

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	
<ul style="list-style-type: none"> • of the optional sensor 	2-pole and 3-pole sensors 3UG3207
General technical data	
<ul style="list-style-type: none"> • (product function) 	Monitoring relay for level monitoring
Display version LED	Yes
Apparent power consumption	
<ul style="list-style-type: none"> • at DC <ul style="list-style-type: none"> — at 24 V maximum • at AC <ul style="list-style-type: none"> — at 24 V maximum 	2 V·A
Insulation voltage	
<ul style="list-style-type: none"> • for overvoltage category III according to IEC 60664 <ul style="list-style-type: none"> — 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	
• acc. to IEC 60068-2-27	sinusoidal half-wave 15g / 11 ms
Mechanical service life (switching cycles)	
• typical	10 000 000
Electrical endurance (switching cycles)	
• at AC-15 at 230 V typical	100 000
Reference code acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750	K
Reference code acc. to DIN EN 81346-2	K
Reference code acc. to DIN EN 61346-2	K
Relative repeat accuracy	1 %

Product Function

Product function	
• outlet monitoring adjustable	Yes
• Adjustable response sensitivity	Yes
• inlet monitoring adjustable	Yes
• External reset	Yes

Control circuit/ Control

Control supply voltage at AC	
• at 50 Hz rated value	24 ... 24 V
• at 60 Hz rated value	24 ... 24 V
Control supply voltage at DC	
• rated value	24 ... 24 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

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 CO contacts	1
• delayed switching	
Operating frequency with 3RT2 contactor maximum	5 000 1/h
Outputs	
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
Operating current at 17 V minimum	5 mA
Continuous current of the DIAZED fuse link of the output relay	4 A
Electromagnetic compatibility	
Conducted interference	
• due to burst acc. to IEC 61000-4-4	2 kV
• due to conductor-earth surge acc. to IEC 61000-4-5	2 kV
• due to conductor-conductor surge acc. to IEC 61000-4-5	1 kV
Field-bound parasitic coupling acc. to IEC 61000-4-3	10 V/m
Electrostatic discharge acc. to IEC 61000-4-2	6 kV contact discharge / 8 kV air discharge
Galvanic isolation	
Galvanic isolation	
• between entrance and outlet	Yes
• between the outputs	No
Connections/Terminals	
Product function	
• removable terminal for auxiliary and control circuit	Yes
Type of electrical connection	screw-type terminals
Type of connectable conductor cross-sections	
• solid	1x (0.5 ... 4.0 mm ²), 2x (0.5 ... 2.5 mm ²)
• finely stranded with core end processing	1x (0.5 ... 2.5 mm ²), 2x (0.5 ... 1.5 mm ²)

<ul style="list-style-type: none"> • at AWG conductors solid • at AWG conductors stranded 	<p>2x (20 ... 14)</p> <p>2x (20 ... 14)</p>
Connectable conductor cross-section <ul style="list-style-type: none"> • solid • finely stranded with core end processing 	<p>0.5 ... 4 mm²</p> <p>0.5 ... 2.5 mm²</p>
AWG number as coded connectable conductor cross section <ul style="list-style-type: none"> • solid • stranded 	<p>20 ... 14</p> <p>20 ... 14</p>
Tightening torque <ul style="list-style-type: none"> • with screw-type terminals 	<p>0.8 ... 1.2 N·m</p>

Installation/ mounting/ dimensions	
<ul style="list-style-type: none"> • (mounting position) 	any
<ul style="list-style-type: none"> • (mounting type) 	screw and snap-on mounting
(height)	92 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 	<p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p>

Ambient conditions	
Installation altitude at height above sea level <ul style="list-style-type: none"> • maximum 	<p>2 000 m</p>

Certificates/approvals

General Product Approval		EMC	Declaration of Conformity		
 CCC	 UL		 C-Tick	 EG-Konf.	Miscellaneous

Test Certificates	Marine / Shipping	other	Railway
Special Test Certificate	 LRS	Confirmation	Vibration and Shock
Type Test Certificates/Test Report	 DNVGL.COM/AF		

Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

<http://www.siemens.com/industrial-controls/catalogs>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3UG4501-1AA30>

Cax online generator

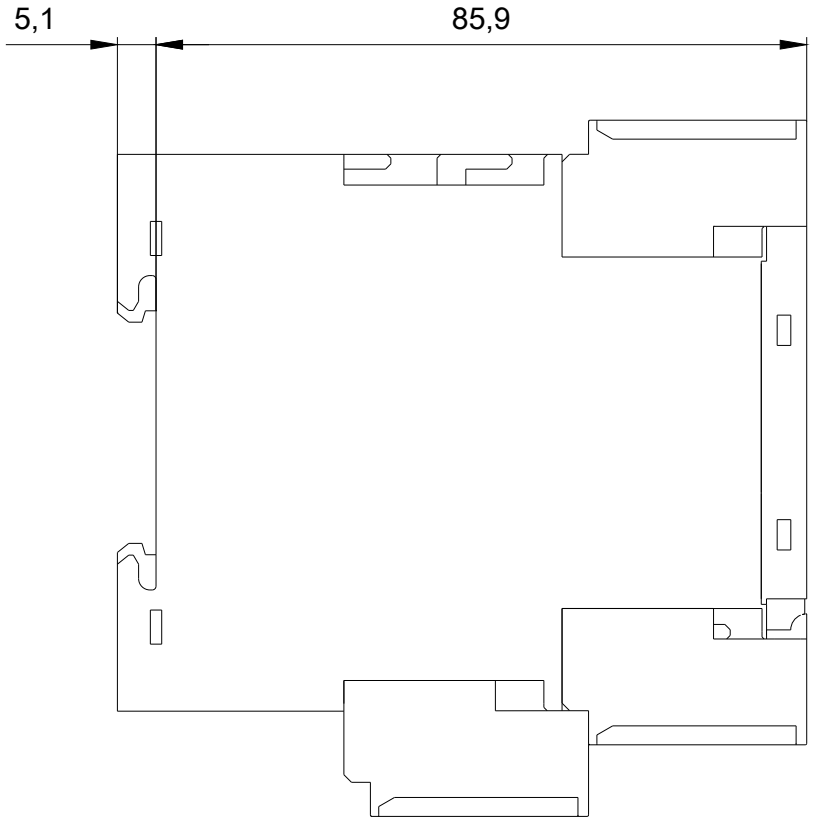
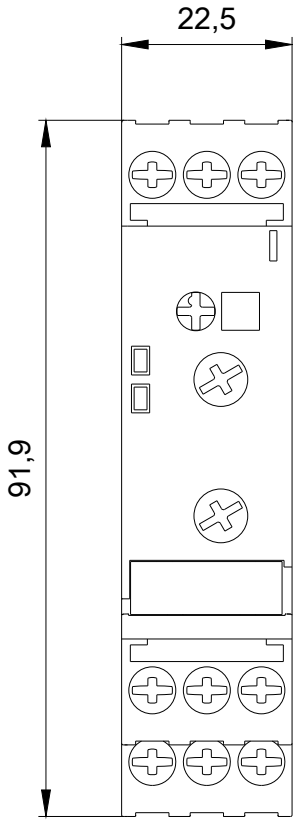
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UG4501-1AA30>

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



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