



Digital monitoring relay Current monitoring, 22.5 mm from 0.05-10 A AC/DC  
Overshoot and undershoot 24 to 240 V AC/DC 50 to 60 Hz DC and AC ON delay  
and noise pulses delay 0.1 to 20 s Hysteresis 0.01 to 5 A 1 change-over contact  
with or without fault buffer screw terminal Successor product for 3UG3522-1AL20,  
3UG3522-1AG20 and 3UG3522-1AC48-0AA1

<b>product brand name</b>	SIRIUS
<b>product designation</b>	Current monitoring relay with digital setting
<b>product type designation</b>	3UG4
<b>General technical data</b>	
<b>product function</b>	Current monitoring relay
<b>design of the display</b>	LCD
<b>insulation voltage for overvoltage category III according to IEC 60664</b>	
• with degree of pollution 3 rated value	690 V
<b>degree of pollution</b>	3
<b>surge voltage resistance rated value</b>	4 kV
<b>maximum permissible voltage for protective separation</b>	
• between auxiliary and auxiliary circuit	300 V
• between control and auxiliary circuit	300 V
<b>protection class IP</b>	IP20
<b>shock resistance according to IEC 60068-2-27</b>	sinusoidal half-wave 15g / 11 ms
<b>mechanical service life (operating cycles) typical</b>	10 000 000
<b>electrical endurance (operating cycles) at AC-15 at 230 V typical</b>	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>SVHC substance name</b>	Blei - 7439-92-1 Bleimonoxid (Bleioxid) - 1317-36-8 Dicyclohexylphthalat (DCHP) - 84-61-7
<b>Product Function</b>	
<b>product function</b>	
• overcurrent detection 1 phase	Yes
• overcurrent detection 3 phase	No
• undercurrent detection 1 phase	Yes
• undercurrent detection 3 phases	No
• overcurrent detection DC	Yes
• undercurrent detection DC	Yes
• current window recognition DC	Yes
• voltage window recognition 1 phase	No
• voltage window recognition 3 phase	No
• adjustable open/closed-circuit current principle	Yes
• external reset	Yes
• auto-RESET	Yes
<b>Supply voltage</b>	

<b>type of voltage of the supply voltage</b>	AC/DC
<b>supply voltage 1 at AC</b>	
• at 50 Hz	20.4 ... 264 V
• at 60 Hz	20.4 ... 264 V
<b>supply voltage 1 at DC</b>	20.4 ... 264 V
<b>Measuring circuit</b>	
<b>type of current for monitoring</b>	AC/DC
<b>measurable current</b>	0.05 ... 15 A
<b>measurable line frequency</b>	40 ... 500 Hz
<b>adjustable current response value current</b>	
• 1	0.05 ... 10 A
• 2	0.05 ... 10 A
<b>adjustable response delay time</b>	
• when starting	0.1 ... 20 s
• with lower or upper limit violation	0.1 ... 20 s
<b>adjustable switching hysteresis for measured current value</b>	10 ... 5 000 mA
<b>buffering time in the event of power failure minimum</b>	10 ms
<b>accuracy of digital display</b>	+/-1 digit
<b>relative temperature-related measurement deviation</b>	5 %
<b>internal resistance of the measuring circuit</b>	5 mΩ
<b>Precision</b>	
<b>relative metering precision</b>	5 %
<b>temperature drift per °C</b>	0.1 %/°C
<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
operating voltage rated value	24 ... 240 V
<b>ampacity of the output relay at AC-15</b>	
• at 250 V at 50/60 Hz	3 A
• 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>	0.005 A
<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 main circuit</b>	Yes
<b>product component removable terminal for auxiliary and control circuit</b>	Yes
<b>type of electrical connection</b>	
• for main current circuit	screw-type terminals

<ul style="list-style-type: none"> <li>• for auxiliary and control circuit</li> </ul>	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>• for AWG cables solid</li> <li>• for AWG cables stranded</li> </ul>	1x (0.5 ... 4.0 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	0.8 ... 1.2 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>— downwards</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

#### Approvals Certificates

<b>General Product Approval</b>	<b>EMC</b>	<b>Declaration of Con- formity</b>
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[Confirmation](#)

<b>Declaration of Con- formity</b>	<b>Test Certificates</b>	<b>Marine / Shipping</b>	<b>other</b>
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[Type Test Certific-  
ates/Test Report](#)

[Special Test Certific-  
ate](#)

[Confirmation](#)

[Vibration and Shock](#)

**Further information**

**Siemens has decided to exit the Russian market (see here).**

<https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business>

**Siemens is working on the renewal of the current EAC certificates.**

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

**Information on the packaging**

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

**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=3UG4622-1AW30>

**Cax online generator**

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UG4622-1AW30>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3UG4622-1AW30>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3UG4622-1AW30&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3UG4622-1AW30&lang=en)

**Characteristic: Derating**

<https://support.industry.siemens.com/cs/ww/en/ps/3UG4622-1AW30/manual>

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