SIEMENS

Data sheet

3UG4501-2AW30



Analog monitoring relay Fill level monitoring Resistance monitoring from 2 to 200 kohm 0vershoot and undershoot 24 to 240 V AC/DC 50 to 60 Hz DC and AC 2-step or 1-step control Tripping delay 0.5 to 10 s 1 change-over contact spring-type connection system

product brand name	SIRIUS
product designation	Level monitoring relay with analog setting
product type designation	3UG4
manufacturer's article number of the optional sensor	2-pole and 3-pole sensors 3UG3207
General technical data	
product function	Monitoring relay for level monitoring
display version LED	Yes
 Apparent power consumption at DC 	
— at 24 V maximum	2 VA
— at 240 V maximum	4 VA
 apparent power consumption at AC 	
— at 24 V maximum	2 VA
— at 240 V maximum	4 VA
insulation voltage	
 for overvoltage category III according to IEC 60664 with degree of pollution 3 rated value 	300 V
degree of pollution	3
type of voltage	
 of the control supply voltage 	AC/DC
surge voltage resistance rated value	4 kV
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
reference code according to IEC 81346-2	К
relative repeat accuracy	1 %
Substance Prohibitance (Date)	05/01/2012
Product Function	
product function	
 outlet monitoring adjustable 	Yes
 adjustable responsiveness 	Yes
 inlet monitoring adjustable 	Yes
external reset	Yes
Control circuit/ Control	
control supply voltage at AC	
 at 50 Hz rated value 	24 240 V

control supply voltage at DC	
rated value	24 240 V
operating range factor control supply voltage rated value at DC	
initial value	0.85
	1.1
• full-scale value	
operating range factor control supply voltage rated value at AC at 50 Hz	
• initial value	0.85
• full-scale value	1.1
operating range factor control supply voltage rated	
value at AC at 60 Hz	
initial value	0.85
• full-scale value	1.1
Measuring circuit	
adjustable response delay time	
when starting	0.5 10 s
with lower or upper limit violation	0.5 10 s
buffering time in the event of power failure minimum	200 ms
physical measuring principle	conductive
Precision	
relative metering precision	20 %
temperature drift per °C	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
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	1A
• at 125 V	0.2 A
• at 250 V	0.1 A
operational current at 17 V minimum	5 mA
continuous current of the DIAZED fuse link of the	4 A
output relay	
Electromagnetic compatibility	
conducted interference	
 due to burst according to IEC 61000-4-4 	2 kV
due to conductor-earth surge according to IEC	2 kV
61000-4-5 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	
galvanic isolation	
between input and output	Yes
 between the outputs 	No
Connections/ Terminals	
product component removable terminal for auxiliary and control circuit	Yes
type of electrical connection	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 mm ²)
 finely stranded without core end processing 	2x (0.25 1.5 mm ²)
at AWG cables solid	2x (24 16)

 at AWG cables stranded 	2x (24 16)
connectable conductor cross-section	ZA (24 10)
solid	0.25 1.5 mm²
 finely stranded with core end processing 	0.25 1.5 mm ²
 finely stranded with core end processing finely stranded without core end processing 	0.25 1.5 mm ²
AWG number as coded connectable conductor cross	0.20 1.0 mm
section	
• solid	24 16
stranded	24 16
tightening torque with screw-type terminals	0.8 1.2 N·m
Installation/ mounting/ dimensions	
mounting position	any
fastening method	screw and 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
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for live parts	0
— 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	
 during operation 	-25 +60 °C
 during storage 	-40 +80 °C
during transport	-40 +80 °C
Certificates/ approvals	
General Product Approval	EMC Declaration of Conformity
	ERE EG-Konf.
Test Certificates Marine / Ship	opping other Railway
Type Test Certific- ates/Test Report Special Test Certific- ate Lovds ates/Test Report ate Lovds uss uss Lovds	Confirmation Vibration and Shock
Further information	

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