



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
Measurable current with AC	mA	50 ... 15 000
Measurable line frequency	Hz	40 ... 500
Adjustable response value 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
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:		
Design of the display		LCD

Product function		
• 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
Startup time after the control supply voltage has been applied	ms	1 000
Type of voltage of the supply voltage		AC/DC
Supply voltage		
• 1 with AC		
— at 50 Hz	V	24 ... 240
— at 60 Hz	V	240 ... 24
• 1		
— for DC	V	24 ... 240
Surge voltage resistance Rated value	kV	4
Active power consumption	W	2
Protection class IP		IP20
Electromagnetic compatibility		IEC 60947-1 / IEC 61000-6-2 / IEC 61000-6-4
Vibration resistance acc. to IEC 60068-2-6		1 ... 6 Hz: 15 mm, 6 ... 500 Hz: 2g
Shock resistance acc. to IEC 60068-2-27		sinusoidal half-wave 15g / 11 ms
Installation altitude at height above sea level maximum	m	2 000
Conducted interference due to burst acc. to IEC 61000-4-4		2 kV
Conducted interference due to conductor-earth surge acc. to IEC 61000-4-5		2 kV
Conducted interference due to conductor-conductor surge acc. to IEC 61000-4-5		1 kV
Electrostatic discharge acc. to IEC 61000-4-2		6 kV contact discharge / 8 kV air discharge
Field-bound parasitic coupling acc. 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 isolation		
• between control and auxiliary circuit	V	300
• between auxiliary and auxiliary circuit	V	300
Degree of pollution		3

Ambient temperature		
• during operation	°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 data:

Width	mm	22.5
Height	mm	92
Depth	mm	91
mounting position		any
Required spacing for grounded parts		
• forwards	mm	0
• Backwards	mm	0
• at the side	mm	0
• upwards	mm	0
• downwards	mm	0
Required spacing with side-by-side mounting		
• forwards	mm	0
• Backwards	mm	0
• at the side	mm	0
• upwards	mm	0
• downwards	mm	0
Required spacing for live parts		
• forwards	mm	0
• Backwards	mm	0
• at the side	mm	0
• upwards	mm	0
• downwards	mm	0
Mounting type		snap-on mounting
Type of electrical connection		
• for auxiliary and control current circuit		screw-type terminals
• for main current circuit		screw-type terminals
Product function		
• removable terminal for auxiliary and control circuit		Yes
• removable terminal for main circuit		Yes
Type of connectable conductor cross-section		
• solid		1x (0.5 ... 4.0 mm ²), 2x (0.5 ... 2.5 mm ²)
• finely stranded		

<ul style="list-style-type: none"> — with core end processing • for AWG conductors <ul style="list-style-type: none"> — solid — stranded 		1x (0.5 ... 2.5 mm ²), 2x (0.5 ... 1.5 mm ²)
Tightening torque 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 CO contacts delayed switching		1
Ampacity		
• of the 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	15
• for overcurrent duration < 1 s maximum permissible	A	50
Operating current at 17 V minimum	A	0.005
Continuous current of the DIAZED fuse link of the output relay	A	4
Thermal current of the switching element with contacts maximum	A	5
Mechanical service life (switching cycles) typical		10 000 000
Electrical endurance (switching cycles) at AC-15 at 230 V typical		100 000
Operating frequency with 3RT2 contactor maximum	1/h	5 000

Certificates/ approvals:

General Product Approval	EMC	Test Certificates
--------------------------	-----	-------------------



[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)

Shipping Approval	other
-------------------	-------



[other](#)

[Declaration of Conformity](#)

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

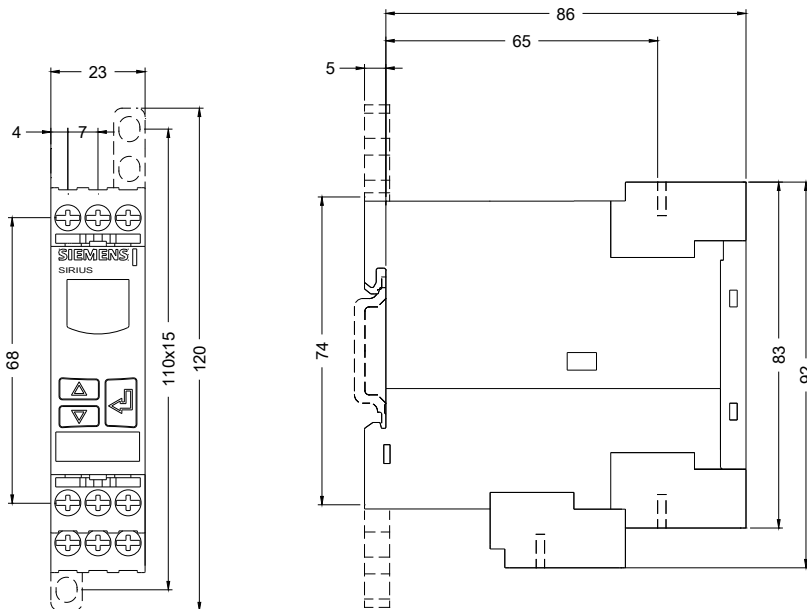
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mfb=3UG46221AW30>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3UG46221AW30>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mfb=3UG46221AW30&lang=en



last modified:

05.05.2015