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	7 1/1
— 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 (operating cycles) typical	10 000 000
electrical endurance (operating cycles) at AC-15 at 230 V typical	100 000
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 Dicyclohexyl phthalate (DCHP) - 84-61-7
Product Function	
product function	
outlet monitoring adjustable	Yes
 adjustable responsiveness 	Yes
 inlet monitoring adjustable 	Yes
external reset	Yes
Control circuit/ Control	

at 50 Up and display	04 040 //
at 50 Hz rated value	24 240 V
at 60 Hz rated value	24 240 V
control supply voltage at DC rated value	04 040 4
	24 240 V
operating range factor control supply voltage rated value at DC	
● initial value	0.85
• full-scale value	1.1
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	1.1
adjustable response delay time	
when starting	0.5 10 s
writh 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	1 A
• 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 output	4 A
relay Floctromagnetic compatibility	
Electromagnetic compatibility	
conducted interference	2 kV
due to burst 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 61000-4-5 due to conductor-conductor surge according to IEC 	1 kV
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 mm²)
 finely stranded without core end processing 	2x (0.25 1.5 mm²)
• for AWG cables solid	2x (24 16)

a for ANC cables stranded	2v /24 16\
• for AWG cables stranded	2x (24 16)
connectable conductor cross-section	0.05 4.5 *****
• solid	0.25 1.5 mm ²
finely stranded with core end processing	0.25 1.5 mm ²
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
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
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	
during operation	-25 +60 °C
during storage	-40 +80 °C
during transport	-40 +80 °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=3UG4501-2AW30

Cax online generator http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UG4501-2AW30

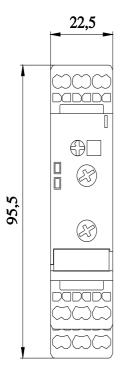
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

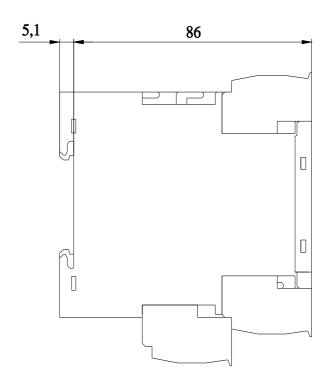
https://support.industry.siemens.com/cs/ww/en/ps/3UG4501-2AW30

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

Characteristic: Derating

https://support.industry.siemens.com/cs/ww/en/ps/3UG4501-2AW30/manual





last modified:

3/11/2024