SIEMENS

Data sheet 3UG4621-1AA30

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..

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 ... 24
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 rated value	V	24
— at 60 Hz rated value	V	24
• 1		
— at DC rated value	V	24
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		No

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-sections		
• solid		1x (0.5 ... 4.0 mm²), 2x (0.5 ... 2.5 mm²)
• finely stranded		
— with core end processing		1x (0.5 ... 2.5 mm²), 2x (0.5 ... 1.5 mm²)
• at AWG conductors		
— solid		2x (20 ... 14)
— stranded		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		
• **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	0.6
• for overcurrent duration < 1 s maximum permissible	A	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	EAC	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

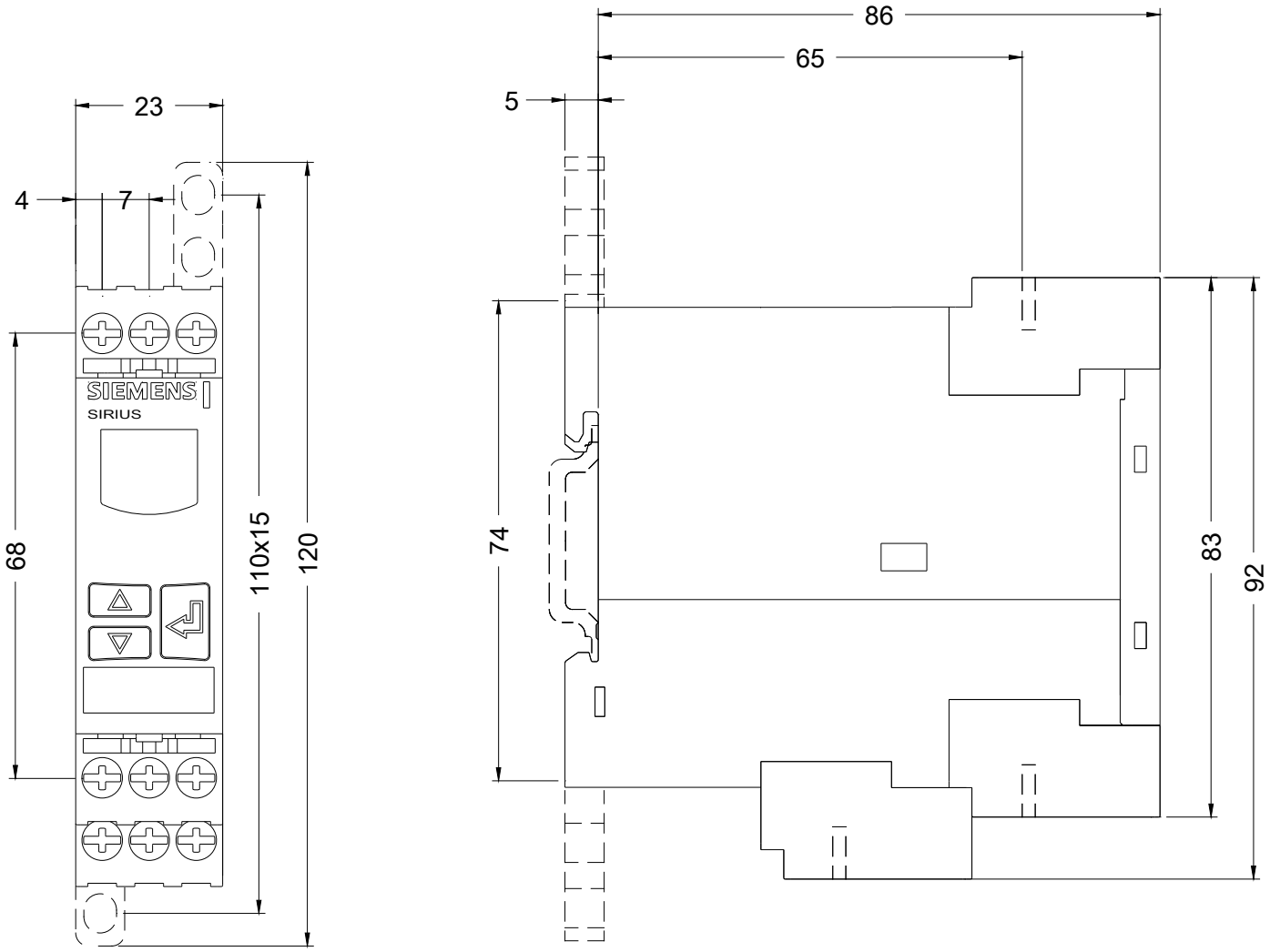
Information- and Downloadcenter (Catalogs, Brochures,…)
http://www.siemens.com/industrial-controls/catalogs

Industry Mall (Online ordering system)
http://www.siemens.com/industrymall

Cax online generator
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UG4621-1AA30

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3UG4621-1AA30

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3UG4621-1AA30&lang=en



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