



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

product brand name	SIRIUS
product designation	Voltage monitoring relay with digital setting
product type designation	3UG4
<b>General technical data</b>	
product function	Voltage monitoring relay
design of the display	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>	
type of voltage	AC/DC
<ul style="list-style-type: none"> <li>for monitoring</li> <li>of the control supply voltage</li> </ul>	AC/DC
surge voltage resistance rated value	4 kV
maximum permissible voltage for safe isolation	300 V
<ul style="list-style-type: none"> <li>between auxiliary and auxiliary circuit</li> <li>between control and auxiliary circuit</li> </ul>	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
<b>Product Function</b>	
product function	Yes
<ul style="list-style-type: none"> <li>undervoltage detection</li> <li>overvoltage detection</li> <li>overvoltage detection 1 phase</li> <li>overvoltage detection 3 phase</li> <li>overvoltage detection DC</li> <li>undervoltage detection 1 phase</li> <li>undervoltage detection 3 phases</li> <li>undervoltage detection DC</li> <li>voltage window recognition 1 phase</li> <li>voltage window recognition 3 phase</li> <li>voltage window recognition DC</li> <li>adjustable open/closed-circuit current principle</li> <li>external reset</li> </ul>	Yes Yes Yes No Yes Yes No Yes Yes No Yes Yes Yes Yes

• auto-RESET	Yes
<b>Control circuit/ Control</b>	
<b>control supply voltage at AC</b>	
• at 50 Hz rated value	24 ... 240 V
• at 60 Hz rated value	24 ... 240 V
<b>control supply voltage at DC</b>	
• rated value	24 ... 240 V
<b>operating range factor control supply voltage rated value at DC</b>	
• initial value	0.85
• full-scale value	1.1
<b>operating range factor control supply voltage rated value at AC at 50 Hz</b>	
• initial value	0.85
• full-scale value	1.1
<b>operating range factor control supply voltage rated value at AC at 60 Hz</b>	
• initial value	0.85
• full-scale value	1.1
<b>Measuring circuit</b>	
<b>measurable line frequency</b>	40 ... 500 Hz
<b>measurable voltage at AC</b>	10 ... 600 V
<b>measurable voltage at DC</b>	10 ... 600 V
<b>adjustable response delay time</b>	
• 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
ampacity of the output relay at AC-15 at 400 V at 50/60 Hz	3 A
<b>ampacity of the output relay at DC-13</b>	
• at 24 V	1 A
• at 125 V	0.2 A
• at 250 V	0.1 A
<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	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

**type of connectable conductor cross-sections**

- solid
- finely stranded with core end processing
- at AWG cables solid
- at AWG cables stranded

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)

**connectable conductor cross-section**

- solid
- finely stranded with core end processing

0.5 ... 4 mm<sup>2</sup>  
 0.5 ... 2.5 mm<sup>2</sup>

**AWG number as coded connectable conductor cross section**

- solid
- stranded

20 ... 14  
 20 ... 14

tightening torque with screw-type terminals

1.2 ... 0.8 N·m

**Installation/ mounting/ dimensions**

**mounting position**

any

**fastening method**

snap-on mounting

**height**

92 mm

**width**

22.5 mm

**depth**

91 mm

**required spacing**

- with side-by-side mounting
  - forwards
  - backwards
  - upwards
  - downwards
  - at the side
- for grounded parts
  - forwards
  - backwards
  - upwards
  - at the side
  - downwards
- for live parts
  - forwards
  - backwards
  - upwards
  - at the side

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

**ambient temperature**

- during operation
- during storage
- during transport

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

**Certificates/ approvals**

General Product Approval	EMC	Declaration of Conformity
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[Confirmation](#)



Declaration of Conformity	Test Certificates	Marine / Shipping	other
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[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



[Confirmation](#)

**Railway**

#### 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>

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