

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 screw terminal Successor product for 3UG3501



Figure similar

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	
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 240 V maximum • at AC <ul style="list-style-type: none"> — at 24 V maximum — at 240 V maximum 	2 V·A 4 V·A 2 V·A 4 V·A
Insulation voltage	

<ul style="list-style-type: none"> • for overvoltage category III according to IEC 60664 — with degree of pollution 3 rated value 	300 V
Degree of pollution	3
Type of voltage	
<ul style="list-style-type: none"> • of the control supply voltage 	AC/DC
Surge voltage resistance rated value	4 kV
Protection class IP	IP20
Shock resistance	
<ul style="list-style-type: none"> • acc. to IEC 60068-2-27 	sinusoidal half-wave 15g / 11 ms
Vibration resistance	
<ul style="list-style-type: none"> • acc. to IEC 60068-2-6 	1 ... 6 Hz: 15 mm, 6 ... 500 Hz: 2g
Mechanical service life (switching cycles)	
<ul style="list-style-type: none"> • typical 	10 000 000
Electrical endurance (switching cycles)	
<ul style="list-style-type: none"> • at AC-15 at 230 V typical 	100 000
Reference code acc. to DIN EN 81346-2	K
Relative repeat accuracy	1 %

Product Function

Product function	
<ul style="list-style-type: none"> • outlet monitoring adjustable 	Yes
<ul style="list-style-type: none"> • Adjustable response sensitivity 	Yes
<ul style="list-style-type: none"> • inlet monitoring adjustable 	Yes
<ul style="list-style-type: none"> • External reset 	Yes

Control circuit/ Control

Control supply voltage at AC	
<ul style="list-style-type: none"> • at 50 Hz rated value 	24 ... 240 V
<ul style="list-style-type: none"> • at 60 Hz rated value 	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	
<ul style="list-style-type: none"> delayed switching 	0
Number of NO contacts	
<ul style="list-style-type: none"> 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

Outputs	
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
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	
<ul style="list-style-type: none"> due to burst acc. to IEC 61000-4-4 	2 kV
<ul style="list-style-type: none"> due to conductor-earth surge acc. to IEC 61000-4-5 	2 kV
<ul style="list-style-type: none"> 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	
<ul style="list-style-type: none"> between entrance and outlet 	Yes
<ul style="list-style-type: none"> between the outputs 	No

Connections/ Terminals

Product function	Yes
<ul style="list-style-type: none"> removable terminal for auxiliary and control circuit 	
Type of electrical connection	screw-type terminals
Type of connectable conductor cross-sections	
<ul style="list-style-type: none"> solid 	1x (0.5 ... 4.0 mm ²), 2x (0.5 ... 2.5 mm ²)
<ul style="list-style-type: none"> 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 	2x (20 ... 14)
<ul style="list-style-type: none"> at AWG conductors stranded 	2x (20 ... 14)
Connectable conductor cross-section	
<ul style="list-style-type: none"> solid 	0.5 ... 4 mm ²
<ul style="list-style-type: none"> finely stranded with core end processing 	0.5 ... 2.5 mm ²
AWG number as coded connectable conductor cross section	
<ul style="list-style-type: none"> solid 	20 ... 14
<ul style="list-style-type: none"> stranded 	20 ... 14
Tightening torque	
<ul style="list-style-type: none"> with screw-type terminals 	0.8 ... 1.2 N·m

Installation/ mounting/ dimensions








Mounting position	any
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 	0 mm
<ul style="list-style-type: none"> for grounded parts <ul style="list-style-type: none"> — forwards — Backwards — upwards — at the side — downwards 	0 mm
<ul style="list-style-type: none"> for live parts <ul style="list-style-type: none"> — forwards — 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	
					Miscellaneous
CCC	UL		RCM	EG-Konf.	
Test Certificates		Marine / Shipping		other	Railway
Type Test Certificates/Test Report	Special Test Certificate			Confirmation	Vibration and Shock
		LRS	DNVGL.COM/AF		

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=3UG4501-1AW30>

Cax online generator

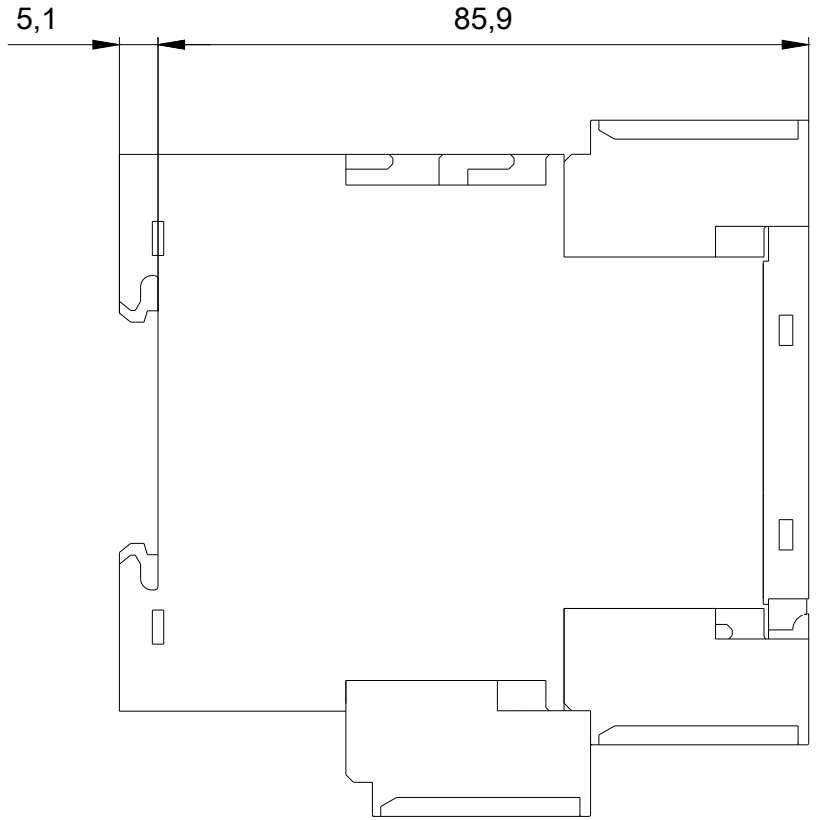
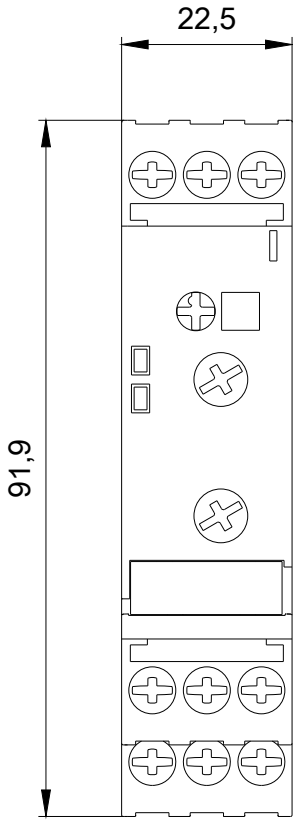
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UG4501-1AW30>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3UG4501-1AW30>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3UG4501-1AW30&lang=en



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