



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, SPRING-LOADED TERMINAL

Product function	Voltage monitoring relay
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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 with 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

<ul style="list-style-type: none"> • undervoltage detection 3 phases • undervoltage detection DC • External reset • Auto-reset • Adjustable open/closed-circuit current principle 		No Yes Yes Yes Yes
Startup time after the control supply voltage has been applied	ms	1 000
Type of voltage of the control supply voltage		DC
Control supply voltage <ul style="list-style-type: none"> • for DC Rated value 	V	18 ... 30
Operating range factor control supply voltage rated value <ul style="list-style-type: none"> • for DC 		0.75 ... 1.25
Surge voltage resistance Rated value	kV	6
Active power consumption	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 <ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • during operation • during storage • during transport 	°C °C °C	-25 ... +60 85 ... -40 85 ... -40
Design of the electrical isolation		Safe isolation
Galvanic isolation <ul style="list-style-type: none"> • between entrance and outlet • between the voltage supply and other circuits 		Yes Yes
Mechanical service life (switching cycles) typical		10 000 002
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		
<ul style="list-style-type: none"> • of the address area of the outputs with cyclical transfer total 	byte	2
<ul style="list-style-type: none"> • 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	94
Depth	mm	91
mounting position		any
Required spacing for grounded parts		
<ul style="list-style-type: none"> • forwards 	mm	0
<ul style="list-style-type: none"> • Backwards 	mm	0
<ul style="list-style-type: none"> • at the side 	mm	0
<ul style="list-style-type: none"> • upwards 	mm	0
<ul style="list-style-type: none"> • downwards 	mm	0
Required spacing with side-by-side mounting		
<ul style="list-style-type: none"> • forwards 	mm	0
<ul style="list-style-type: none"> • Backwards 	mm	0
<ul style="list-style-type: none"> • at the side 	mm	0
<ul style="list-style-type: none"> • upwards 	mm	0
<ul style="list-style-type: none"> • downwards 	mm	0
Required spacing for live parts		
<ul style="list-style-type: none"> • forwards 	mm	0
<ul style="list-style-type: none"> • Backwards 	mm	0
<ul style="list-style-type: none"> • at the side 	mm	0
<ul style="list-style-type: none"> • upwards 	mm	0
Mounting type		snap-on mounting
Product function removable terminal for auxiliary and control circuit		Yes
Type of electrical connection		spring-loaded terminals
Type of connectable conductor cross-section		
<ul style="list-style-type: none"> • solid 		2x (0.25 ... 1.5 mm ²)
<ul style="list-style-type: none"> • finely stranded 		
<ul style="list-style-type: none"> — with core end processing 		2 x (0.25 ... 1.5 mm ²)
<ul style="list-style-type: none"> — without core end processing 		2x (0.25 ... 1.5 mm ²)

- for AWG conductors

- solid

- stranded

2x (24 ... 16)

2x (24 ... 16)

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



CCC

[Manufacturer declaration](#)



UL

Test Certificates

[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)

other

[other](#)

[Declaration of Conformity](#)

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

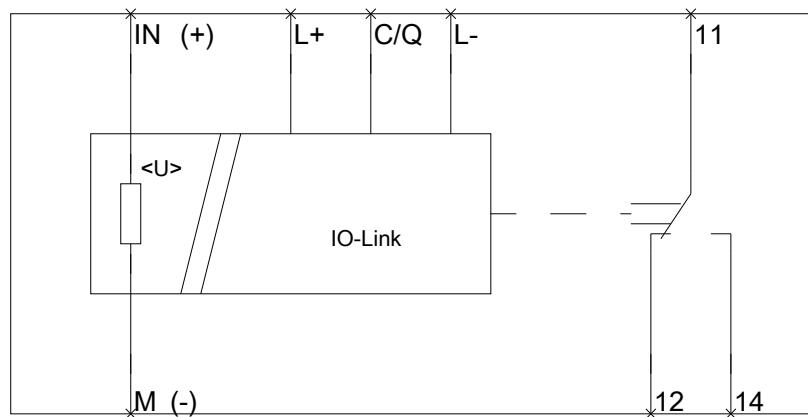
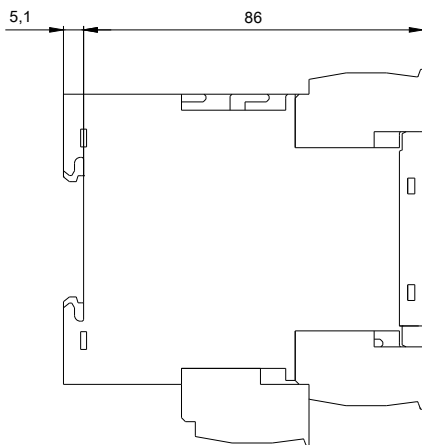
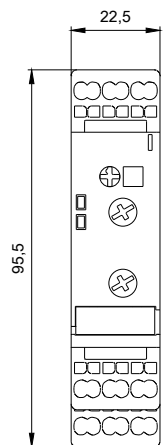
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UG48322AA40>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3UG48322AA40>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3UG48322AA40&lang=en



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