## 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..

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				
<ul> <li>between control and auxiliary circuit</li> </ul>	300 V				
protection class IP	IP20				
shock resistance according to IEC 60068-2-27	sinusoidal half-wave 15g / 11 ms				
vibration resistance according 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 according to IEC 81346-2	К				
relative repeat accuracy	1 %				
Substance Prohibitance (Date)	05/01/2012				
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				
external reset	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 50 Hz rated value	24 V
• at 60 Hz	20.4 26.4 V
supply voltage 1 at DC	20.4 20.4 V
supply voltage 1 at DC supply voltage 1 at DC	24 V
Measuring circuit	Z++ V
type of current for monitoring	AC/DC
measurable current	0.05 15 A
measurable line frequency	40 500 Hz
adjustable current response value current <ul> <li>1</li> </ul>	0.05 10 A
• 2	0.05 10 A
adjustable response delay time	0.03 10 A
when starting	0.1 20 s
with lower or upper limit violation	0.1 20 s
adjustable switching hysteresis for measured current	10 5 000 mA
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	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
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	
<ul> <li>due to burst according to IEC 61000-4-4</li> </ul>	2 kV
<ul> <li>due to conductor-earth surge according to IEC 61000-4-5</li> </ul>	2 KV
due to conductor-conductor surge according to IEC     61000-4-5	1 kV
field-based interference according to IEC 61000-4-3	10 V/m
electrostatic discharge according to IEC 61000-4-2	6 kV contact discharge / 8 kV air discharge
Galvanic isolation	
design of the electrical isolation	Protective separation
galvanic isolation	
<ul> <li>between input and output</li> </ul>	Yes
between the outputs	Yes
<ul> <li>between the voltage supply and other circuits</li> </ul>	No

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
<ul> <li>for auxiliary and control circuit</li> </ul>	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)
<ul> <li>at AWG cables stranded</li> </ul>	2x (20 14)
connectable conductor cross-section	
• solid	0.5 4 mm <sup>2</sup>
<ul> <li>finely stranded with core end processing</li> </ul>	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
nstallation/ 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
• for live parts	
— forwards	0 mm
— backwards	0 mm
— upwards	0 mm
— downwards	0 mm
— at the side	0 mm
mbient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
during operation	-25 +60 °C
during operation     orage	-40 +85 °C
during storage     during transport	-40 +85 °C
ertificates/ approvals	
	Declaration of
General Product Approval	EMC Conformity
<u>Confirmation</u>	

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Test Certificates	Marine / Shipping		other	Railway
Type Test Certific- ates/Test Report         Special Test Certific- ate	Lloyd's Register	DNV-GL	Confirmation	Vibration and Shock

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