SIEMENS

Data sheet 3UG4832-1AA40

DIGITAL MONITORING RELAY VOLTAGE MONITORING, 22.5MM FOR IO-LINK 10 TO 600V AC/DC OVER- AND UNDERCURRENT HYSTERESIS 0.1 TO 300V ON DELAY TIME TRIPPING DELAY TIME 1 CHANGE-OVER CONTACT, SCREW TERMINAL

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	40 ... 500
Measurable voltage at AC	V	10 ... 600
Adjustable voltage range	V	10 ... 600
Adjustable response delay time		
• when starting	s	0 ... 999.9
• with lower or upper limit violation	s	0 ... 999.9
Response time maximum	ms	450
Relative metering precision	%	5
Accuracy of digital display		+/-1 digit
Relative temperature-related measurement deviation	%	0.1
Relative repeat accuracy	%	1
General technical data:		
Design of the display		LCD
Product function		
• Voltage window recognition 1 phase		Yes

• Voltage window recognition 3 phase		No
• Voltage window recognition DC		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
• External reset		Yes
• Auto-reset		Yes
• Adjustable open/closed-circuit current principle		Yes
Starting time after the control supply voltage has been applied	ms	1 000
Type of voltage of the control supply voltage		DC
Control supply voltage		
• at DC rated value	V	18 ... 30
Operating range factor control supply voltage rated value		
• at DC		0.75 ... 1.25
Surge voltage resistance rated value	kV	6
Consumed active power	W	2
Protection class IP		IP20
Electromagnetic compatibility		IEC 60947-1 / IEC 61000-6-2 / IEC 61000-6-4
Vibration resistance acc. to IEC 60068-2-6		1 ... 6 Hz: 15 mm, 6 ... 500 Hz: 2g
Shock resistance acc. to IEC 60068-2-27		sinusoidal half-wave 15g / 11 ms
Installation altitude at height above sea level maximum	m	2 000
maximum permissible voltage for safe isolation		
• between control and auxiliary circuit	V	690
Conducted interference due to burst acc. to IEC 61000-4-4		2 kV
Conducted interference due to conductor-earth surge acc. to IEC 61000-4-5		2 kV
Conducted interference due to conductor-conductor surge acc. to IEC 61000-4-5		1 kV
Electrostatic discharge acc. to IEC 61000-4-2		6 kV contact discharge / 8 kV air discharge
Field-bound parasitic coupling acc. to IEC 61000-4-3		10 V/m
Ambient temperature		
• during operation	°C	-25 ... +60
• during storage	°C	85 ... -40
• during transport	°C	85 ... -40
Design of the electrical isolation		Safe isolation
Galvanic isolation		

• between entrance and outlet		Yes
• between the voltage supply and other circuits		Yes
Mechanical service life (switching cycles) typical		10 000 001
Electrical endurance (switching cycles) at AC-15 at 230 V typical		100 000
Operating frequency with 3RT2 contactor maximum	1/h	5 000

Communication/ Protocol:		
Type of voltage supply via input/output link master		Yes
IO-Link transfer rate		COM2 (38,4 kBaud)
Protocol is supported IO-Link protocol		Yes
Amount of data		
• of the address area of the outputs with cyclical transfer total	byte	2
• of the address area of the inputs with cyclical transfer total	byte	4
Point-to-point cycle time between master and IO-Link device minimum	ms	10

Mechanical data:		
Width	mm	22.5
Height	mm	92
Depth	mm	91
Mounting position		any
Required spacing for grounded parts		
• forwards	mm	0
• Backwards	mm	0
• at the side	mm	0
• upwards	mm	0
• downwards	mm	0
Required spacing with side-by-side mounting		
• forwards	mm	0
• Backwards	mm	0
• at the side	mm	0
• upwards	mm	0
• downwards	mm	0
Required spacing for live parts		
• forwards	mm	0
• Backwards	mm	0
• at the side	mm	0
• upwards	mm	0
Mounting type		snap-on mounting
Product function 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)
• finely stranded		
— with core end processing		1x (0.5 ... 2.5 mm2), 2x (0.5 ... 1.5 mm2)
• at 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 CO contacts delayed switching		1
Operating current at 17 V minimum	mA	10
Continuous current of the DIAZED fuse link of the output relay	A	4
Thermal current of the switching element with contacts maximum	A	5

Certificates/ approvals:

General Product Approval				Declaration of Conformity	Test Certificates
CCC	Manufacturer Declaration	UL	EAC	EG-Konf.	Special Test Certificate

Test Certificates	other	Railway
Type Test Certificates/Test Report	Confirmation	Vibration and Shock

Further information

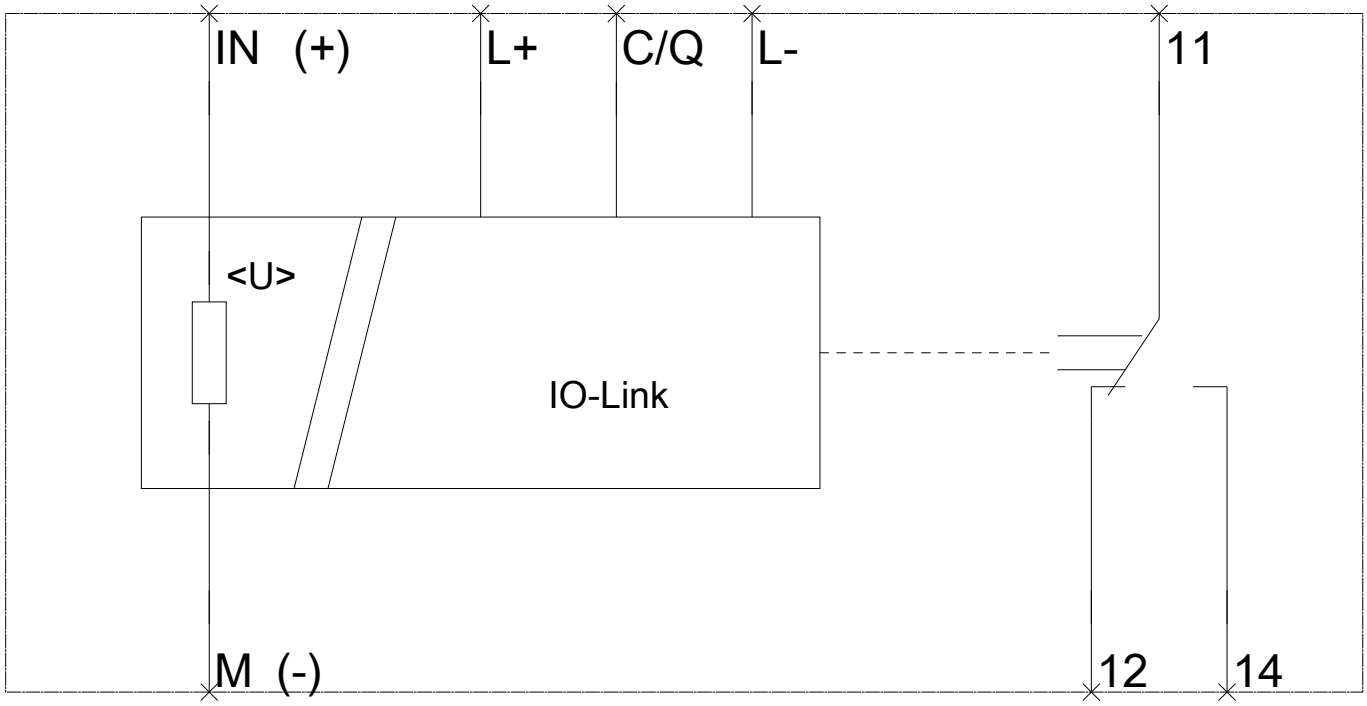
Information- and Downloadcenter (Catalogs, Brochures,…)
http://www.siemens.com/industrial-controls/catalogs

Industry Mall (Online ordering system)
http://www.siemens.com/industrymall

Cax online generator
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UG4832-1AA40

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3UG4832-1AA40

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3UG4832-1AA40&lang=en



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