SIEMENS

product brand name

Data sheet 3UG4622-2AA30

SIRIUS



Digital monitoring relay Current monitoring, 22.5 mm from 0.05-10 A AC/DC Overshoot 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 spring-type connection system

product brand name	SINIUS
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 protective separation	
 between auxiliary and auxiliary circuit 	300 V
 between control and auxiliary circuit 	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 (operating cycles) typical	10 000 000
electrical endurance (operating 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	K
relative repeat accuracy	1 %
Substance Prohibitance (Date)	05/01/2012
SVHC substance name	Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8
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
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 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	247
type of current for monitoring	AC/DC
measurable current	0.05 15 A
measurable line frequency	40 500 Hz
adjustable current response value current	10 000 TIE
• 1	0.05 10 A
• 2	0.05 10 A
adjustable response delay time	0.00 10 A
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 5 000 MA
	+/-1 digit
accuracy of digital display relative temperature-related measurement deviation	+/-1 aigit 5 %
internal resistance of the measuring circuit Precision	$5\ m\Omega$
	5.0/
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	
due to burst according to IEC 61000-4-4	2 kV
 due to builst according to IEC 61000-4-4 due to conductor-earth surge according to IEC 61000-4-5 	2 kV
 due to conductor-earth surge according to IEC 6 1000-4-5 due to conductor-conductor surge according to IEC 	1 kV
61000-4-5	1 IV
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	
	Yes
 between input and output 	165
·	Yes
• between the outputs	
between the outputs between the voltage supply and other circuits	Yes
• between the outputs	Yes

Connections/ Terminals	
product component removable terminal for main circuit	Yes
product component removable terminal for auxiliary and	Yes
control circuit	165
type of electrical connection	
for main current circuit	spring-loaded terminals
 for auxiliary and control circuit 	spring-loaded terminals
type of connectable conductor cross-sections	
• solid	2x (0.25 1.5 mm²)
 finely stranded with core end processing 	2 x (0.25 1.5 mm²)
 finely stranded without core end processing 	2x (0.25 1.5 mm²)
• for AWG cables solid	2x (24 16)
 for AWG cables stranded 	2x (24 16)
connectable conductor cross-section	
• solid	0.25 1.5 mm²
 finely stranded with core end processing 	0.25 1.5 mm²
 finely stranded without core end processing 	0.25 1.5 mm²
AWG number as coded connectable conductor cross	
section	
• solid	24 16
• stranded	24 16
Installation/ mounting/ dimensions	
mounting position	any
fastening method	snap-on mounting
height	94 mm
width	22.5 mm
depth	91 mm
required spacing	
 with side-by-side mounting 	
— forwards	0 mm
— backwards	0 mm
— upwards	0 mm
— downwards	0 mm
— at the side	0 mm
 for grounded parts 	
— 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
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	05
during operation	-25 +60 °C
during storage	-40 +85 °C
during transport	-40 +85 °C
Approvals Certificates	
General Product Approval	







Confirmation





EMV Test Certificates Marine / Shipping



<u>KC</u>

Type Test Certificates/Test Report

Special Test Certificate





other Railway Environment

Confirmation Special Test Certificate



Environmental Confirmations

Further information

Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

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=3UG4622-2AA30

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UG4622-2AA30

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

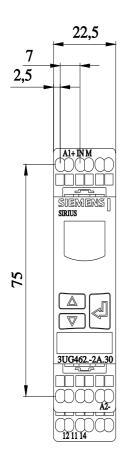
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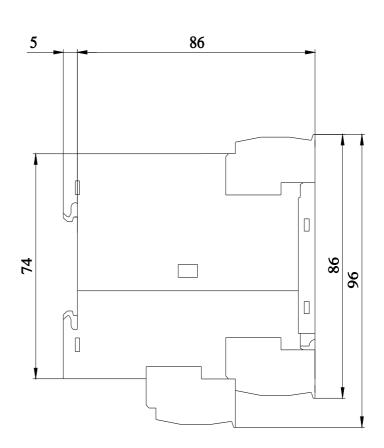
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3UG4622-2AA30&lang=en

Characteristic: Derating

https://support.industry.siemens.com/cs/ww/en/ps/3UG4622-2AA30/manual





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