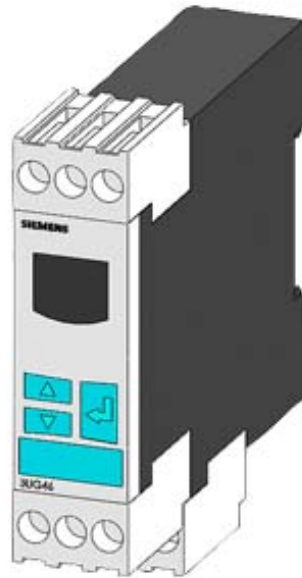


Digital monitoring relay Voltage monitoring, 22.5 mm from 10 to 600 V AC/DC Overshoot and undershoot 24 to 240 V AC/DC 50 to 60 Hz DC and AC Noise pulses delay 0.1 to 20 s Hysteresis 0.1 to 300 V 1 change-over contact with or without fault buffer screw terminal Successor product for 3UG3532-1AL20, 3UG3532-1AG20



Product brand name	SIRIUS
Product designation	Voltage monitoring relay with digital setting
Product type designation	3UG4

General technical data	
Product function	Voltage monitoring relay
Design of the display	LCD
Type of voltage	
• for monitoring	AC/DC
• of the control supply voltage	AC/DC
Surge voltage resistance rated value	4 kV
maximum permissible voltage for safe isolation	
• between auxiliary and auxiliary circuit	300 V
• between control and auxiliary circuit	300 V
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
Thermal current of the switching element with contacts maximum	5 A
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	
• undervoltage detection	Yes
• Overvoltage detection	Yes
• Overvoltage detection 1 phase	Yes
• Overvoltage detection 3 phase	No
• Overvoltage detection DC	Yes
• undervoltage detection 1 phase	Yes
• undervoltage detection 3 phases	No
• undervoltage detection DC	Yes
• Voltage window recognition 1 phase	Yes
• Voltage window recognition 3 phase	No
• Voltage window recognition DC	Yes
• Adjustable open/closed-circuit current principle	Yes
• External reset	Yes
• Auto-reset	Yes

Control circuit/ Control

Control supply voltage at AC	
• at 50 Hz rated value	24 ... 240 V
• at 60 Hz rated value	24 ... 240 V
Control supply voltage at DC	
• rated value	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	
Measurable line frequency	40 ... 500 Hz
Measurable voltage at DC	10 ... 600
Adjustable response delay time	
<ul style="list-style-type: none"> with lower or upper limit violation 	0.1 ... 20 s
Accuracy of digital display	+/-1 digit
Relative temperature-related measurement deviation	0.1 %

Precision	
Relative metering precision	5 %

Auxiliary circuit	
Number of CO contacts	
<ul style="list-style-type: none"> delayed switching 	1
Operating frequency with 3RT2 contactor maximum	5 000 1/h

Main circuit	
Number of poles for main current circuit	1

Outputs	
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	
Design of the electrical isolation	Safe isolation
Galvanic isolation	
<ul style="list-style-type: none"> between entrance and outlet 	Yes
<ul style="list-style-type: none"> between the outputs 	Yes
<ul style="list-style-type: none"> between the voltage supply and other circuits 	Yes

Connections/ Terminals	
Product function	
<ul style="list-style-type: none"> removable terminal for auxiliary and control circuit 	Yes
Type of electrical connection	screw-type terminals
Type of connectable conductor cross-sections	

<ul style="list-style-type: none"> • solid • finely stranded with core end processing • at AWG conductors solid • at AWG conductors stranded 	<p>1x (0.5 ... 4 mm²), 2x (0.5 ... 2.5 mm²)</p> <p>1x (0.5 ... 2.5 mm²), 2x (0.5 ... 1.5 mm²)</p> <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>1.2 ... 0.8 N·m</p>






Installation/ mounting/ dimensions

Mounting position	any
Mounting type	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 — 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>

Ambient conditions

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

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

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

Further information

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

www.siemens.com/sirius/catalogs

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3UG4632-1AW30>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UG4632-1AW30>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3UG4632-1AW30>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3UG4632-1AW30&lang=en

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