



Digital monitoring relay Voltage monitoring, 22.5 mm from 10 to 600 V AC/DC Overshoot 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 300 V 1 change-over contact with or without fault buffer screw terminal Successor product for 3UG3532-1AL20, 3UG3532-1AG20

<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	690 V																						
<ul style="list-style-type: none"> <li>with degree of pollution 3 rated value</li> </ul>																							
<b>type of voltage</b>	AC/DC																						
<ul style="list-style-type: none"> <li>for monitoring</li> <li>of the control supply voltage</li> </ul>																							
<b>surge voltage resistance rated value</b>	4 kV																						
<b>maximum permissible voltage for safe isolation</b>	300 V																						
<ul style="list-style-type: none"> <li>between auxiliary and auxiliary circuit</li> <li>between control and auxiliary circuit</li> </ul>																							
<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>thermal current of the switching element with contacts maximum</b>	5 A																						
<b>reference code according to IEC 81346-2</b>	K																						
<b>relative repeat accuracy</b>	1 %																						
<b>Substance Prohibitance (Date)</b>	05/01/2012																						
<b>Product Function</b>																							
<b>product function</b>	<table border="0"> <tr><td>• undervoltage detection</td><td>Yes</td></tr> <tr><td>• overvoltage detection</td><td>Yes</td></tr> <tr><td>• overvoltage detection 1 phase</td><td>Yes</td></tr> <tr><td>• overvoltage detection 3 phase</td><td>No</td></tr> <tr><td>• overvoltage detection DC</td><td>Yes</td></tr> <tr><td>• undervoltage detection 1 phase</td><td>Yes</td></tr> <tr><td>• undervoltage detection 3 phases</td><td>No</td></tr> <tr><td>• undervoltage detection DC</td><td>Yes</td></tr> <tr><td>• voltage window recognition 1 phase</td><td>Yes</td></tr> <tr><td>• voltage window recognition 3 phase</td><td>No</td></tr> <tr><td>• voltage window recognition DC</td><td>Yes</td></tr> </table>	• 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
• 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																					

<ul style="list-style-type: none"> <li>adjustable open/closed-circuit current principle</li> </ul>	Yes
<ul style="list-style-type: none"> <li>external reset</li> </ul>	Yes
<ul style="list-style-type: none"> <li>auto-RESET</li> </ul>	Yes
<b>Control circuit/ Control</b>	
<b>control supply voltage at AC</b>	
<ul style="list-style-type: none"> <li>at 50 Hz rated value</li> </ul>	24 ... 240 V
<ul style="list-style-type: none"> <li>at 60 Hz rated value</li> </ul>	24 ... 240 V
<b>control supply voltage at DC</b>	
<ul style="list-style-type: none"> <li>rated value</li> </ul>	24 ... 240 V
<b>operating range factor control supply voltage rated value at DC</b>	
<ul style="list-style-type: none"> <li>initial value</li> </ul>	0.85
<ul style="list-style-type: none"> <li>full-scale value</li> </ul>	1.1
<b>operating range factor control supply voltage rated value at AC at 50 Hz</b>	
<ul style="list-style-type: none"> <li>initial value</li> </ul>	0.85
<ul style="list-style-type: none"> <li>full-scale value</li> </ul>	1.1
<b>operating range factor control supply voltage rated value at AC at 60 Hz</b>	
<ul style="list-style-type: none"> <li>initial value</li> </ul>	0.85
<ul style="list-style-type: none"> <li>full-scale value</li> </ul>	1.1
<b>Measuring circuit</b>	
<b>measurable line frequency</b>	40 ... 500 Hz
<b>measurable voltage at AC</b>	600 ... 10 V
<b>measurable voltage at DC</b>	10 ... 600 V
<b>adjustable response delay time</b>	
<ul style="list-style-type: none"> <li>with lower or upper limit violation</li> </ul>	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>	
<ul style="list-style-type: none"> <li>due to burst according to IEC 61000-4-4</li> </ul>	2 kV
<ul style="list-style-type: none"> <li>due to conductor-earth surge according to IEC 61000-4-5</li> </ul>	2 kV
<ul style="list-style-type: none"> <li>due to conductor-conductor surge according to IEC 61000-4-5</li> </ul>	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>	
<ul style="list-style-type: none"> <li>between input and output</li> </ul>	Yes
<ul style="list-style-type: none"> <li>between the outputs</li> </ul>	Yes
<ul style="list-style-type: none"> <li>between the voltage supply and other circuits</li> </ul>	Yes
<b>Connections/ Terminals</b>	
<b>product component removable terminal for auxiliary and control circuit</b>	Yes
<b>type of electrical connection</b>	screw-type terminals
<b>type of connectable conductor cross-sections</b>	

<ul style="list-style-type: none"> <li>• solid</li> <li>• finely stranded with core end processing</li> <li>• at AWG cables solid</li> <li>• at AWG cables stranded</li> </ul>	1x (0.5 ... 4 mm <sup>2</sup> ), 2x (0.5 ... 2.5 mm <sup>2</sup> ) 1x (0.5 ... 2.5 mm <sup>2</sup> ), 2x (0.5 ... 1.5 mm <sup>2</sup> ) 2x (20 ... 14) 2x (20 ... 14)
<b>connectable conductor cross-section</b>	
<ul style="list-style-type: none"> <li>• solid</li> <li>• finely stranded with core end processing</li> </ul>	0.5 ... 4 mm <sup>2</sup> 0.5 ... 2.5 mm <sup>2</sup>
<b>AWG number as coded connectable conductor cross section</b>	
<ul style="list-style-type: none"> <li>• solid</li> <li>• stranded</li> </ul>	20 ... 14 20 ... 14
tightening torque with screw-type terminals	1.2 ... 0.8 N·m

### Installation/ mounting/ dimensions

<b>mounting position</b>	any
<b>fastening method</b>	snap-on mounting
<b>height</b>	92 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>	0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm

### 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>	-25 ... +60 °C -40 ... +85 °C -40 ... +85 °C

### 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>
--------------------------	--------------------------	--------------	----------------

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



[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=3UG4632-1AW30>

**Cax online generator**

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UG4632-1AW30>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3UG4632-1AW30>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3UG4632-1AW30&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3UG4632-1AW30&lang=en)

**Characteristic: Derating**

<https://support.industry.siemens.com/cs/ww/en/ps/3UG4632-1AW30/manual>

last modified:

11/17/2021 