## **SIEMENS**

Data sheet 3UG4622-1AA30



Digital monitoring relay Current monitoring, 22.5 mm from 0.05-10 A AC/DC 0vershoot and undershoot Supply voltage: 24 V AC/DC 50 to 60 Hz DC and AC without galvanic isolation to measuring circuit ON delay and noise pulses delay 0.1 to 20 s Hysteresis 0.01 to 5 A 1 change-over contact with or without fault buffer screw terminal Successor product for 3UG3522-1AC..

Figure similar

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				
<ul> <li>with degree of pollution 3 rated value</li> </ul>	690 V			
degree of pollution	3			
surge voltage resistance rated value	4 kV			
maximum permissible voltage for safe isolation				
<ul> <li>between auxiliary and auxiliary circuit</li> </ul>	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	K			
relative repeat accuracy	1 %			
Substance Prohibitance (Date)	01.05.2012 00:00:00			
Product Function				
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			
<ul> <li>voltage window recognition 1 phase</li> </ul>	No			
<ul> <li>voltage window recognition 3 phase</li> </ul>	No			
<ul> <li>adjustable open/closed-circuit current principle</li> </ul>	Yes			
<ul> <li>external reset</li> </ul>	Yes			
auto-RESET	Yes			

Supply voltage		
type of voltage of the supply voltage	AC/DC	
supply voltage 1 at AC		
at 50 Hz rated value	24 V	
• at 50 Hz	20.4 26.4 V	
• at 60 Hz rated value	24 V	
● at 60 Hz	20.4 26.4 V	
supply voltage 1 at DC	20.4 26.4 V	
supply voltage 1 at DC rated value	24 V	
Measuring circuit		
type of current for monitoring	AC/DC	
measurable current	0.05 15 A	
measurable line frequency	40 500 Hz	
adjustable current response value current		
• 1	0.05 10 A	
• 2	0.05 10 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 value	10 5 000 mA	
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	5 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 24 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 output relay	4 A	
Electromagnetic compatibility		
conducted interference		
• due to burst acc. to IEC 61000-4-4	2 kV	
• due to conductor-earth surge acc. to IEC 61000-4-5	2 kV	
• due to conductor-conductor surge acc. to IEC 61000-4-5	1 kV	
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	
·		

<ul> <li>between the voltage supply and other circuits</li> </ul>	No			
Connections/ Terminals				
product component removable terminal for main circuit	Yes			
product component removable terminal for auxiliary and control circuit	Yes			
type of electrical connection				
<ul> <li>for main current circuit</li> </ul>	screw-type terminals			
for auxiliary and control circuit	screw-type terminals			
type of connectable conductor cross-sections				
• solid	1x (0.5 4.0 mm²), 2x (0.5	2.5 mm²)		
<ul> <li>finely stranded with core end processing</li> </ul>	1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²)			
<ul> <li>at AWG cables solid</li> </ul>	2x (20 14)			
at AWG cables stranded	2x (20 14)			
connectable conductor cross-section				
• solid	0.5 4 mm²			
finely stranded with core end processing	0.5 2.5 mm <sup>2</sup>			
AWG number as coded connectable conductor 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				
<ul> <li>with side-by-side mounting</li> </ul>				
— forwards	0 mm			
— backwards	0 mm			
— upwards	0 mm			
— downwards	0 mm			
— at the side	0 mm			
<ul> <li>for grounded parts</li> </ul>				
— forwards	0 mm			
— backwards	0 mm			
— upwards	0 mm			
— at the side	0 mm			
— downwards	0 mm			
<ul> <li>for live parts</li> </ul>				
— forwards	0 mm			
— backwards	0 mm			
— upwards	0 mm			
— downwards	0 mm			
— at the side	0 mm			
Ambient conditions				
installation altitude at height above sea level maximum	2 000 m			
ambient temperature				
<ul> <li>during operation</li> </ul>	-25 +60 °C			
during storage	-40 +85 °C			
<ul> <li>during transport</li> </ul>	-40 +85 °C			
Certificates/ approvals				
General Product Approval	ЕМС	Declaration of Conformity	Test Certificates	











Type Test Certificates/Test Report

**Test Certificates** 

Marine / Shipping

other

Railway

Special Test Certificate





Confirmation

Vibration and Shock

## 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=3UG4622-1AA30

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UG4622-1AA30

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

https://support.industry.siemens.com/cs/ww/en/ps/3UG4622-1AA30

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

http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3UG4622-1AA30&lang=en

**Characteristic: Derating** 

https://support.industry.siemens.com/cs/ww/en/ps/3UG4622-1AA30/manual

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