SIEMENS

Data sheet 3UG4633-2AL30



Digital monitoring relay Voltage monitoring, 22.5 mm from 17-275 V AC/DC Overshoot and undershoot self-supplied Noise pulses delay 0.1 to 20 s Hysteresis 0.1 to 150 V 1 changeover contact spring-type connection system spring-type connection system

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
reference code acc. to IEC 81346-2	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

Subject to change without notice
© Copyright Siemens

● external reset	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	500 ... 40 Hz
measurable voltage at DC	17 ... 275 V
adjustable response delay time	
● when starting	0.1 ... 20 s
● 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 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 61000-4-5	1 kV
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 function removable terminal for auxiliary and control circuit	Yes

Subject to change without notice
© Copyright Siemens

type of electrical connection	spring-loaded terminals
type of connectable conductor cross-sections	
● solid	2x (0.25 ... 1.5 mm²)
● finely stranded with core end processing	2 x (0.25 ... 1.5 mm²)
● finely stranded without core end processing	2x (0.25 ... 1.5 mm²)
● at AWG cables solid	2x (24 ... 16)
● at AWG cables stranded	2x (24 ... 16)
● connectable conductor cross-section solid	0.25 ... 1.5 mm²
● connectable conductor cross-section finely stranded with core end processing	0.25 ... 1.5 mm²
● connectable conductor cross-section finely stranded without core end processing	0.25 ... 1.5 mm²
● AWG number as coded connectable conductor cross section solid	24 ... 16
● AWG number as coded connectable conductor cross section stranded	24 ... 16
Installation/ mounting/ dimensions	
mounting position	any
fastening method	snap-on mounting
height	94 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 during operation	-25 ... +60 °C
● ambient temperature during storage	85 ... -40 °C
● ambient temperature during transport	85 ... -40 °C

Certificates/ approvals

General Product Approval	EMC	Declaration of Conformity	Test Certificates
CCC UL RCM EG-Konf.		Miscellaneous	Type Test Certificates/Test Report

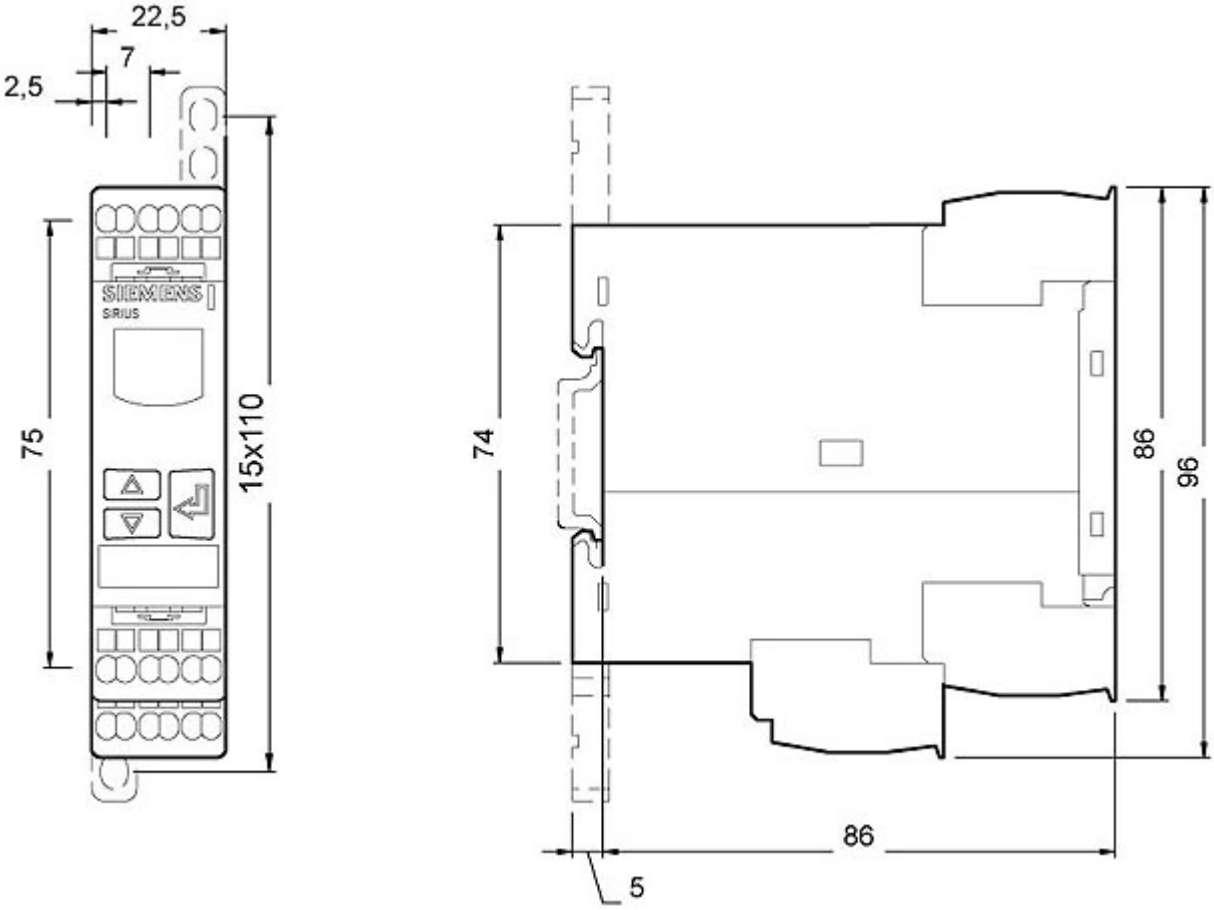
Test Certificates	Marine / Shipping	other	Railway

Subject to change without notice
© Copyright Siemens

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=3UG4633-2AL30
Cax online generator
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UG4633-2AL30
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3UG4633-2AL30
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3UG4633-2AL30&lang=en
Characteristic: Derating
https://support.industry.siemens.com/cs/ww/en/ps/3UG4633-2AL30/manual



last modified: 5/15/2020

Subject to change without notice
© Copyright Siemens