



DIGITAL MONITORING RELAY CURRENT MONITORING, 22.5MM FROM 2 TO 500MA AC/DC OVERSHOOT AND UNDERSHOOT SUPPLY VOLTAGE: AC/DC 24V DC AND AC 50 TO 60 HZ NO GALVANIC ISOLATION FROM MEASURING CIRCUIT STARTUP AND INTERF. PEAK DELAY 0.1 TO 20S HYSTERESIS 0.1 TO 250MA 1 CO CONTACT W. OR W/O ERROR LOG SCREW TERMINAL REPLACEMENT PRODUCT FOR 3UG3521-1AC..

<b>Product function</b>	Current monitoring relay	
<b>Measuring circuit:</b>		
<b>Number of poles / for main current circuit</b>		1
<b>Type of current / for monitoring</b>		AC/DC
<b>Measurable current</b>	A	0.0030 ... 0.6
• for AC	mA	3 ... 600
<b>Measurable line frequency</b>	Hz	40 ... 500
<b>Adjustable response current</b>		
• 1	A	0.0030 ... 0.5
• 2	A	0.0030 ... 0.5
<b>Adjustable response delay time</b>		
• when starting	s	0.1 ... 20
• with lower or upper limit violation	s	0.1 ... 20
<b>Adjustable switching hysteresis for measured current value</b>	mA	0.1 ... 250
<b>Stored energy time / at mains power cut / minimum</b>	ms	10
<b>Operating voltage</b>		
• rated value	V	24 ... 24
<b>Response time / maximum</b>	ms	450
<b>Relative metering precision</b>	%	5
<b>Precision of digital display</b>		+/-1 digit

Relative temperature-related measurement deviation	%	5
Temperature drift per °C	%/°C	0.1
Relative repeat accuracy	%	1

#### General technical details:

<b>Design of the display</b>		LCD
<b>Product function</b>		
• overcurrent recognition of 1 phase		Yes
• overcurrent recognition of 3 phases		No
• undercurrent recognition of 1 phase		Yes
• undercurrent recognition of 3 phases		No
• overcurrent recognition DC		Yes
• undercurrent recognition DC		Yes
• current window recognition DC		Yes
• reset external		Yes
• self-reset		Yes
• open-circuit or 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 supply voltage</b>		AC/DC
<b>Supply voltage / 1</b>		
• at 50 Hz / for AC / rated value	V	24
• at 60 Hz / for AC / rated value	V	24
• for DC / rated value	V	24
<b>Impulse voltage resistance / rated value</b>	kV	4
<b>Recorded real 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>Resistance against vibration / according to IEC 60068-2-6</b>		1 ... 6 Hz: 15 mm, 6 ... 500 Hz: 2g
<b>Resistance against shock / according to IEC 60068-2-27</b>		sinusoidal half-wave 15g / 11 ms
<b>Installation altitude / at a height over sea level / maximum</b>	m	2,000
<b>Conductor-bound parasitic coupling BURST / according to IEC 61000-4-4</b>		2 kV
<b>Conductor-bound parasitic coupling conductor-earth SURGE / according to IEC 61000-4-5</b>		2 kV
<b>Conductor-bound parasitic coupling conductor-conductor SURGE / according to IEC 61000-4-5</b>		1 kV
<b>Electrostatic discharge / according to IEC 61000-4-2</b>		6 kV contact discharge / 8 kV air discharge
<b>Field-bound parasitic coupling / according 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 disconnection</b>		

• between control and auxiliary circuit	V	300
• between auxiliary circuit and auxiliary circuit	V	300
<b>Degree of pollution</b>		3
<b>Ambient temperature</b>		
• during operating	°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		No








<b>Mechanical design:</b>		
<b>Width</b>	mm	22.5
<b>Height</b>	mm	92
<b>Depth</b>	mm	91
<b>mounting position</b>		any
<b>Distance, to be maintained, to earthed part</b>		
• forwards	mm	0
• backwards	mm	0
• sideways	mm	0
• upwards	mm	0
• downwards	mm	0
<b>Distance, to be maintained, to the ranks assembly</b>		
• forwards	mm	0
• backwards	mm	0
• sideways	mm	0
• upwards	mm	0
• downwards	mm	0
<b>Distance, to be maintained, conductive elements</b>		
• forwards	mm	0
• backwards	mm	0
• sideways	mm	0
• upwards	mm	0
• downwards	mm	0
<b>Type of mounting</b>		snap-on mounting
<b>Design of the electrical connection</b>		
• for auxiliary and control current circuit		screw-type terminals
• for main current circuit		screw-type terminals

<b>Product function</b>		
• removable terminal for auxiliary and control circuit		Yes
• removable terminal for main circuit		Yes
<b>Type of the connectable conductor cross-section</b>		
• solid		1x (0.5 ... 4 mm <sup>2</sup> ), 2x (0.5 ... 2.5 mm <sup>2</sup> )
• finely stranded		1x (0.5 ... 2.5 mm <sup>2</sup> ), 2x (0.5 ... 1.5 mm <sup>2</sup> )
• with wire end processing		
• for AWG conductors		
• solid		2x (20 ... 14)
• stranded		2x (20 ... 14)
<b>Tightening torque</b>		
• with screw-type terminals	N-m	0.8 ... 1.2

### Outputs:

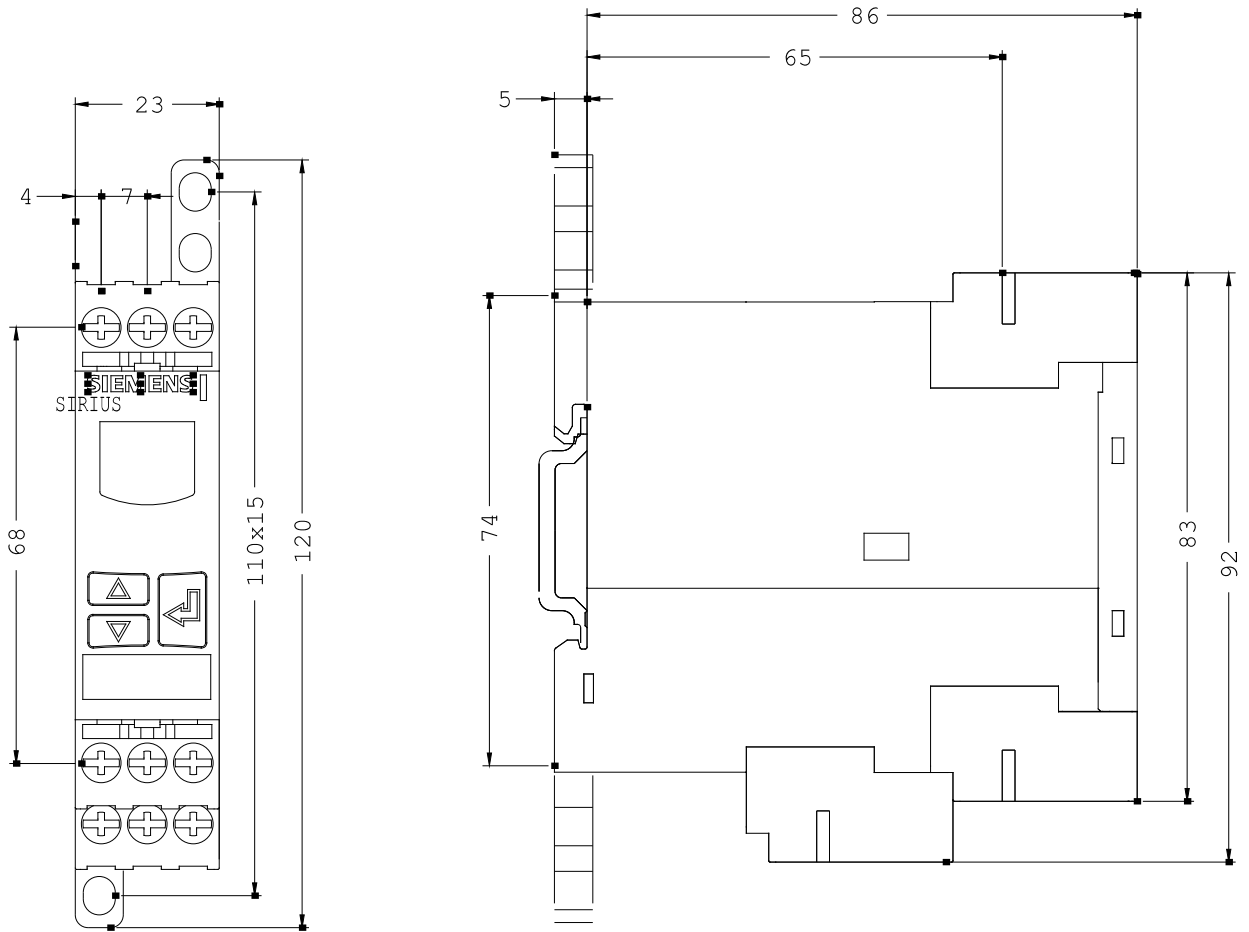
<b>Number of NO contacts / delayed switching</b>		0
<b>Number of NC contacts / delayed switching</b>		0
<b>Number of change-over switches / delayed switching</b>		1
<b>Current carrying capacity</b>		
• of output relay		
• at AC-15		
• at 250 V / at 50/60 Hz	A	3
• at 400 V / at 50/60 Hz	A	3
• at DC-13		
• at 24 V	A	1
• at 125 V	A	0.2
• at 250 V	A	0.1
• for permanent overcurrent / maximum permissible	A	0.6
• for overcurrent duration < 1 s / maximum permissible	A	5
<b>Operating current / at 17 V / minimum</b>	A	0.0050
<b>Continuous current / of the DIAZED fuse link of the output relay</b>	A	4
<b>Thermal current / of the contact-affected switching element / maximum</b>	A	5
<b>Mechanical operating cycles as operating time / typical</b>		10,000,000
<b>Electrical operating cycles as operating time / at AC-15 / at 230 V / typical</b>		100,000
<b>Operating cycles / with 3RT2 contactor / maximum</b>	1/h	5,000

### Certificates/approvals:

General Product Approval			EMC	Test Certificates
 CCC	 GOST	 UL	 C-TICK	<a href="#">Special Test Certificate</a>
Shipping Approval			other	
 DNV	 GL	 LRS	<a href="#">Declaration of Conformity</a>	<a href="#">other</a>

**Further information:**

- Information- and Downloadcenter (Catalogs, Brochures,...)**  
<http://www.siemens.com/industrial-controls/catalogs>
- 
- Industry Mall (Online ordering system)**  
<http://www.siemens.com/industrial-controls/mall>
- 
- Cax online generator:**  
<http://www.siemens.com/cax>
- 
- Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**  
<http://support.automation.siemens.com/WW/view/en/3UG4621-1AA30/all>
- 
- Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)**  
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3UG4621-1AA30](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3UG4621-1AA30)



last change:

Feb 4, 2013