



Analog monitoring relay Fill level monitoring Resistance monitoring from 2 to 200 kohm Overshoot 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
<ul style="list-style-type: none"> • Apparent power consumption at DC <ul style="list-style-type: none"> — at 24 V maximum — at 240 V maximum • apparent power consumption at AC <ul style="list-style-type: none"> — at 24 V maximum — at 240 V maximum 	2 VA 4 VA 2 VA 4 VA
insulation voltage	300 V
<ul style="list-style-type: none"> • for overvoltage category III according to IEC 60664 with degree of pollution 3 rated value 	
degree of pollution	3
type of voltage	AC/DC
<ul style="list-style-type: none"> • of the control supply voltage 	
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	K
relative repeat accuracy	1 %
Substance Prohibitance (Date)	05/01/2012
Product Function	
product function	
<ul style="list-style-type: none"> • outlet monitoring adjustable • adjustable responsiveness • inlet monitoring adjustable • external reset 	Yes Yes Yes Yes
Control circuit/ Control	
control supply voltage at AC	
<ul style="list-style-type: none"> • at 50 Hz rated value • at 60 Hz rated value 	24 ... 240 V 24 ... 240 V

control supply voltage at DC	
<ul style="list-style-type: none"> rated value 	24 ... 240 V
operating range factor control supply voltage rated value at DC	
<ul style="list-style-type: none"> initial value 	0.85
<ul style="list-style-type: none"> full-scale value 	1.1
operating range factor control supply voltage rated value at AC at 50 Hz	
<ul style="list-style-type: none"> initial value 	0.85
<ul style="list-style-type: none"> full-scale value 	1.1
operating range factor control supply voltage rated value at AC at 60 Hz	
<ul style="list-style-type: none"> initial value 	0.85
<ul style="list-style-type: none"> full-scale value 	1.1
Measuring circuit	
adjustable response delay time	
<ul style="list-style-type: none"> when starting 	0.5 ... 10 s
<ul style="list-style-type: none"> 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	
<ul style="list-style-type: none"> delayed switching 	1
operating frequency with 3RT2 contactor maximum	5 000 1/h
ampacity of the output relay at AC-15	
<ul style="list-style-type: none"> at 250 V at 50/60 Hz 	3 A
<ul style="list-style-type: none"> at 400 V at 50/60 Hz 	3 A
ampacity of the output relay at DC-13	
<ul style="list-style-type: none"> at 24 V 	1 A
<ul style="list-style-type: none"> at 125 V 	0.2 A
<ul style="list-style-type: none"> at 250 V 	0.1 A
operational current at 17 V minimum	5 mA
continuous current of the DIAZED fuse link of the output relay	4 A
Electromagnetic compatibility	
conducted interference	
<ul style="list-style-type: none"> due to burst according to IEC 61000-4-4 	2 kV
<ul style="list-style-type: none"> due to conductor-earth surge according to IEC 61000-4-5 	2 kV
<ul style="list-style-type: none"> 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	
<ul style="list-style-type: none"> between input and output 	Yes
<ul style="list-style-type: none"> 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	
<ul style="list-style-type: none"> solid 	2x (0.25 ... 1.5 mm ²)
<ul style="list-style-type: none"> finely stranded with core end processing 	2 x (0.25 ... 1.5 mm ²)
<ul style="list-style-type: none"> finely stranded without core end processing 	2x (0.25 ... 1.5 mm ²)
<ul style="list-style-type: none"> at AWG cables solid 	2x (24 ... 16)

<ul style="list-style-type: none"> at AWG cables stranded 	2x (24 ... 16)
connectable conductor cross-section	
<ul style="list-style-type: none"> solid 	0.25 ... 1.5 mm ²
<ul style="list-style-type: none"> finely stranded with core end processing 	0.25 ... 1.5 mm ²
<ul style="list-style-type: none"> finely stranded without core end processing 	0.25 ... 1.5 mm ²
AWG number as coded connectable conductor cross section	
<ul style="list-style-type: none"> solid 	24 ... 16
<ul style="list-style-type: none"> 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	
<ul style="list-style-type: none"> with side-by-side mounting <ul style="list-style-type: none"> forwards backwards upwards downwards at the side for grounded parts <ul style="list-style-type: none"> forwards backwards upwards at the side downwards for live parts <ul style="list-style-type: none"> forwards backwards upwards downwards at the side 	0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm

Ambient conditions

installation altitude at height above sea level maximum	2 000 m
ambient temperature	
<ul style="list-style-type: none"> during operation 	-25 ... +60 °C
<ul style="list-style-type: none"> during storage 	-40 ... +80 °C
<ul style="list-style-type: none"> during transport 	-40 ... +80 °C

Certificates/ approvals

General Product Approval	EMC	Declaration of Conformity
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[Confirmation](#)



Test Certificates	Marine / Shipping	other	Railway
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[Type Test Certificates/Test Report](#)

[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=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, ...)

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3UG4501-2AW30&lang=en

Characteristic: Derating

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

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