

DIGITAL MONITORING RELAY VOLTAGE MONITORING, 22.5MM FROM 0.1 TO 60V AC/DC OVERSHOOT AND UNDERSHOOT SUPPLY VOLTAGE: AC/DC 24V DC AND AC 50 TO 60 HZ NO GALVANIC ISOLATION FROM MEASURING CIRCUIT INTERF. PEAK DELAY 0.1 TO 20S HYSTERESIS 0.1 TO 30V 1 CO CONTACT W. OR W/O ERROR LOG SPRING-LOADED CONNECTION

<b>Product function</b>	Voltage monitoring relay
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**Measuring circuit:**

<b>Type of voltage for monitoring</b>		AC/DC
<b>Number of poles for main current circuit</b>		1
<b>Measurable line frequency</b>	Hz	500 ... 40
<b>Measurable voltage with AC</b>	V	0.1 ... 60
<b>Adjustable voltage range</b>	V	0.1 ... 60
<b>Adjustable response delay time</b>		
• with lower or upper limit violation	s	0.1 ... 20
<b>Response time maximum</b>	ms	450
<b>Relative metering precision</b>	%	5
<b>Accuracy of digital display</b>		+/-1 digit
<b>Relative temperature-related measurement deviation</b>	%	0.1
<b>Relative repeat accuracy</b>	%	1

**General technical data:**

<b>Design of the display</b>		LCD
<b>Product function</b>		
• 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

<b>Startup time after the control supply voltage has been applied</b>	ms	1 000
<b>Type of voltage of the control supply voltage</b>		AC/DC
<b>Control supply voltage</b>		
• with AC		
— at 50 Hz Rated value	V	24 ... 24
— at 60 Hz Rated value	V	24 ... 24
• for DC Rated value	V	24 ... 24
<b>Operating range factor control supply voltage rated value</b>		
• with AC		
— at 50 Hz		0.85 ... 1.15
— at 60 Hz		0.85 ... 1.15
• for DC		0.85 ... 1.15
<b>Surge voltage resistance Rated value</b>	kV	4
<b>Active power consumption</b>	W	2
<b>Protection class IP</b>		IP20
<b>Electromagnetic compatibility</b>		IEC 60947-1 / IEC 61000-6-2 / IEC 61000-6-4
<b>Vibration resistance acc. to IEC 60068-2-6</b>		1 ... 6 Hz: 15 mm, 6 ... 500 Hz: 2g
<b>Shock resistance acc. to IEC 60068-2-27</b>		sinusoidal half-wave 15g / 11 ms
<b>Installation altitude at height above sea level maximum</b>	m	2 000
<b>maximum permissible voltage for safe isolation</b>		
• between control and auxiliary circuit	V	300
• between auxiliary and auxiliary circuit	V	300
<b>Conducted interference due to burst acc. to IEC 61000-4-4</b>		2 kV
<b>Conducted interference due to conductor-earth surge acc. to IEC 61000-4-5</b>		2 kV
<b>Conducted interference due to conductor-conductor surge acc. to IEC 61000-4-5</b>		1 kV
<b>Electrostatic discharge acc. to IEC 61000-4-2</b>		6 kV contact discharge / 8 kV air discharge
<b>Field-bound parasitic coupling acc. to IEC 61000-4-3</b>		10 V/m
<b>Insulation voltage for overvoltage category III according to IEC 60664 with degree of pollution 3 Rated value</b>	V	690
<b>Ambient temperature</b>		
• during operation	°C	-25 ... +60
• during storage	°C	-40 ... +85
• during transport	°C	-40 ... +85
<b>Design of the electrical isolation</b>		Safe isolation
<b>Galvanic isolation</b>		
• between entrance and outlet		Yes
• between the outputs		Yes

• between the voltage supply and other circuits		No
<b>Mechanical service life (switching cycles) typical</b>		10 000 000
<b>Electrical endurance (switching cycles) at AC-15 at 230 V typical</b>		100 000
<b>Operating frequency with 3RT2 contactor maximum</b>	1/h	5 000

#### Mechanical data:








<b>Width</b>	mm	22.5
<b>Height</b>	mm	94
<b>Depth</b>	mm	91
<b>mounting position</b>		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
<b>Mounting type</b>		snap-on mounting
<b>Product function removable terminal for auxiliary and control circuit</b>		Yes
<b>Type of electrical connection</b>		spring-loaded terminals
<b>Type of connectable conductor cross-section</b>		
• solid		2x (0.25 ... 1.5 mm <sup>2</sup> )
• finely stranded		
— with core end processing		2 x (0.25 ... 1.5 mm <sup>2</sup> )
— without core end processing		2x (0.25 ... 1.5 mm <sup>2</sup> )
• for AWG conductors		
— solid		2x (24 ... 16)
— stranded		2x (24 ... 16)

#### Outputs:

<b>Number of NO contacts delayed switching</b>		0
<b>Number of NC contacts delayed switching</b>		0

Number of CO contacts 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 switching element with contacts maximum	A	5

#### Certificates/ approvals:

General Product Approval			EMC	Test Certificates	
				<a href="#">Type Test Certificates/Test Report</a>	<a href="#">Special Test Certificate</a>
CCC		UL	C-TICK		
Shipping Approval			other		
			<a href="#">Declaration of Conformity</a>	<a href="#">other</a>	
DNV	GL	LRS			

#### 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**

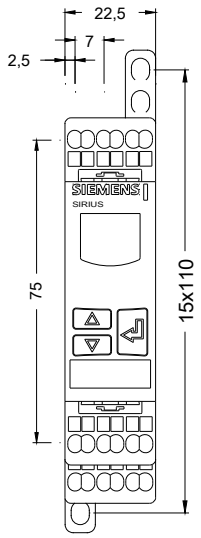
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UG46312AA30>

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

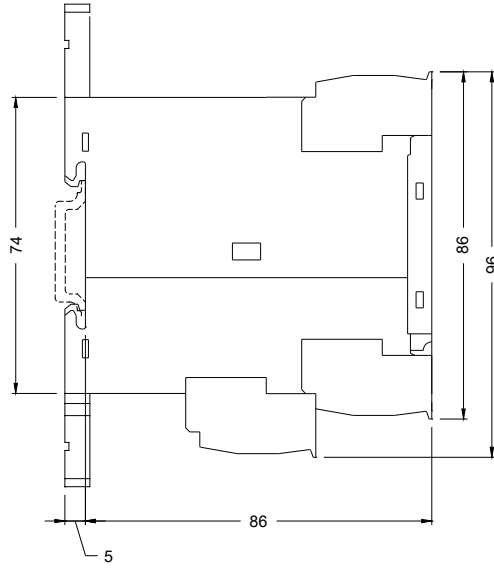
<https://support.industry.siemens.com/cs/ww/en/ps/3UG46312AA30>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3UG46312AA30&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3UG46312AA30&lang=en)



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