SIEMENS

Product data sheet 3UG4633-1AL30

DIGITAL MONITORING RELAY VOLTAGE MONITORING, 22.5MM FROM 17 TO 275V AC/DC OVERSHOOT AND UNDERSHOOT INTERNAL POWER SUPPLY DC AND AC 50 TO 60 HZ SPIKE DELAY 0.1 TO 20S HYSTERESIS 0.1 TO 150V 1 CHANGEOVER CONTACT W. OR W/O ERROR LOG SCREW TERMINAL REPLACEMENT PRODUCT F. 3UG3534,
3UG3535

Product function		Voltage monitoring relay
Measuring circuit:		
Type of voltage / for monitoring		AC/DC
Number of poles / for main current circuit		1
Measurable line frequency	Hz	500 … 40
Measurable voltage		
• for AC	V	17 … 275
Adjustable voltage range	V	17 … 275
Adjustable response delay time		
• when starting	s	0.1 … 20
• with lower or upper limit violation	s	0.1 … 20
Response time / maximum	ms	450
Relative metering precision	%	5
Precision of digital display		+/-1 digit
Relative temperature-related measurement deviation	%	0.1
Relative repeat accuracy	%	1
General technical details:		
Design of the display		LCD
Product function		
• tension window recognition of 1 phase		Yes

• tension window recognition of 3 phases		No
• tension window recognition DC		Yes
• overvoltage recognition of 1 phase		Yes
• overvoltage recognition of 3 phases		No
• overvoltage recognition DC		Yes
• undervoltage recognition of 1 phase		Yes
• undervoltage recognition of 3 phases		No
• undervoltage recognition DC		Yes
• reset external		Yes
• self-reset		Yes
• open-circuit or closed-circuit current principle		Yes
Starting time / after the control supply voltage has been applied	ms	1,000
Type of voltage / of the controlled supply voltage		AC/DC
Control supply voltage		
• at 50 Hz / at AC		
• rated value	V	17 … 275
• at 60 Hz / at AC		
• rated value	V	17 … 275
• for DC		
• rated value	V	17 … 275
Operating range factor control supply voltage rated value		
• at 50 Hz		
• for AC		1 … 1
• at 60 Hz		
• for AC		1 … 1
• for DC		1 … 1
Impulse voltage resistance / rated value	kV	4
Recorded real power	W	2
Protection class IP		IP20
Electromagnetic compatibility		IEC 60947-1 / IEC 61000-6-2 / IEC 61000-6-4
Resistance against vibration / according to IEC 60068-2-6		1 … 6 Hz: 15 mm, 6 … 500 Hz: 2g
Resistance against shock / according to IEC 60068-2-27		sinusoidal half-wave 15g / 11 ms
Installation altitude / at a height over sea level / maximum	m	2,000
Maximum permissible voltage for safe disconnection		
• between control and auxiliary circuit	V	300
• between auxiliary circuit and auxiliary circuit	V	300
Conductor-bound parasitic coupling BURST / according to IEC 61000-4-4		2 kV
Conductor-bound parasitic coupling conductor-earth SURGE / according to IEC 61000-4-5		2 kV

Conductor-bound parasitic coupling conductor-conductor SURGE / according to IEC 61000-4-5		1 kV
Electrostatic discharge / according to IEC 61000-4-2		6 kV contact discharge / 8 kV air discharge
Field-bound parasitic coupling / according to IEC 61000-4-3		10 V/m
Insulation voltage / for overvoltage category III according to IEC 60664 / with degree of pollution 3 / rated value	V	690
Ambient temperature		
• during operating	°C	-25 … +60
• during storage	°C	-40 … +85
• during transport	°C	-40 … +85
Design of the electrical isolation		Safe isolation
Galvanic isolation		
• between entrance and outlet		Yes
• between the outputs		Yes
• between the voltage supply and other circuits		No
Mechanical operating cycles as operating time / typical		10,000,000
Electrical operating cycles as operating time / at AC-15 / at 230 V / typical		100,000
Operating cycles / with 3RT2 contactor / maximum	1/h	5,000

Mechanical design:		
Width	mm	22.5
Height	mm	92
Depth	mm	91
mounting position		any
Distance, to be maintained, to earthed part		
• forwards	mm	0
• backwards	mm	0
• sidewards	mm	0
• upwards	mm	0
• downwards	mm	0
Distance, to be maintained, to the ranks assembly		
• forwards	mm	0
• backwards	mm	0
• sidewards	mm	0
• upwards	mm	0
• downwards	mm	0
Distance, to be maintained, conductive elements		
• forwards	mm	0
• backwards	mm	0

• sidewards	mm	0
• upwards	mm	0
Type of mounting		snap-on mounting
Product function / removable terminal for auxiliary and control circuit		Yes
Design of the electrical connection		screw-type terminals
Type of the connectable conductor cross-section		
• solid		1x (0.5 ... 4 mm2), 2x (0.5 ... 2.5 mm2)
• finely stranded		
• with wire end processing		1x (0.5 ... 2.5 mm2), 2x (0.5 ... 1.5 mm2)
• for AWG conductors		
• solid		2x (20 ... 14)
• stranded		2x (20 ... 14)
Tightening torque		
• with screw-type terminals	N·m	1.2 … 0.8

Outputs:

Number of NO contacts / delayed switching		0
Number of NC contacts / delayed switching		0
Number of change-over switches / delayed switching		1
Operating current / at 17 V / minimum	mA	5
Continuous current / of the DIAZED fuse link of the output relay	A	4
Thermal current / of the contact-affected switching element / maximum	A	5

Certificates/approvals:

General Product Approval			EMC	Test Certificates
CCC	GOST	UL	C-TICK	Special Test Certificate
Shipping Approval			**other**	
DNV	GL	LRS	Declaration of Conformity	other

Further information:

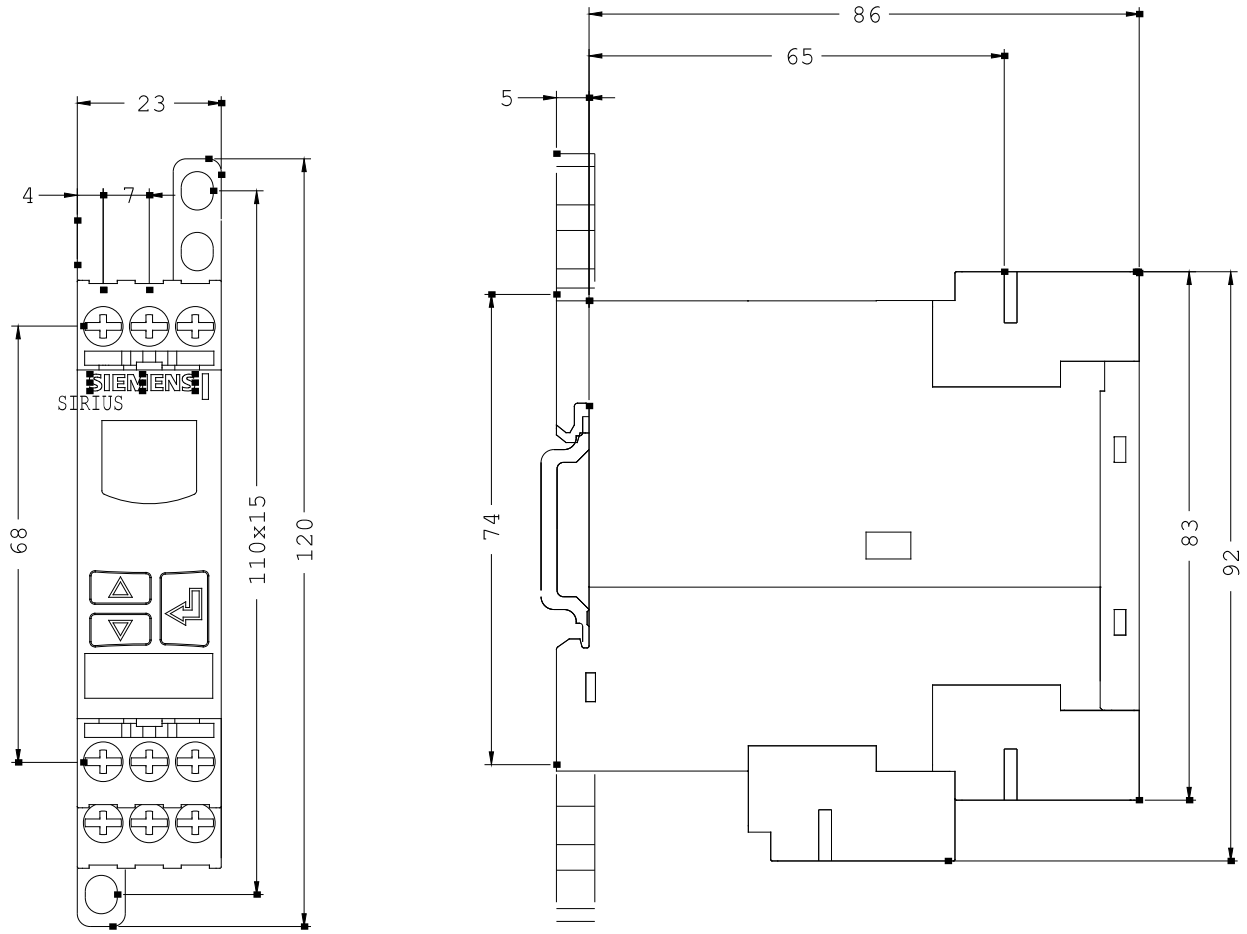
Information- and Downloadcenter (Catalogs, Brochures,…)
http://www.siemens.com/industrial-controls/catalogs

Industry Mall (Online ordering system)
http://www.siemens.com/industrial-controls/mall

Cax online generator:
http://www.siemens.com/cax

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
http://support.automation.siemens.com/WW/view/en/3UG4633-1AL30/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3UG4633-1AL30



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