

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

Product function		Current monitoring relay
<b>Measuring circuit:</b>		
Number of poles for main current circuit		1
Type of current for monitoring		AC/DC
Measurable current	A	0.05 ... 15
Measurable current at AC	mA	50 ... 15 000
Measurable line frequency	Hz	40 ... 500
Adjustable pick-up value current		
• 1	A	0.05 ... 10
• 2	A	0.05 ... 10
Adjustable response delay time		
• when starting	s	0.1 ... 20
• with lower or upper limit violation	s	0.1 ... 20
Adjustable switching hysteresis for measured current value	mA	10 ... 5 000
Buffering time in the event of power failure minimum	ms	10
Operating voltage rated value	V	24 ... 240
Response time maximum	ms	450
Relative metering precision	%	5

Accuracy of digital display		+/-1 digit
Relative temperature-related measurement deviation	%	5
Temperature drift per °C	%/°C	0.1
Relative repeat accuracy	%	1

#### General technical data:

<b>Design of the display</b>		LCD
<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
• External reset		Yes
• Auto-reset		Yes
• Adjustable open/closed-circuit current principle		Yes
<b>Starting time after the control supply voltage has been applied</b>	ms	1 000
<b>Type of voltage of the supply voltage</b>		AC/DC
<b>Supply voltage</b>		
• 1 at AC		
— at 50 Hz	V	24 ... 240
— at 60 Hz	V	240 ... 24
• 1		
— at DC	V	24 ... 240
<b>Surge voltage resistance rated value</b>	kV	4
<b>Consumed active power</b>	W	2
<b>Protection class IP</b>		IP20
<b>Electromagnetic compatibility</b>		IEC 60947-1 / IEC 61000-6-2 / IEC 61000-6-4
<b>Vibration resistance acc. to IEC 60068-2-6</b>		1 ... 6 Hz: 15 mm, 6 ... 500 Hz: 2g
<b>Shock resistance acc. to IEC 60068-2-27</b>		sinusoidal half-wave 15g / 11 ms
<b>Installation altitude at height above sea level maximum</b>	m	2 000
<b>Conducted interference due to burst acc. to IEC 61000-4-4</b>		2 kV
<b>Conducted interference due to conductor-earth surge acc. to IEC 61000-4-5</b>		2 kV
<b>Conducted interference due to conductor-conductor surge acc. to IEC 61000-4-5</b>		1 kV
<b>Electrostatic discharge acc. to IEC 61000-4-2</b>		6 kV contact discharge / 8 kV air discharge
<b>Field-bound parasitic coupling acc. to IEC 61000-4-3</b>		10 V/m

<b>Insulation voltage for overvoltage category III according to IEC 60664 with degree of pollution 3 rated value</b>	V	690
<b>maximum permissible voltage for safe isolation</b>		
• between control and auxiliary circuit	V	300
• between auxiliary and auxiliary circuit	V	300
<b>Degree of pollution</b>		3
<b>Ambient temperature</b>		
• during operation	°C	-25 ... +60
• during storage	°C	-40 ... +85
• during transport	°C	-40 ... +85
<b>Galvanic isolation</b>		
• between entrance and outlet		Yes
• between the outputs		Yes
• between the voltage supply and other circuits		Yes






Mechanical data:		
<b>Width</b>	mm	22.5
<b>Height</b>	mm	92
<b>Depth</b>	mm	91
<b>Mounting position</b>		any
<b>Required spacing for grounded parts</b>		
• forwards	mm	0
• Backwards	mm	0
• at the side	mm	0
• upwards	mm	0
• downwards	mm	0
<b>Required spacing with side-by-side mounting</b>		
• forwards	mm	0
• Backwards	mm	0
• at the side	mm	0
• upwards	mm	0
• downwards	mm	0
<b>Required spacing for live parts</b>		
• forwards	mm	0
• Backwards	mm	0
• at the side	mm	0
• upwards	mm	0
• downwards	mm	0
<b>Mounting type</b>		snap-on mounting
<b>Type of electrical connection</b>		
• for auxiliary and control current circuit		screw-type terminals
• for main current circuit		screw-type terminals


<b>Product function</b>		
<ul style="list-style-type: none"> <li>removable terminal for auxiliary and control circuit</li> </ul>		Yes
<ul style="list-style-type: none"> <li>removable terminal for main circuit</li> </ul>		Yes
<b>Type of connectable conductor cross-sections</b>		
<ul style="list-style-type: none"> <li>solid</li> </ul>		1x (0.5 ... 4.0 mm <sup>2</sup> ), 2x (0.5 ... 2.5 mm <sup>2</sup> )
<ul style="list-style-type: none"> <li>finely stranded <ul style="list-style-type: none"> <li>with core end processing</li> </ul> </li> </ul>		1x (0.5 ... 2.5 mm <sup>2</sup> ), 2x (0.5 ... 1.5 mm <sup>2</sup> )
<ul style="list-style-type: none"> <li>at AWG conductors <ul style="list-style-type: none"> <li>solid</li> </ul> </li> </ul>		2x (20 ... 14)
<ul style="list-style-type: none"> <li>at AWG conductors <ul style="list-style-type: none"> <li>stranded</li> </ul> </li> </ul>		2x (20 ... 14)
Tightening torque with screw-type terminals	N·m	0.8 ... 1.2

#### Outputs:

<b>Number of NO contacts delayed switching</b>		0
<b>Number of NC contacts delayed switching</b>		0
<b>Number of CO contacts delayed switching</b>		1
<b>Ampacity</b>		
<ul style="list-style-type: none"> <li><b>of the output relay</b> <ul style="list-style-type: none"> <li>at AC-15 <ul style="list-style-type: none"> <li>at 250 V at 50/60 Hz</li> </ul> </li> <li>at 400 V at 50/60 Hz</li> </ul> </li> </ul>	A	3
<ul style="list-style-type: none"> <li>at DC-13 <ul style="list-style-type: none"> <li>at 24 V</li> <li>at 125 V</li> <li>at 250 V</li> </ul> </li> </ul>	A	1
<ul style="list-style-type: none"> <li>for permanent overcurrent maximum permissible</li> </ul>	A	0.2
<ul style="list-style-type: none"> <li>for overcurrent duration &lt; 1 s maximum permissible</li> </ul>	A	0.1
<ul style="list-style-type: none"> <li>for permanent overcurrent maximum permissible</li> </ul>	A	15
<ul style="list-style-type: none"> <li>for overcurrent duration &lt; 1 s maximum permissible</li> </ul>	A	50
<b>Operating current at 17 V minimum</b>	A	0.005
<b>Continuous current of the DIAZED fuse link of the output relay</b>	A	4
<b>Thermal current of the switching element with contacts maximum</b>	A	5
<b>Mechanical service life (switching cycles) typical</b>		10 000 000
<b>Electrical endurance (switching cycles) at AC-15 at 230 V typical</b>		100 000
<b>Operating frequency with 3RT2 contactor maximum</b>	1/h	5 000

#### Certificates/ approvals:

General Product Approval			EMC	Declaration of Conformity	Test Certificates
 CCC	 UL		 C-Tick	 EG-Konf.	<a href="#">Special Test Certificate</a>

Test Certificates	Shipping Approval	other	Railway
<a href="#">Type Test Certificates/Test Report</a>	 LRS	<a href="#">Confirmation</a>	<a href="#">Vibration and Shock</a>

#### Further information

**Information- and Downloadcenter (Catalogs, Brochures,...)**

<http://www.siemens.com/industrial-controls/catalogs>

**Industry Mall (Online ordering system)**

<http://www.siemens.com/industrymall>

**Cax online generator**

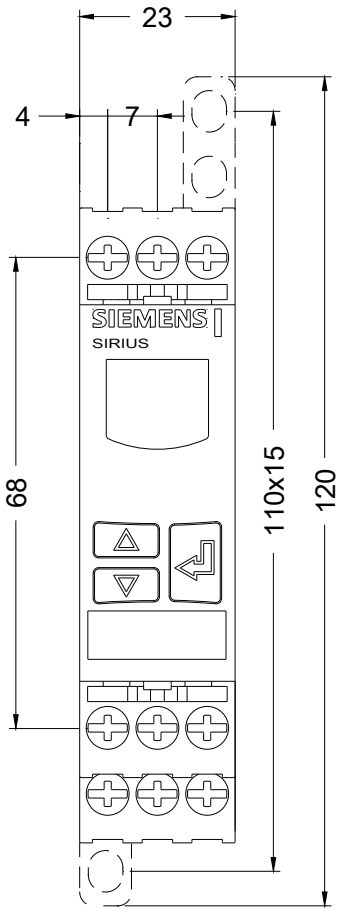
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mfb=3UG4622-1AW30>

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

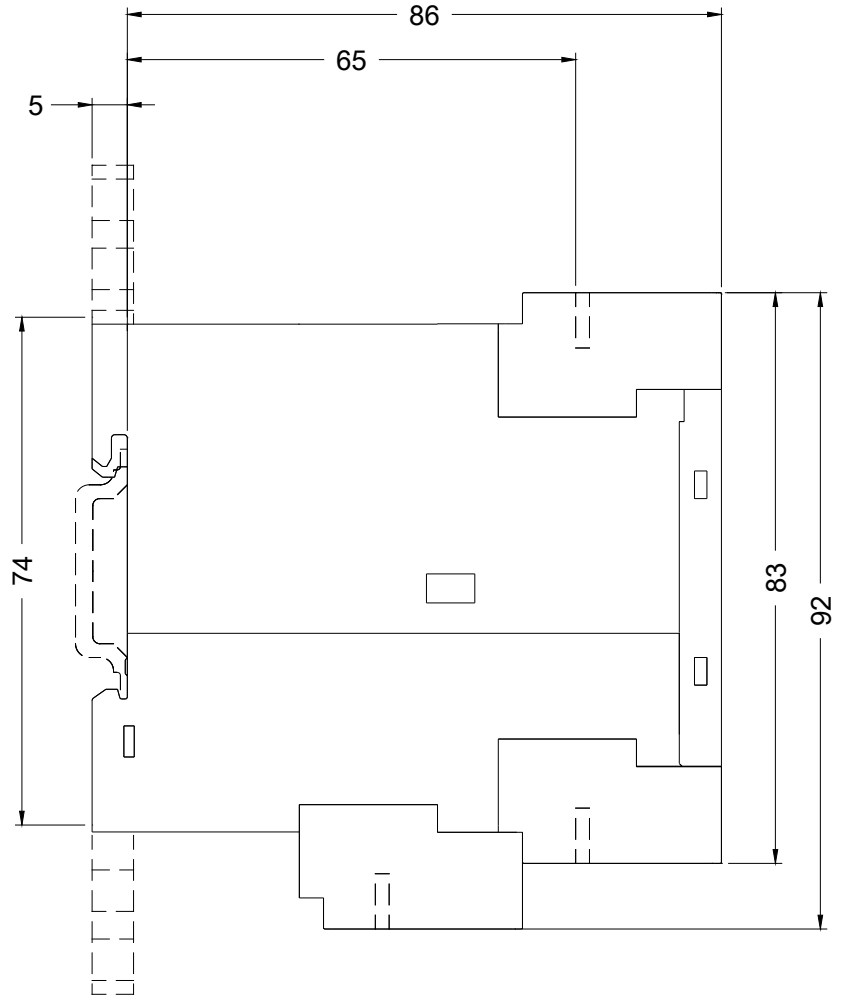
<https://support.industry.siemens.com/cs/ww/en/ps/3UG4622-1AW30>

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

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



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