SIEMENS

product brand name

Data sheet 3UG4632-1AW30

SIRIUS



Digital monitoring relay Voltage monitoring, 22.5 mm from 10 to 600 V AC/DC 0vershoot 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			
insulation voltage for overvoltage category III according to IEC 60664				
 with degree of pollution 3 rated value 	690 V			
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			
vibration resistance acc. 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			
thermal current of the switching element with contacts maximum	5 A			
reference code acc. to IEC 81346-2	K			
relative repeat accuracy	1 %			
Substance Prohibitance (Date)	01.05.2012			
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			

	v		
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 AC	600 10 V		
measurable voltage at DC	10 600 V		
adjustable response delay time			
 with lower or upper limit violation 	0.1 20 s		
accuracy of digital display	+/-1 digit		
relative temperature-related measurement deviation	0.1 %		
Precision			
	F 0/		
relative metering precision	5 %		
Auxiliary circuit	5 %		
	0		
Auxiliary circuit			
Auxiliary circuit number of NC contacts delayed switching	0		
Auxiliary circuit number of NC contacts delayed switching number of NO contacts delayed switching	0 0		
Auxiliary circuit number of NC contacts delayed switching number of NO contacts delayed switching number of CO contacts delayed switching	0 0 1		
Auxiliary circuit number of NC contacts delayed switching number of NO contacts delayed switching number of CO contacts delayed switching operating frequency with 3RT2 contactor maximum Main circuit	0 0 1		
Auxiliary circuit number of NC contacts delayed switching number of NO contacts delayed switching number of CO contacts delayed switching operating frequency with 3RT2 contactor maximum	0 0 1 5 000 1/h		
Auxiliary circuit number of NC contacts delayed switching number of NO contacts delayed switching number of CO contacts delayed switching operating frequency with 3RT2 contactor maximum Main circuit number of poles for main current circuit	0 0 1 5 000 1/h		
Auxiliary circuit number of NC contacts delayed switching number of NO contacts delayed switching number of CO contacts delayed switching operating frequency with 3RT2 contactor maximum Main circuit number of poles for main current circuit operational current at 17 V minimum	0 0 1 5 000 1/h		
Auxiliary circuit number of NC contacts delayed switching number of NO contacts delayed switching number of CO contacts delayed switching operating frequency with 3RT2 contactor maximum Main circuit number of poles for main current circuit operational current at 17 V minimum continuous current of the DIAZED fuse link of the	0 0 1 5 000 1/h		
Auxiliary circuit number of NC contacts delayed switching number of NO contacts delayed switching number of CO contacts delayed switching operating frequency with 3RT2 contactor maximum Main circuit number of poles for main current circuit operational current at 17 V minimum continuous current of the DIAZED fuse link of the output relay	0 0 1 5 000 1/h		
Auxiliary circuit number of NC contacts delayed switching number of NO contacts delayed switching number of CO contacts delayed switching operating frequency with 3RT2 contactor maximum Main circuit number of poles for main current circuit operational current at 17 V minimum continuous current of the DIAZED fuse link of the output relay Electromagnetic compatibility	0 0 1 5 000 1/h		
Auxiliary circuit number of NC contacts delayed switching number of NO contacts delayed switching number of CO contacts delayed switching operating frequency with 3RT2 contactor maximum Main circuit number of poles for main current circuit operational current at 17 V minimum continuous current of the DIAZED fuse link of the output relay Electromagnetic compatibility conducted interference	0 0 1 5 000 1/h		
Auxiliary circuit number of NC contacts delayed switching number of NO contacts delayed switching number of CO contacts delayed switching operating frequency with 3RT2 contactor maximum Main circuit number of poles for main current circuit operational current at 17 V minimum continuous current of the DIAZED fuse link of the output relay Electromagnetic compatibility conducted interference • due to burst acc. to IEC 61000-4-4	0 0 1 5 000 1/h		
Auxiliary circuit number of NC contacts delayed switching number of NO contacts delayed switching number of CO contacts delayed switching operating frequency with 3RT2 contactor maximum Main circuit number of poles for main current circuit operational current at 17 V minimum continuous current of the DIAZED fuse link of the output relay Electromagnetic compatibility conducted interference • due to burst acc. to IEC 61000-4-4 • due to conductor-earth surge acc. to IEC 61000-4-5 • due to conductor-conductor surge acc. to IEC	0 0 1 5 000 1/h		
Auxiliary circuit number of NC contacts delayed switching number of NO contacts delayed switching number of CO contacts delayed switching operating frequency with 3RT2 contactor maximum Main circuit number of poles for main current circuit operational current at 17 V minimum continuous current of the DIAZED fuse link of the output relay Electromagnetic compatibility conducted interference • due to burst acc. to IEC 61000-4-4 • due to conductor-earth surge acc. to IEC 61000-4-5 • due to conductor-conductor surge acc. to IEC 61000-4-5	0 0 1 5 000 1/h		
Auxiliary circuit number of NC contacts delayed switching number of NO contacts delayed switching number of CO contacts delayed switching operating frequency with 3RT2 contactor maximum Main circuit number of poles for main current circuit operational current at 17 V minimum continuous current of the DIAZED fuse link of the output relay Electromagnetic compatibility conducted interference • due to burst acc. to IEC 61000-4-4 • due to conductor-earth surge acc. to IEC 61000-4-5 • due to conductor-conductor surge acc. to IEC 61000-4-5 field-based interference acc. to IEC 61000-4-3	0 0 1 5 000 1/h 1 5 mA 4 A 2 kV 2 kV 1 kV		
Auxiliary circuit number of NC contacts delayed switching number of NO contacts delayed switching number of CO contacts delayed switching operating frequency with 3RT2 contactor maximum Main circuit number of poles for main current circuit operational current at 17 V minimum continuous current of the DIAZED fuse link of the output relay Electromagnetic compatibility conducted interference • due to burst acc. to IEC 61000-4-4 • due to conductor-earth surge acc. to IEC 61000-4-5 • due to conductor-conductor surge acc. to IEC 61000-4-5 field-based interference acc. to IEC 61000-4-2	0 0 1 5 000 1/h 1 5 mA 4 A 2 kV 2 kV 1 kV		
Auxiliary circuit number of NC contacts delayed switching number of NO contacts delayed switching number of CO contacts delayed switching operating frequency with 3RT2 contactor maximum Main circuit number of poles for main current circuit operational current at 17 V minimum continuous current of the DIAZED fuse link of the output relay Electromagnetic compatibility conducted interference • due to burst acc. to IEC 61000-4-4 • due to conductor-earth surge acc. to IEC 61000-4-5 • due to conductor-conductor surge acc. to IEC 61000-4-5 field-based interference acc. to IEC 61000-4-3 electrostatic discharge acc. to IEC 61000-4-2 Galvanic isolation	0 0 1 5 000 1/h 1 5 mA 4 A 2 kV 2 kV 1 kV 10 V/m 6 kV contact discharge / 8 kV air discharge		
Auxiliary circuit number of NC contacts delayed switching number of NO contacts delayed switching number of CO contacts delayed switching operating frequency with 3RT2 contactor maximum Main circuit number of poles for main current circuit operational current at 17 V minimum continuous current of the DIAZED fuse link of the output relay Electromagnetic compatibility conducted interference • due to burst acc. to IEC 61000-4-4 • due to conductor-earth surge acc. to IEC 61000-4-5 • due to conductor-conductor surge acc. to IEC 61000-4-5 field-based interference acc. to IEC 61000-4-3 electrostatic discharge acc. to IEC 61000-4-2 Galvanic isolation design of the electrical isolation	0 0 1 5 000 1/h 1 5 mA 4 A 2 kV 2 kV 1 kV 10 V/m 6 kV contact discharge / 8 kV air discharge		
Auxiliary circuit number of NC contacts delayed switching number of NO contacts delayed switching number of CO contacts delayed switching operating frequency with 3RT2 contactor maximum Main circuit number of poles for main current circuit operational current at 17 V minimum continuous current of the DIAZED fuse link of the output relay Electromagnetic compatibility conducted interference • due to burst acc. to IEC 61000-4-4 • due to conductor-earth surge acc. to IEC 61000-4-5 • due to conductor-conductor surge acc. to IEC 61000-4-5 field-based interference acc. to IEC 61000-4-3 electrostatic discharge acc. to IEC 61000-4-2 Galvanic isolation design of the electrical isolation galvanic isolation	0 0 1 5 000 1/h 1 5 mA 4 A 2 kV 2 kV 1 kV 10 V/m 6 kV contact discharge / 8 kV air discharge		
Auxiliary circuit number of NC contacts delayed switching number of NO contacts delayed switching number of CO contacts delayed switching operating frequency with 3RT2 contactor maximum Main circuit number of poles for main current circuit operational current at 17 V minimum continuous current of the DIAZED fuse link of the output relay Electromagnetic compatibility conducted interference • due to burst acc. to IEC 61000-4-4 • due to conductor-earth surge acc. to IEC 61000-4-5 • due to conductor-conductor surge acc. to IEC 61000-4-5 field-based interference acc. to IEC 61000-4-3 electrostatic discharge acc. to IEC 61000-4-2 Galvanic isolation design of the electrical isolation galvanic isolation • between input and output	0 0 1 5 000 1/h 1 5 mA 4 A 2 kV 2 kV 1 kV 10 V/m 6 kV contact discharge / 8 kV air discharge		
Auxiliary circuit number of NC contacts delayed switching number of NO contacts delayed switching number of CO contacts delayed switching operating frequency with 3RT2 contactor maximum Main circuit number of poles for main current circuit operational current at 17 V minimum continuous current of the DIAZED fuse link of the output relay Electromagnetic compatibility conducted interference • due to burst acc. to IEC 61000-4-4 • due to conductor-earth surge acc. to IEC 61000-4-5 • due to conductor-conductor surge acc. to IEC 61000-4-5 field-based interference acc. to IEC 61000-4-3 electrostatic discharge acc. to IEC 61000-4-2 Galvanic isolation design of the electrical isolation galvanic isolation • between input and output • between the outputs • between the voltage supply and other circuits	0 0 1 5 000 1/h 1 5 mA 4 A 2 kV 2 kV 1 kV 10 V/m 6 kV contact discharge / 8 kV air discharge Protective separation Yes Yes		
Auxiliary circuit number of NC contacts delayed switching number of NO contacts delayed switching number of CO contacts delayed switching operating frequency with 3RT2 contactor maximum Main circuit number of poles for main current circuit operational current at 17 V minimum continuous current of the DIAZED fuse link of the output relay Electromagnetic compatibility conducted interference • due to burst acc. to IEC 61000-4-4 • due to conductor-earth surge acc. to IEC 61000-4-5 • due to conductor-conductor surge acc. to IEC 61000-4-5 field-based interference acc. to IEC 61000-4-3 electrostatic discharge acc. to IEC 61000-4-2 Galvanic isolation design of the electrical isolation galvanic isolation • between input and output • between the outputs	0 0 1 5 000 1/h 1 5 mA 4 A 2 kV 2 kV 1 kV 10 V/m 6 kV contact discharge / 8 kV air discharge Protective separation Yes Yes		
number of NC contacts delayed switching number of NO contacts delayed switching number of CO contacts delayed switching number of CO contacts delayed switching operating frequency with 3RT2 contactor maximum Main circuit number of poles for main current circuit operational current at 17 V minimum continuous current of the DIAZED fuse link of the output relay Electromagnetic compatibility conducted interference • due to burst acc. to IEC 61000-4-4 • due to conductor-earth surge acc. to IEC 61000-4-5 • due to conductor-conductor surge acc. to IEC 61000-4-5 field-based interference acc. to IEC 61000-4-3 electrostatic discharge acc. to IEC 61000-4-2 Galvanic isolation design of the electrical isolation galvanic isolation • between input and output • between the outputs • between the voltage supply and other circuits Connections/ Terminals product component removable terminal for auxiliary and control circuit	0 0 1 5 000 1/h 1 5 mA 4 A 2 kV 2 kV 1 kV 10 V/m 6 kV contact discharge / 8 kV air discharge Protective separation Yes Yes Yes		
Auxiliary circuit number of NC contacts delayed switching number of NO contacts delayed switching number of CO contacts delayed switching operating frequency with 3RT2 contactor maximum Main circuit number of poles for main current circuit operational current at 17 V minimum continuous current of the DIAZED fuse link of the output relay Electromagnetic compatibility conducted interference • due to burst acc. to IEC 61000-4-4 • due to conductor-earth surge acc. to IEC 61000-4-5 • due to conductor-conductor surge acc. to IEC 61000-4-5 field-based interference acc. to IEC 61000-4-3 electrostatic discharge acc. to IEC 61000-4-2 Galvanic isolation design of the electrical isolation galvanic isolation • between input and output • between the outputs • between the voltage supply and other circuits Connections/ Terminals product component removable terminal for auxiliary	0 0 1 5 000 1/h 1 5 mA 4 A 2 kV 2 kV 1 kV 10 V/m 6 kV contact discharge / 8 kV air discharge Protective separation Yes Yes Yes		

General Product Approval		EMC	Declaration of Conformity	Test Certificates		
Certificates/ approvals						
during transport	-40 +85 °C					
during storage	-40 +85 °C					
 during operation 		-25 +60 °C				
ambient temperature						
installation altitude at height above sea level maximum	2 000	2 000 m				
Ambient conditions						
— at the side	0 mn	0 mm				
— upwards	0 mn	0 mm				
— backwards	0 mm					
— forwards	0 mm					
for live parts						
— downwards	0 mm					
— at the side	0 mm					
— upwards	0 mm					
— backwards	0 mm					
— forwards	0 mm					
 for grounded parts 						
— at the side	0 mm					
— downwards	0 mm					
— upwards	0 mm					
— backwards	0 mm					
— forwards	0 mn	า				
with side-by-side mounting						
required spacing						
depth	91 mm					
width	22.5 mm					
height	92 mm					
fastening method	snap-on mounting					
mounting position	any	anv				
Installation/ mounting/ dimensions						
tightening torque with screw-type terminals		1.2 0.8 N·m				
• stranded	20 14					
AWG number as coded connectable conductor cross section • solid	20	14				
finely stranded with core end processing	0.5 2.5 mm²					
• solid		. 4 mm²				
connectable conductor cross-section						
at AWG cables stranded	2x (20 14)					
 at AWG cables solid 	2x (20 14)					
 finely stranded with core end processing 	1x (0	.5 2.5 mm2), 2x (0.5	1.5 mm2)			
		.5 4 mm2), 2x (0.5	,			











Special Test Certificate

Test Certificates

Marine / Shipping

other

Railway

Type Test Certificates/Test Report





Confirmation

Vibration and Shock

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=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

Characteristic: Derating

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

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