

DIGITAL MONITORING RELAY CURRENT MONITORING, 22.5MM FROM 0.05 TO 10A AC/DC OVERSHOOT A. UNDERSHOOT AC/DC 24 TO 240V DC AND AC 50 TO 60 HZ ON AND SPIKE DELAY 0.1 TO 20S HYSTERESIS 0.01 TO 5A 1 CO CONTACT W. OR W/O ERROR MEMORY SCREW CONNECTION REPLACEMENT PRODUCT FOR 3UG3522-1AL20, 3UG3522-1AG20 AND 3UG3522-1AC48-0AA1

Product function	Current monitoring relay	
Measuring circuit:		
Number of poles / for main current circuit		1
Type of current / for monitoring		AC/DC
Measurable current	A	0.05 ... 15
• for AC	mA	50 ... 15,000
Measurable line frequency	Hz	40 ... 500
Adjustable response current		
• 1	A	0.5 ... 10
• 2	A	0.5 ... 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
Stored energy time / at mains power cut / minimum	ms	10
Operating voltage		
• rated value	V	24 ... 240
Response time / maximum	ms	450
Relative metering precision	%	5
Precision of digital display		+/-1 digit

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

General technical details:

Design of the display		LCD
Product function		
• 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
Starting time / after the control supply voltage has been applied	ms	1,000
Type of voltage / of supply voltage		AC/DC
Supply voltage / 1		
• at 50 Hz		
• for AC	V	24 ... 240
• at 60 Hz		
• for AC	V	240 ... 24
• for DC	V	24 ... 240
Impulse voltage resistance / rated value	kV	4
Recorded real power	W	2
Protection class IP		IP20
Electromagnetic compatibility		IEC 60947-1 / IEC 61000-6-2 / IEC 61000-6-4
Resistance against vibration / according to IEC 60068-2-6		1 ... 6 Hz: 15 mm, 6 ... 500 Hz: 2g
Resistance against shock / according to IEC 60068-2-27		sinusoidal half-wave 15g / 11 ms
Installation altitude / at a height over sea level / maximum	m	2,000
Conductor-bound parasitic coupling BURST / according to IEC 61000-4-4		2 kV
Conductor-bound parasitic coupling conductor-earth SURGE / according to IEC 61000-4-5		2 kV
Conductor-bound parasitic coupling conductor-conductor SURGE / according to IEC 61000-4-5		1 kV
Electrostatic discharge / according to IEC 61000-4-2		6 kV contact discharge / 8 kV air discharge
Field-bound parasitic coupling / according to IEC 61000-4-3		10 V/m

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

Mechanical design:







Width	mm	22.5
Height	mm	92
Depth	mm	91
mounting position		any
Distance, to be maintained, to earthed part		
• forwards	mm	0
• backwards	mm	0
• sideways	mm	0
• upwards	mm	0
• downwards	mm	0
Distance, to be maintained, to the ranks assembly		
• forwards	mm	0
• backwards	mm	0
• sideways	mm	0
• upwards	mm	0
• downwards	mm	0
Distance, to be maintained, conductive elements		
• forwards	mm	0
• backwards	mm	0
• sideways	mm	0
• upwards	mm	0
• downwards	mm	0
Type of mounting		snap-on mounting
Design of the electrical connection		

<ul style="list-style-type: none"> • for auxiliary and control current circuit • for main current circuit 		screw-type terminals
		screw-type terminals
Product function		
<ul style="list-style-type: none"> • removable terminal for auxiliary and control circuit • removable terminal for main circuit 		Yes
		Yes
Type of the connectable conductor cross-sections		
<ul style="list-style-type: none"> • solid • finely stranded <ul style="list-style-type: none"> • with wire end processing • for AWG conductors <ul style="list-style-type: none"> • solid • stranded 		1x (0.5 ... 4 mm ²), 2x (0.5 ... 2.5 mm ²)
		1x (0.5 ... 2.5 mm ²), 2x (0.5 ... 1.5 mm ²)
		2x (20 ... 14)
		2x (20 ... 14)
Tightening torque		
<ul style="list-style-type: none"> • with screw-type terminals 	N·m	0.8 ... 1.2

Outputs:

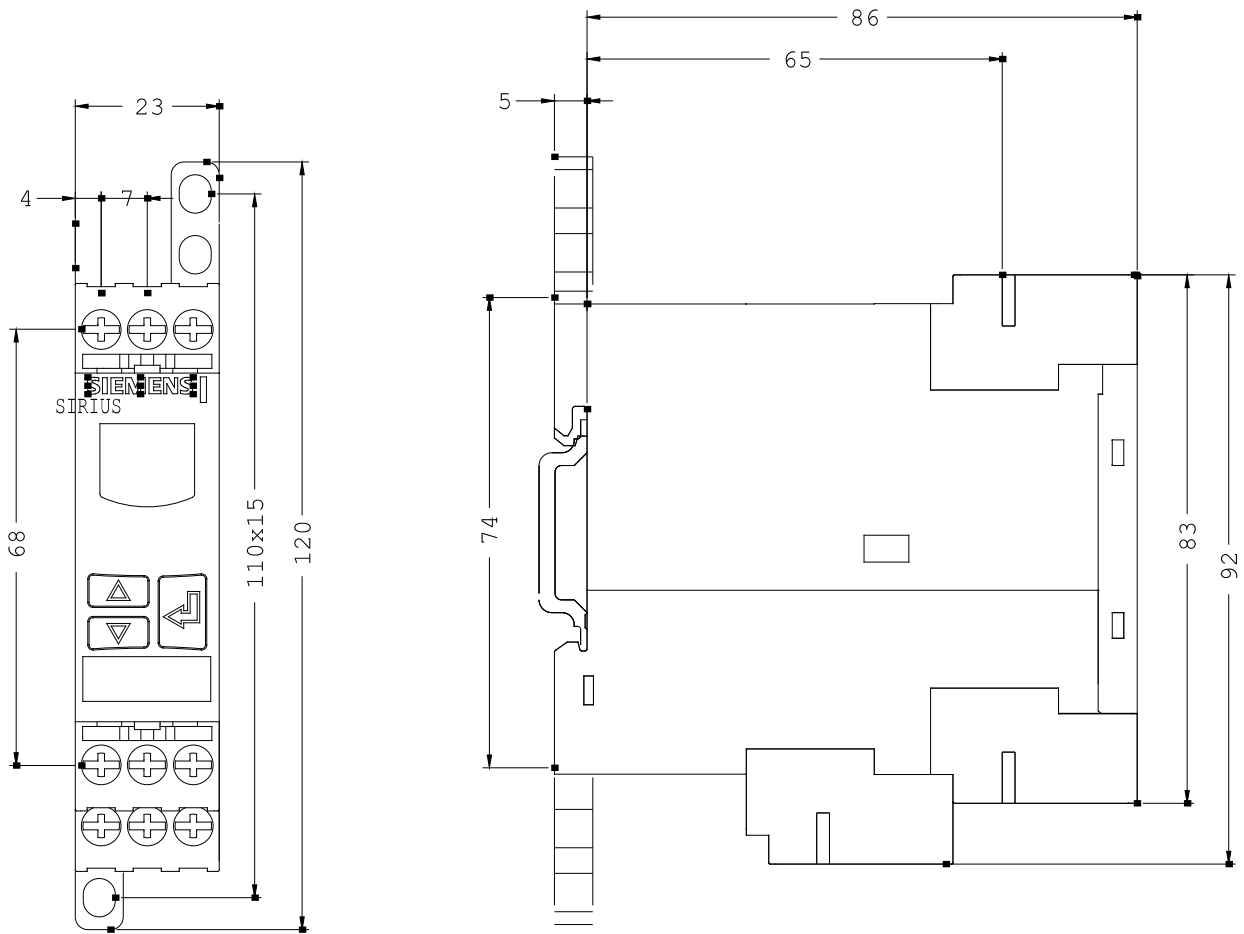
Number of NO contacts / delayed switching		0
Number of NC contacts / delayed switching		0
Number of change-over switches / delayed switching		1
Current carrying capacity		
<ul style="list-style-type: none"> • of output relay <ul style="list-style-type: none"> • at AC-15 <ul style="list-style-type: none"> • at 250 V / at 50/60 Hz • at 400 V / at 50/60 Hz • at DC-13 <ul style="list-style-type: none"> • at 24 V • at 125 V • at 250 V • for permanent overcurrent / maximum permissible • for overcurrent duration < 1 s / maximum permissible 	A	3
	A	3
	A	1
	A	0.2
	A	0.1
	A	15
	A	50
Operating current / at 17 V / minimum	A	0.0050
Continuous current / of the DIAZED fuse link of the output relay	A	4
Thermal current / of the contact-affected switching element / maximum	A	5
Mechanical operating cycles as operating time / typical		10,000,000
Electrical operating cycles as operating time / at AC-15 / at 230 V / typical		100,000
Operating cycles / with 3RT2 contactor / maximum	1/h	5,000

Certificates/approvals:

General Product Approval		EMC	Test Certificates	
 CCC	 UL	 C-TICK	Special Test Certificate	
Shipping Approval			other	
 DNV	 GL	 LRS	Declaration of Conformity	other

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/3UG4622-1AW30/all>
- Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)**
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3UG4622-1AW30



last change:

Jul 1, 2013