SIEMENS

product brand name

Data sheet 3UG4631-1AA30

SIRIUS



Digital monitoring relay Voltage monitoring, 22.5 mm from 0.1-60 V AC/DC 0vershoot and undershoot Supply voltage: 24 V AC/DC 50 to 60 Hz DC and AC without galvanic isolation to measuring circuit Noise pulses delay 0.1 to 20 s Hysteresis 0.1 to 30 V 1 change-over contact with or without fault buffer screw terminal Successor product for 3UG3531-1AC..

product brane					
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 00:00:00				
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				

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• 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 6 kV contact discharge / 8 kV air discharge Galvanic isolation design of the electrical isolation protective separation e between input and output yes between the outputs between the voltage supply and other circuits Product component removable terminal for auxiliary and control circuit type of electrical connection 2 kV ve kV ve kV contact discharge / 8 kV air discharge field-based interference acc. to IEC 61000-4-3		
• 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 6 kV contact discharge / 8 kV air discharge Galvanic isolation design of the electrical isolation protective separation e between input and output between the outputs between the outputs between the voltage supply and other circuits Product component removable terminal for auxiliary and control circuit type of electrical connection 2 kV 1 kV 1 kV 1 kV 6 kV contact discharge / 8 kV air discharge 7 k kV 1 k		011/
due to conductor-conductor surge acc. to IEC 61000-4-5 field-based interference 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 Protective separation galvanic isolation • between input and output Yes • between the outputs Yes • between the voltage supply and other circuits No Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection screw-type terminals		
field-based interference acc. to IEC 61000-4-3 electrostatic discharge acc. to IEC 61000-4-2 Galvanic isolation design of the electrical isolation protective separation electrostation • 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 type of electrical connection 10 V/m 6 kV contact discharge / 8 kV air discharge 6 kV contact discharge / 8 kV air discharge 7 kes No Ves Yes No Yes Screw-type terminals	-	
field-based interference acc. to IEC 61000-4-3 electrostatic discharge acc. to IEC 61000-4-2 6 kV contact discharge / 8 kV air discharge Galvanic isolation design of the electrical isolation protective separation electrostatic discharge / 8 kV air discharge Protective separation Yes between input and output yes between the outputs between the voltage supply and other circuits Product component removable terminal for auxiliary and control circuit type of electrical connection screw-type terminals		I KV
Galvanic isolation		10 V/m
Galvanic isolation	electrostatic discharge acc. to IEC 61000-4-2	6 kV contact discharge / 8 kV air discharge
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 type of electrical connection Protective separation Yes Yes Yes No Screw-type terminals		
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 type of electrical connection Yes No Yes Screw-type terminals		Protective separation
 between the outputs between the voltage supply and other circuits Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection Yes screw-type terminals 		
 between the outputs between the voltage supply and other circuits Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection Yes screw-type terminals 	 between input and output 	Yes
Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection Screw-type terminals		Yes
Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection Screw-type terminals	 between the voltage supply and other circuits 	No
and control circuit type of electrical connection screw-type terminals	Connections/ Terminals	
		Yes
type of connectable conductor cross-sections	type of electrical connection	screw-type terminals
	type of connectable conductor cross-sections	

• solid	1x (C	.5 4 mm2), 2x (0.5	2.5 mm2)				
finely stranded with core end processing		.5 2.5 mm2), 2x (0.5					
at AWG cables solid		0 14)	1.0 111112)				
at AWG cables stranded		0 14)					
connectable conductor cross-section	ZX (Z	··· 1-1)					
• solid	0.5	. 4 mm²					
finely stranded with core end processing		. 2.5 mm²					
AWG number as coded connectable conductor cross	0.0 2.0 IIIII						
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 m	m					
width	22.5	mm					
depth	91 m	m					
required spacing							
 with side-by-side mounting 							
— forwards	0 mn	า					
— backwards	0 mn	า					
— upwards	0 mn	า					
— downwards	0 mn	า					
— at the side	0 mm						
 for grounded parts 							
— forwards	0 mn						
— backwards	0 mn	ı					
— upwards	0 mn	ı					
— at the side	0 mn	ı					
— downwards	0 mn	า					
for live parts							
— forwards	0 mn	า					
— backwards	0 mm						
— upwards	0 mm						
— at the side	0 mn	0 mm					
Ambient conditions							
installation altitude at height above sea level maximum	2 00) m					
ambient temperature							
during operation		-25 +60 °C					
during storage	-40 +85 °C						
during transport	-40 +85 °C						
Certificates/ approvals							
General Product Approval		EMC	Declaration of Conformity	Test Certificates			











Type Test Certificates/Test Report

Test Certificates Marine / Shipping

other

Railway

Special Test Certificate





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=3UG4631-1AA30

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UG4631-1AA30

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

https://support.industry.siemens.com/cs/ww/en/ps/3UG4631-1AA30

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3UG4631-1AA30&lang=en

Characteristic: Derating

https://support.industry.siemens.com/cs/ww/en/ps/3UG4631-1AA30/manual