## **SIEMENS**

Data sheet 3UG4633-1AL30



Digital monitoring relay Voltage monitoring, 22.5 mm from 17-275 V AC/DC Overshoot and undershoot Self-powered Spike delay 0.1 to 20 s Hysteresis 0.1 to 150 V 1 CO contact With or without error buffer Screw terminals Successor product for 3UG3534, 3UG3535

Figure similar

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			
<ul><li>for monitoring</li></ul>	AC/DC		
of the control supply voltage	AC/DC		
surge voltage resistance rated value	4 kV		
maximum permissible voltage for safe isolation			
<ul> <li>between auxiliary and auxiliary circuit</li> </ul>	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 00:00:00		
Product Function			
product function			
<ul> <li>undervoltage detection</li> </ul>	Yes		
<ul> <li>overvoltage detection</li> </ul>	Yes		
<ul> <li>overvoltage detection 1 phase</li> </ul>	Yes		
<ul> <li>overvoltage detection 3 phase</li> </ul>	No		
<ul> <li>overvoltage detection DC</li> </ul>	Yes		
<ul> <li>undervoltage detection 1 phase</li> </ul>	Yes		
<ul> <li>undervoltage detection 3 phases</li> </ul>	No		
<ul> <li>undervoltage detection DC</li> </ul>	Yes		

<ul> <li>voltage window recognition 1 phase</li> </ul>	Yes			
<ul> <li>voltage window recognition 3 phase</li> </ul>	No			
<ul> <li>voltage window recognition DC</li> </ul>	Yes			
<ul> <li>adjustable open/closed-circuit current principle</li> </ul>	Yes			
<ul> <li>external reset</li> </ul>	Yes			
auto-RESET	Yes			
Control circuit/ Control				
control supply voltage at AC				
at 50 Hz rated value	17 275 V			
at 60 Hz rated value	17 275 V			
control supply voltage at DC				
• rated value	17 275 V			
operating range factor control supply voltage rated				
value at DC				
initial value	1			
full-scale value	1			
operating range factor control supply voltage rated value at AC at 50 Hz				
initial value	1			
full-scale value	1			
operating range factor control supply voltage rated value at AC at 60 Hz				
• initial value	1			
• full-scale value	1			
Measuring circuit				
measurable line frequency	40 500 Hz			
measurable voltage at DC	17 275 V			
adjustable response delay time				
<ul><li>when starting</li></ul>	0.1 20 s			
<ul> <li>with lower or upper limit violation</li> </ul>	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 NC contacts delayed switching	0			
number of NO contacts delayed switching	0			
number of CO contacts delayed switching	1			
operating frequency with 3RT2 contactor maximum	5 000 1/h			
Main circuit				
number of poles for main current circuit	1			
Outputs				
operational 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	1 kV			
61000-4-5 field-based interference acc. to IEC 61000-4-3	10 V/m			
electrostatic discharge acc. to IEC 61000-4-3	6 kV contact discharge / 8 kV air discharge			
Galvanic isolation	O NV Contact discharge / O NV all discharge			
	Protoctive congration			
design of the electrical isolation	Protective separation			
galvanic isolation	Voc			
between input and output     between the outputs	Yes Yes			

between the voltage supply and other circuits	No			
Connections/ Terminals				
product component 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 mm2), 2x (0.5 2.5 mm2)			
<ul> <li>finely stranded with core end processing</li> </ul>	1x (0.5 2.5 mm2), 2x (0	.5 1.5 mm2)		
<ul> <li>at AWG cables solid</li> </ul>	2x (20 14)			
<ul> <li>at AWG cables stranded</li> </ul>	2x (20 14)			
connectable conductor cross-section				
• solid	0.5 4 mm²			
<ul> <li>finely stranded with core end processing</li> </ul>	0.5 2.5 mm²			
AWG number as coded connectable conductor cross section				
• solid	20 14			
• stranded	20 14			
tightening torque with screw-type terminals	1.2 0.8 N·m			
Installation/ mounting/ dimensions				
mounting position	any			
fastening method	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			
— at the side	0 mm			
Ambient conditions				
installation altitude at height above sea level maximum	2 000 m			
ambient temperature	2 000 111			
during operation	-25 +60 °C			
during operation     during storage	-40 +85 °C			
during storage     during transport	-40 +85 °C			
Certificates/ approvals				
General Product Approval	EMC	Declaration of Conformity	Test Certificates	
@ <b>6</b> rnr			Type Test Certific-	











Type Test Certificates/Test Report

Test Certificates Marine / Shipping other Railway

Special Test Certificate





Confirmation Vibration and Shock

## **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=3UG4633-1AL30

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UG4633-1AL30

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

https://support.industry.siemens.com/cs/ww/en/ps/3UG4633-1AL30

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

http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3UG4633-1AL30&lang=en

**Characteristic: Derating** 

https://support.industry.siemens.com/cs/ww/en/ps/3UG4633-1AL30/manual

last modified: 12/21/2020 🖸