



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>

**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>
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[Confirmation](#)



<b>Test Certificates</b>	<b>Marine / Shipping</b>	<b>other</b>	<b>Railway</b>
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[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,...)

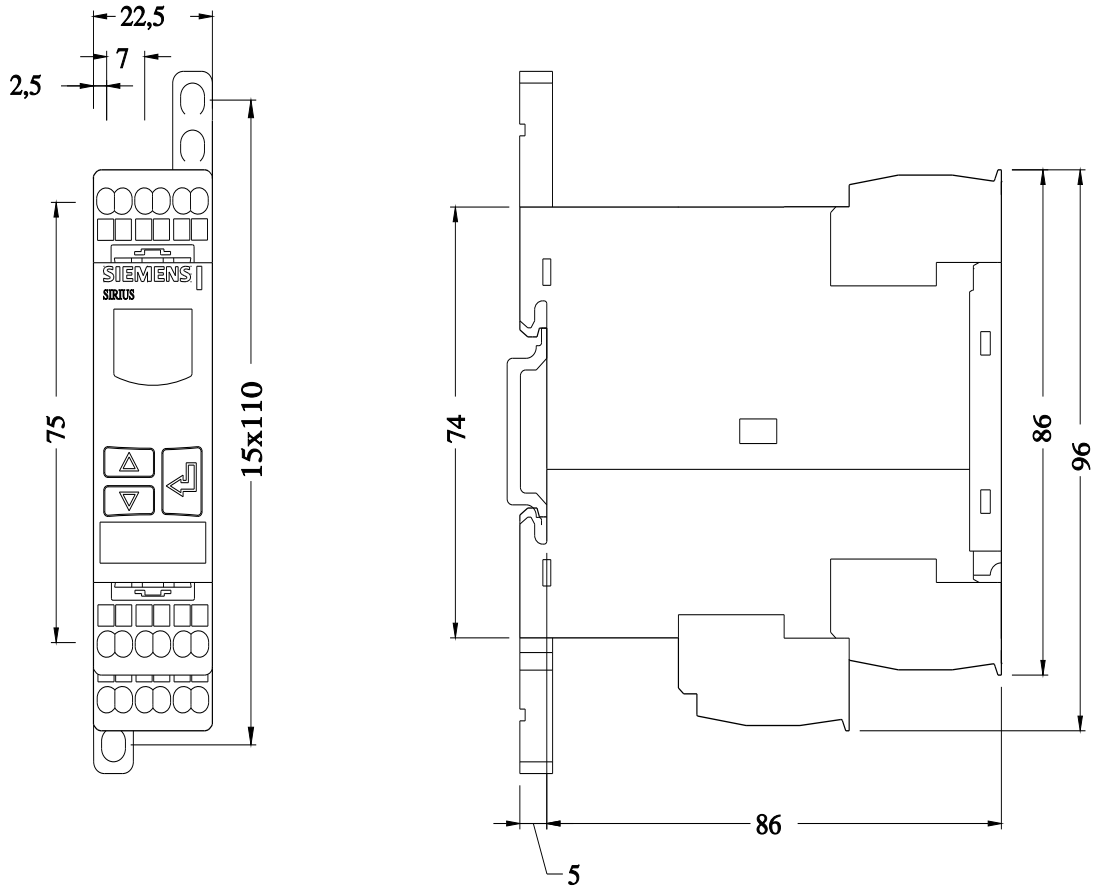
<https://support.industry.siemens.com/cs/ww/en/ps/3UG4633-2AL30>

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