SIEMENS

Data sheet

3UG4621-1AW30



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 sin	nilar
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product brand name	SIRIUS
product designation	Current monitoring relay with digital setting
product type designation	3UG4
General technical data	
product function	Current monitoring relay
design of the display	LCD
insulation voltage for overvoltage category III according to IEC 60664	
 with degree of pollution 3 rated value 	690 V
degree of pollution	3
surge voltage resistance rated value	4 kV
maximum permissible voltage for safe isolation	
 between auxiliary and auxiliary circuit 	300 V
 between control and auxiliary circuit 	300 V
protection class IP	IP20
shock resistance acc. to IEC 60068-2-27	sinusoidal half-wave 15g / 11 ms
vibration resistance acc. to IEC 60068-2-6	1 6 Hz: 15 mm, 6 500 Hz: 2g
mechanical service life (switching cycles) typical	10 000 000
electrical endurance (switching cycles) at AC-15 at 230 V typical	100 000
thermal current of the switching element with contacts maximum	5 A
reference code acc. to IEC 81346-2	К
relative repeat accuracy	1 %
Substance Prohibitance (Date)	01.05.2012 00:00:00
Product Function	
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
 voltage window recognition 1 phase 	No
 voltage window recognition 3 phase 	No
 adjustable open/closed-circuit current principle 	Yes

e external recet	Yes
external reset auto-RESET	Yes
	res
Supply voltage	
type of voltage of the supply voltage	AC/DC
supply voltage 1 at AC	00.4 004.14
• at 50 Hz	20.4 264 V
• at 60 Hz	20.4 264 V
supply voltage 1 at DC	20.4 264 V
Measuring circuit	
type of current for monitoring	AC/DC
measurable current	0.003 0.6 A
measurable line frequency	40 500 Hz
adjustable current response value current	0.002 0.5 4
• 1 • 2	0.003 0.5 A 0.003 0.5 A
	0.005 0.5 A
adjustable response delay time when starting 	0.1 20 s
with lower or upper limit violation	0.1 20 s
adjustable switching hysteresis for measured current	0.1 20 s
value	
buffering time in the event of power failure minimum	10 ms
accuracy of digital display	+/-1 digit
relative temperature-related measurement deviation	5 %
internal resistance of the measuring circuit	500 mΩ
Precision	
relative metering precision	5 %
temperature drift per °C	0.1 %/°C
Auxiliary circuit	
number of NC contacts delayed switching	0
number of NO contacts delayed switching	0
number of CO contacts delayed switching	1
operating frequency with 3RT2 contactor maximum	5 000 1/h
Main circuit	
number of poles for main current circuit	1
operating voltage rated value	24 240 V
Outputs	
ampacity of the output relay at AC-15	
• at 250 V at 50/60 Hz	3 A
• at 400 V at 50/60 Hz	3 A
ampacity of the output relay at DC-13	
• at 24 V	1 A
• at 125 V	0.2 A
• at 250 V	0.1 A
operational current at 17 V minimum	0.005 A
continuous current of the DIAZED fuse link of the	4 A
output relay	
Electromagnetic compatibility conducted interference	
due to burst acc. to IEC 61000-4-4	2 kV
 due to burst acc. to IEC 01000-4-4 due to conductor-earth surge acc. to IEC 61000-4-5 	2 kV
due to conductor-conductor surge acc. to IEC 01000-4-5	1 kV
61000-4-5	
field-based interference acc. to IEC 61000-4-3	10 V/m
electrostatic discharge acc. to IEC 61000-4-2	6 kV contact discharge / 8 kV air discharge
Galvanic isolation	
design of the electrical isolation	Protective separation
galvanic isolation	
 between input and output 	Yes

 between the outputs 		Yes		
 between the voltage supply and other of 	ircuits	Yes		
Connections/ Terminals				
product component				
 removable terminal for main circuit 		Yes		
 removable terminal for auxiliary and control 	ntrol circuit	Yes		
type of electrical connection				
for main current circuit		screw-type terminals		
 for auxiliary and control circuit 		screw-type terminals		
type of connectable conductor cross-sect	ons			
• solid		1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)		
 finely stranded with core end processin 	g	1x (0.5 2.5 mm ²), 2x (0.5 1.5 mm ²)		
 at AWG cables solid 		2x (20 14)		
 at AWG cables stranded 		2x (20 14)		
connectable conductor cross-section				
• solid		0.5 4 mm²		
 finely stranded with core end processin 	g	0.5 2.5 mm²		
AWG number as coded connectable conde	uctor cross			
section				
• solid		20 14		
stranded		20 14		
tightening torque with screw-type terminals		0.8 1.2 N·m		
Installation/ mounting/ dimensions				
mounting position		any		
fastening method		snap-on mounting		
height		92 mm		
width		22.5 mm		
depth		91 mm		
required spacing				
 with side-by-side mounting 				
— forwards		0 mm		
— forwards — backwards		0 mm		
— forwards — backwards — upwards		0 mm 0 mm		
 forwards backwards upwards downwards 	3	0 mm 0 mm 0 mm		
 forwards backwards upwards downwards at the side 	3	0 mm 0 mm		
 forwards backwards upwards downwards at the side for grounded parts 		0 mm 0 mm 0 mm 0 mm		
 forwards backwards upwards downwards at the side for grounded parts forwards 		0 mm 0 mm 0 mm 0 mm 0 mm		
 forwards backwards upwards downwards at the side for grounded parts forwards backwards 		0 mm 0 mm 0 mm 0 mm 0 mm 0 mm		
 forwards backwards upwards downwards at the side for grounded parts forwards backwards upwards 		0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm		
 forwards backwards upwards downwards at the side for grounded parts forwards backwards upwards at the side 		0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm		
 forwards backwards upwards downwards at the side for grounded parts forwards backwards upwards at the side downwards downwards downwards 		0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm		
 forwards backwards upwards downwards at the side for grounded parts forwards backwards upwards at the side downwards of on live parts 		0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm		
 forwards backwards upwards downwards at the side for grounded parts forwards backwards upwards at the side downwards for live parts forwards forwards 		0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm		
 forwards backwards upwards downwards at the side for grounded parts forwards backwards upwards at the side downwards for live parts forwards backwards backwards backwards 		0 mm 0 mm		
 forwards backwards upwards downwards at the side for grounded parts forwards backwards upwards at the side downwards for live parts forwards for live parts forwards backwards upwards 		0 mm 0 mm		
 forwards backwards upwards downwards at the side for grounded parts forwards backwards upwards at the side downwards for live parts for wards backwards backwards downwards downwards backwards 		0 mm 0 mm		
 forwards backwards upwards downwards at the side for grounded parts forwards backwards upwards at the side downwards for live parts forwards backwards upwards at the side downwards at the side 		0 mm 0 mm		
 forwards backwards upwards downwards at the side for grounded parts forwards backwards upwards at the side downwards for live parts forwards backwards backwards at the side downwards at the side at the side at the side at the side backwards at the side at the side at the side 		0 mm 0 mm		
 forwards backwards upwards downwards at the side for grounded parts forwards backwards upwards at the side downwards for live parts for live parts forwards backwards upwards at the side downwards at the side at the side at the side backwards at the side backwards backwards at the side backwards backwards at the side 		0 mm 0 mm		
 forwards backwards upwards downwards at the side for grounded parts for wards backwards upwards at the side downwards for live parts for wards for live parts for wards backwards upwards at the side downwards at the side at the side mounwards for live parts at the side at the side mounwards mounwards mounwards at the side 	maximum	0 mm 0 mm 2 000 m		
 forwards backwards upwards downwards at the side for grounded parts forwards backwards upwards at the side downwards for live parts for live parts forwards backwards upwards at the side downwards for live parts forwards act wards backwards upwards at the side downwards mistallation altitude at height above sea level of ambient temperature during operation 	maximum	0 mm 0 mm 2 000 m -25 +60 °C		
 forwards backwards upwards downwards at the side for grounded parts forwards backwards upwards at the side downwards for live parts for live parts forwards backwards upwards at the side downwards at the side downwards for live parts for live parts a forwards backwards upwards mathe side Ambient conditions installation altitude at height above sea level of ambient temperature during operation during storage 	maximum	0 mm 0 mm 2 000 m -25 +60 °C -40 +85 °C		
 forwards backwards upwards downwards at the side for grounded parts forwards backwards backwards upwards at the side downwards for live parts for live parts forwards backwards upwards at the side downwards at the side downwards motional side at the side downwards at the side downwards motional side Ambient conditions during operation during storage during transport 	maximum	0 mm 0 mm 2 000 m -25 +60 °C		
 forwards backwards upwards downwards at the side for grounded parts forwards backwards upwards at the side downwards for live parts for live parts forwards backwards upwards at the side downwards at the side downwards for live parts for live parts a forwards backwards upwards mathe side Ambient conditions installation altitude at height above sea level of ambient temperature during operation during storage 	maximum	0 mm 0 mm 2 000 m -25 +60 °C -40 +85 °C	Test Certificates	

		RCM	<u>Miscellaneous</u>	CE EG-Konf.	<u>Type Test Certific-</u> ates/Test Report
Test Certificates	Marine / Shipping		other	Railway	
<u>Special Test Certific-</u> <u>ate</u>	Llovdis Register uks	ENVILCEMENT	<u>Confirmation</u>	<u>Vibration and Shock</u>	

Further information

Information- and Downloadcenter (Catalogs, Brochures,...) https://www.siemens.com/ic10

Industry Mall (Online ordering system) https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3UG4621-1AW30

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=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?mlfb=3UG4621-1AW30&lang=en **Characteristic: Derating**

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

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