## **SIEMENS**

Data sheet 3UG4622-1AA30



DIGITAL MONITORING RELAY CURRENT MONITORING, 22.5MM FROM 0.05 TO 10A 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 0.01 TO 5A 1 CO CONTACT W. OR W/O ERROR LOG SCREW TERMINAL REPLACEMENT PRODUCT FOR 3UG3522-1AC...

## 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	Α	0.05 15	
Measurable current at AC	mA	50 15 000	
Measurable line frequency	Hz	40 500	
Adjustable response value current			
• 1	Α	0.5 10	
• 2	Α	0.5 10	
Adjustable response delay time			
<ul><li>when starting</li></ul>	S	0.1 20	
<ul> <li>with lower or upper limit violation</li> </ul>	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 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

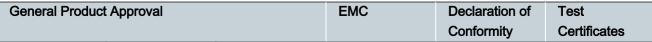
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General technical data:		
Design of the display		LCD
Product function		
<ul> <li>Overcurrent detection 1 phase</li> </ul>		Yes
<ul> <li>Overcurrent detection 3 phase</li> </ul>		No
<ul> <li>undercurrent detection 1 phase</li> </ul>		Yes
<ul> <li>undercurrent detection 3 phases</li> </ul>		No
<ul> <li>Overcurrent detection DC</li> </ul>		Yes
<ul> <li>undercurrent detection DC</li> </ul>		Yes
<ul> <li>Current window recognition DC</li> </ul>		Yes
External reset		Yes
Auto-reset		Yes
Adjustable open/closed-circuit current principle		Yes
Startup time after the control supply voltage has been	ms	1 000
applied		
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
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	V	690
according to IEC 60664 with degree of pollution 3		
Rated value		
maximum permissible voltage for safe isolation		
<ul> <li>between control and auxiliary circuit</li> </ul>	V	300
<ul> <li>between auxiliary and auxiliary circuit</li> </ul>	V	300
Degree of pollution		3
Ambient temperature		
<ul><li>during operation</li></ul>	°C	-25 <b>+</b> 60
<ul><li>during storage</li></ul>	°C	-40 +85
during transport	°C	-40 +85
Galvanic isolation		
<ul> <li>between entrance and outlet</li> </ul>		Yes
<ul><li>between the outputs</li></ul>		Yes
<ul> <li>between the voltage supply and other circuits</li> </ul>		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
- Tot main ourrent onoult		on the type terminals

Product function		
<ul> <li>removable terminal for auxiliary and control circuit</li> </ul>		Yes
<ul> <li>removable terminal for main circuit</li> </ul>		Yes
Type of connectable conductor cross-section		
• solid		1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)
• finely stranded		
<ul><li>— with core end processing</li></ul>		1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²)
<ul><li>for AWG conductors</li></ul>		
— 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		
<ul><li>of the output relay</li></ul>		
— at AC-15		
— at 250 V at 50/60 Hz	Α	3
— at 400 V at 50/60 Hz	Α	3
— at DC-13		
— at 24 V	Α	1
— at 125 V	Α	0.2
— at 250 V	Α	0.1
<ul> <li>for permanent overcurrent maximum</li> </ul>	Α	15
permissible		
<ul><li>for overcurrent duration &lt; 1 s maximum</li></ul>	Α	50
permissible		
Operating current at 17 V minimum	Α	0.005
Continuous current of the DIAZED fuse link of the output relay	Α	4
Thermal current of the switching element with	Α	5
contacts maximum		
Mechanical service life (switching cycles) typical		10 000 000
Electrical endurance (switching cycles) at AC-15 at		100 000
230 V typical		
Operating frequency with 3RT2 contactor maximum	1/h	5 000

Certificates/ approvals:













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Test	Shipping Approval		other		
Certificates					
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	DNV	GL	LRS		

## **Further information**

Information- and Downloadcenter (Catalogs, Brochures,...)

http://www.siemens.com/industrial-controls/catalogs

Industry Mall (Online ordering system)

http://www.siemens.com/industrymall

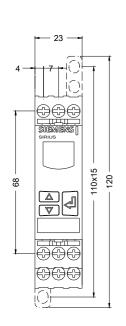
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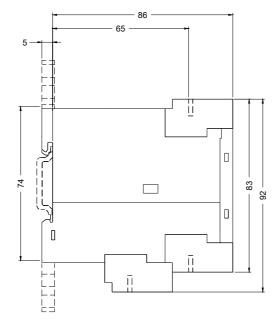
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UG46221AA30

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

https://support.industry.siemens.com/cs/ww/en/ps/3UG46221AA30

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3UG46221AA30&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3UG46221AA30&lang=en</a>





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