



Analog monitoring relay Fill level monitoring Resistance monitoring from 2 to 200 kohm Overshoot and undershoot Supply voltage 24 V AC/DC 50 to 60 Hz DC and AC without galvanic isolation to measuring circuit 2-step or 1-step control Tripping delay 0.5 to 10 s 1 change-over contact screw terminal Successor product for 3UG3501-1AC20

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
<b>General technical data</b>	
product function	Monitoring relay for level monitoring
display version LED	Yes
<ul style="list-style-type: none"> <li>Apparent power consumption at DC                             <ul style="list-style-type: none"> <li>— at 24 V maximum</li> </ul> </li> <li>apparent power consumption at AC                             <ul style="list-style-type: none"> <li>— at 24 V maximum</li> </ul> </li> </ul>	2 VA  2 VA
insulation voltage <ul style="list-style-type: none"> <li>for overvoltage category III according to IEC 60664 with degree of pollution 3 rated value</li> </ul>	300 V
degree of pollution	3
type of voltage <ul style="list-style-type: none"> <li>of the control supply voltage</li> </ul>	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
<b>Product Function</b>	
product function <ul style="list-style-type: none"> <li>outlet monitoring adjustable</li> <li>adjustable responsiveness</li> <li>inlet monitoring adjustable</li> <li>external reset</li> </ul>	Yes Yes Yes Yes
<b>Control circuit/ Control</b>	
control supply voltage at AC <ul style="list-style-type: none"> <li>at 50 Hz rated value</li> <li>at 60 Hz rated value</li> </ul>	24 ... 24 V 24 ... 24 V
control supply voltage at DC <ul style="list-style-type: none"> <li>rated value</li> </ul>	24 ... 24 V
operating range factor control supply voltage rated value at	

<b>DC</b>	
• initial value	0.85
• full-scale value	1.1
<b>operating range factor control supply voltage rated value at AC at 50 Hz</b>	
• initial value	0.85
• full-scale value	1.1
<b>operating range factor control supply voltage rated value at AC at 60 Hz</b>	
• initial value	0.85
• full-scale value	1.1
<b>Measuring circuit</b>	
<b>adjustable response delay time</b>	
• when starting	0.5 ... 10 s
• with lower or upper limit violation	0.5 ... 10 s
<b>buffering time in the event of power failure minimum</b>	200 ms
<b>physical measuring principle</b>	conductive
<b>Precision</b>	
<b>relative metering precision</b>	20 %
<b>temperature drift per °C</b>	1 %/°C
<b>Auxiliary circuit</b>	
number of NC contacts delayed switching	0
number of NO contacts delayed switching	0
<b>number of CO contacts</b>	
• delayed switching	1
<b>operating frequency with 3RT2 contactor maximum</b>	5 000 1/h
<b>ampacity of the output relay at AC-15</b>	
• at 250 V at 50/60 Hz	3 A
• at 400 V at 50/60 Hz	3 A
<b>ampacity of the output relay at DC-13</b>	
• at 24 V	1 A
• at 125 V	0.2 A
• at 250 V	0.1 A
<b>operational current at 17 V minimum</b>	5 mA
<b>continuous current of the DIAZED fuse link of the output relay</b>	4 A
<b>Electromagnetic compatibility</b>	
<b>conducted interference</b>	
• due to burst according to IEC 61000-4-4	2 kV
• due to conductor-earth surge according to IEC 61000-4-5	2 kV
• due to conductor-conductor surge according to IEC 61000-4-5	1 kV
<b>field-based interference according to IEC 61000-4-3</b>	10 V/m
<b>electrostatic discharge according to IEC 61000-4-2</b>	6 kV contact discharge / 8 kV air discharge
<b>Galvanic isolation</b>	
<b>galvanic isolation</b>	
• between input and output	Yes
• between the outputs	No
<b>Connections/ Terminals</b>	
<b>product component removable terminal for auxiliary and control circuit</b>	Yes
<b>type of electrical connection</b>	screw-type terminals
<b>type of connectable conductor cross-sections</b>	
• solid	1x (0.5 ... 4.0 mm²), 2x (0.5 ... 2.5 mm²)
• finely stranded with core end processing	1x (0.5 ... 2.5 mm²), 2x (0.5 ... 1.5 mm²)
• for AWG cables solid	2x (20 ... 14)
• for AWG cables stranded	2x (20 ... 14)
<b>connectable conductor cross-section</b>	
• solid	0.5 ... 4 mm²
• finely stranded with core end processing	0.5 ... 2.5 mm²
<b>AWG number as coded connectable conductor cross section</b>	

• solid	20 ... 14
• stranded	20 ... 14
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	92 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

#### Certificates/ approvals

General Product Approval	EMC	Declaration of Con- formity
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[Confirmation](#)



Declaration of Con- formity	Test Certificates	Marine / Shipping	other
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[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



[Confirmation](#)

#### Railway

[Vibration and Shock](#)

#### Further information

Siemens has decided to exit the Russian market (see here).

<https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business>

**Siemens is working on the renewal of the current EAC certificates.**

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

**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=3UG4501-1AA30>

**Cax online generator**

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UG4501-1AA30>

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

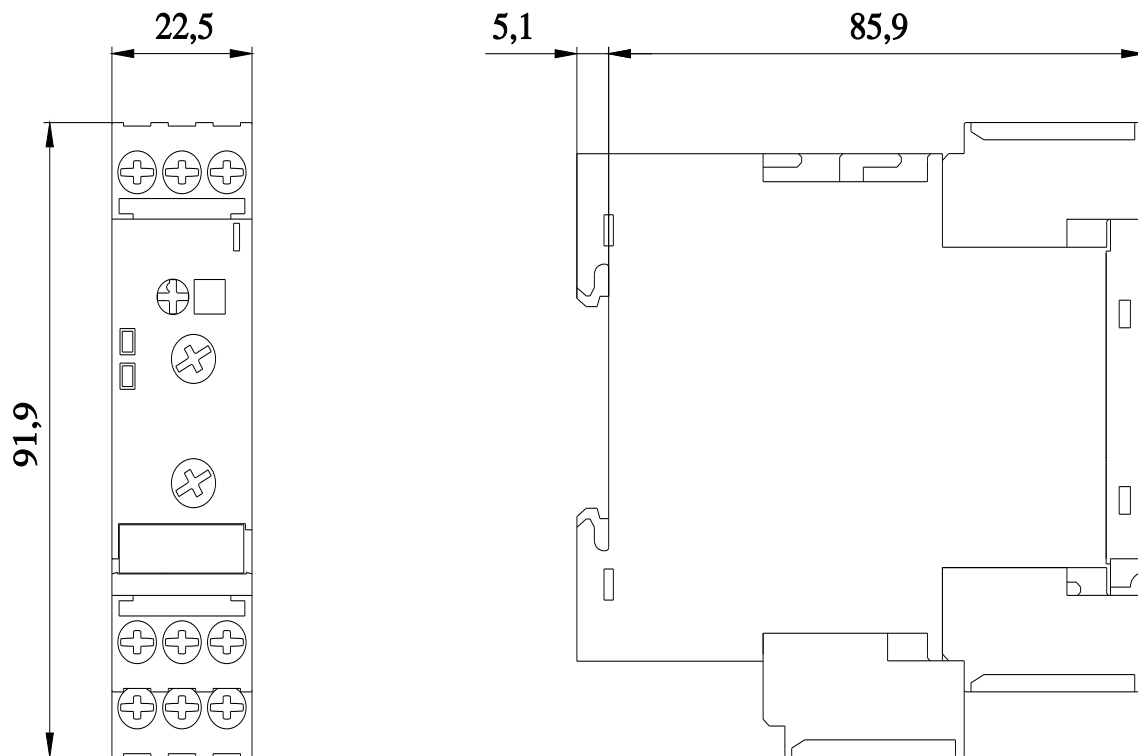
<https://support.industry.siemens.com/cs/ww/en/ps/3UG4501-1AA30>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3UG4501-1AA30&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3UG4501-1AA30&lang=en)

**Characteristic: Derating**

<https://support.industry.siemens.com/cs/ww/en/ps/3UG4501-1AA30/manual>



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