



Digital monitoring relay Current monitoring, 22.5 mm from 2-500 mA 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 0.1 to 250 mA 1 change-over contact with or without fault buffer screw terminal Successor product for 3UG3521-1AL20, 3UG3521-1AG20 and 3UG3521-1AC48-0AA1

Figure similar

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	0.003 ... 0.6
Measurable current at AC	mA	3 ... 600
Measurable line frequency	Hz	40 ... 500
Adjustable pick-up value current		
• 1	A	0.003 ... 0.5
• 2	A	0.003 ... 0.5
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	0.1 ... 250
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
Starting time after the control supply voltage has been applied	ms	1 000
Type of voltage of the supply voltage		AC/DC
Supply voltage		
• 1 at AC		
— at 50 Hz	V	24 ... 240
— at 60 Hz	V	240 ... 24
• 1		
— at DC	V	24 ... 240
Surge voltage resistance rated value	kV	4
Consumed active power	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


<ul style="list-style-type: none"> • for main current circuit 		screw-type terminals
Product function		
<ul style="list-style-type: none"> • removable terminal for auxiliary and control circuit 		Yes
<ul style="list-style-type: none"> • removable terminal for main circuit 		Yes
Type of connectable conductor cross-sections		
<ul style="list-style-type: none"> • solid 		1x (0.5 ... 4.0 mm ²), 2x (0.5 ... 2.5 mm ²)
<ul style="list-style-type: none"> • finely stranded <ul style="list-style-type: none"> — with core end processing 		1x (0.5 ... 2.5 mm ²), 2x (0.5 ... 1.5 mm ²)
<ul style="list-style-type: none"> • at AWG conductors <ul style="list-style-type: none"> — solid — stranded 		2x (20 ... 14) 2x (20 ... 14)
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		
<ul style="list-style-type: none"> • of the 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 A A A A A A	3 3 1 0.2 0.1 0.6 5
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	Declaration of Conformity	Test Certificates
 CCC	 UL		 C-Tick	 EG-Konf.	Type Test Certificates/Test Report

Test Certificates	Shipping Approval	other	Railway
Special Test Certificate	 LRS	Confirmation	Vibration and Shock

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

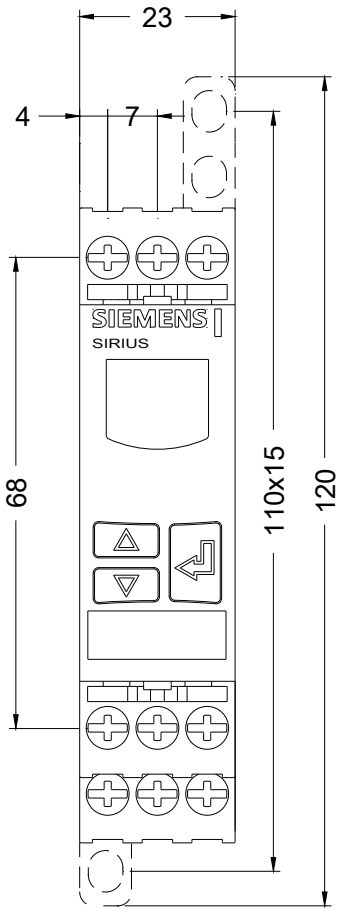
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mfb=3UG4621-1AW30>

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

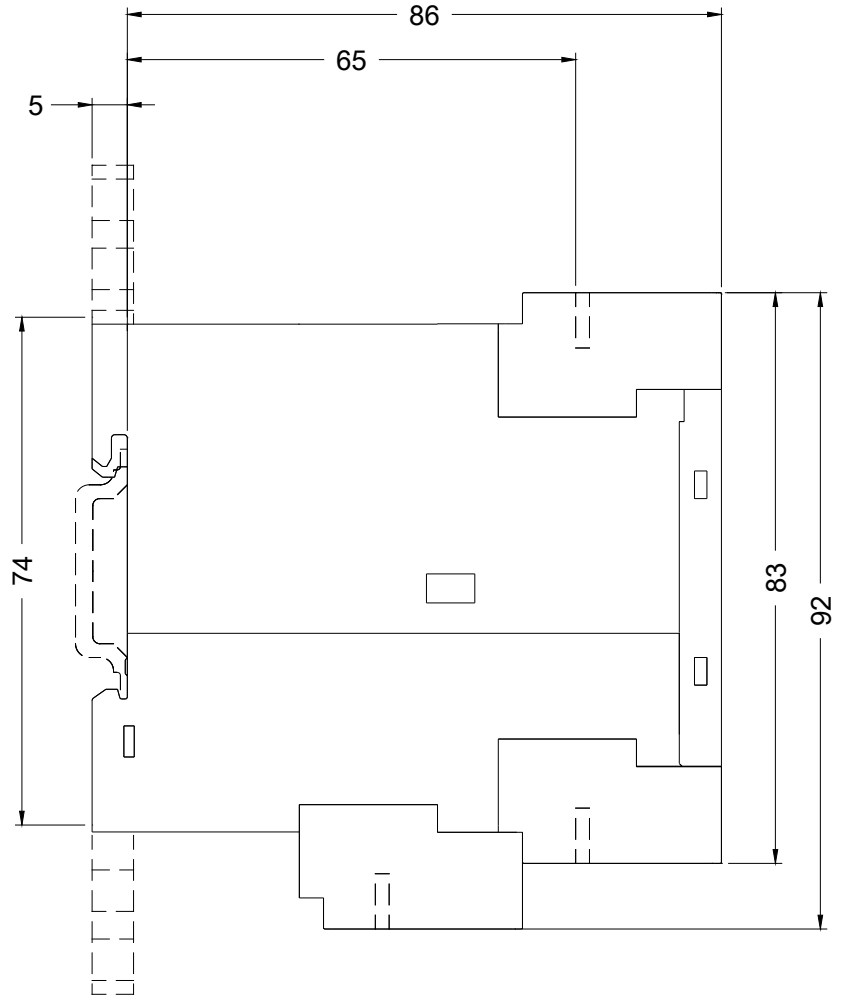
<https://support.industry.siemens.com/cs/ww/en/ps/3UG4621-1AW30>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mfb=3UG4621-1AW30&lang=en



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