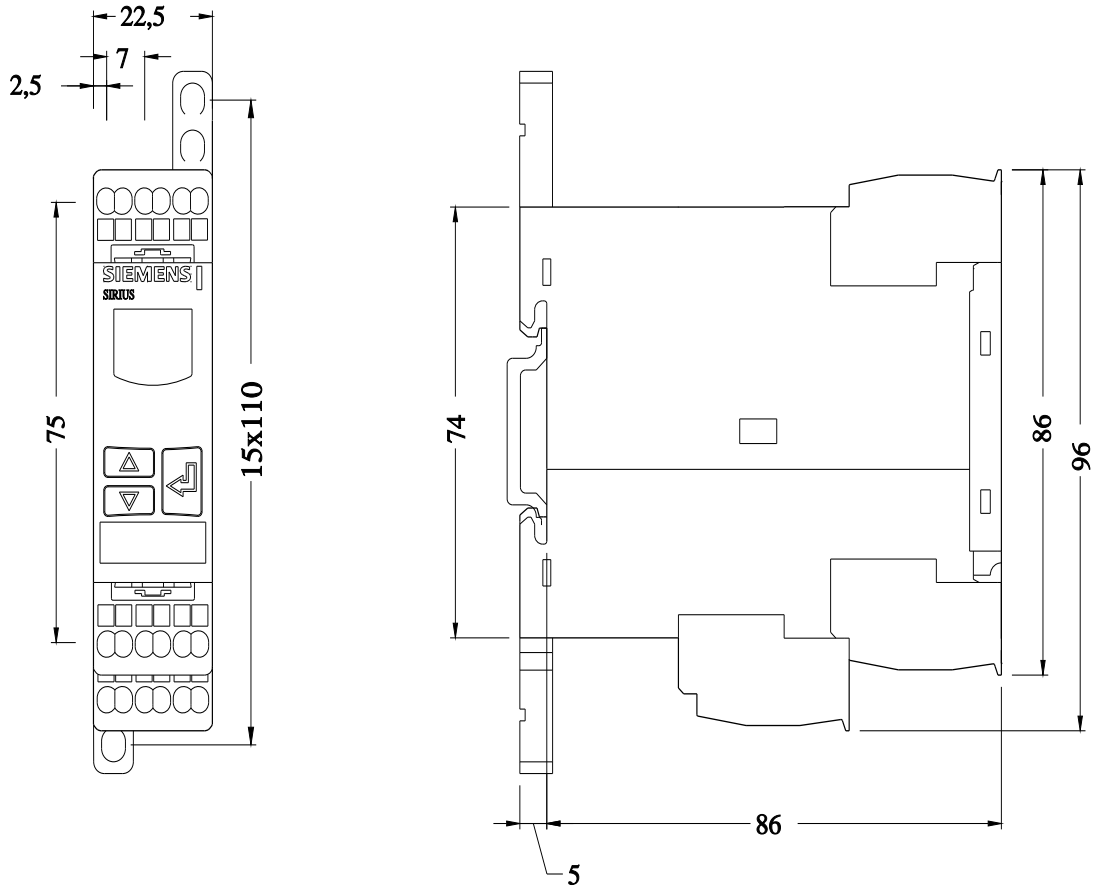
<https://support.industry.siemens.com/cs/ww/en/ps/3UG4633-2AL30>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3UG4633-2AL30&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3UG4633-2AL30&lang=en)

Characteristic: Derating

<https://support.industry.siemens.com/cs/ww/en/ps/3UG4633-2AL30/manual>



last modified:

11/17/2021