



Digital monitoring relay Voltage monitoring, 22.5 mm from 0.1-60 V AC/DC Overshoot and undershoot 24 to 240 V AC/DC 50 to 60 Hz DC and AC Noise pulses delay 0.1 to 20 s Hysteresis 0.1 to 30 V 1 change-over contact with or without fault buffer screw terminal Successor product for 3UG3531-1AL20, 3UG3531-1AG20

Figure similar

Product function		Voltage monitoring relay
<b>Measuring circuit:</b>		
Type of voltage for monitoring		AC/DC
Number of poles for main current circuit		1
Measurable line frequency	Hz	500 ... 40
Measurable voltage at AC	V	0.1 ... 60
Adjustable voltage range	V	0.1 ... 60
Adjustable response delay time		
• with lower or upper limit violation	s	0.1 ... 20
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
<b>General technical data:</b>		
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
<b>Starting 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>		
• at AC		
— at 50 Hz rated value	V	24 ... 240
— at 60 Hz rated value	V	24 ... 240
• at DC rated value	V	24 ... 240
<b>Operating range factor control supply voltage rated value</b>		
• at AC		
— at 50 Hz		0.85 ... 1.1
— at 60 Hz		0.85 ... 1.1
• at DC		0.85 ... 1.1
<b>Surge voltage resistance rated value</b>	kV	4
<b>Consumed active power</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		Yes
<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	92
<b>Depth</b>	mm	91
<b>Mounting position</b>		any
<b>Required spacing for grounded parts</b>		
• forwards	mm	0
• Backwards	mm	0
• at the side	mm	0
• upwards	mm	0
• downwards	mm	0
<b>Required spacing with side-by-side mounting</b>		
• forwards	mm	0
• Backwards	mm	0
• at the side	mm	0
• upwards	mm	0
• downwards	mm	0
<b>Required spacing for live parts</b>		
• forwards	mm	0
• Backwards	mm	0
• at the side	mm	0
• upwards	mm	0
<b>Mounting type</b>		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		1x (0.5 ... 4 mm <sup>2</sup> ), 2x (0.5 ... 2.5 mm <sup>2</sup> )
<ul style="list-style-type: none"> <li>• solid</li> <li>• finely stranded <ul style="list-style-type: none"> <li>— with core end processing</li> </ul> </li> <li>• at AWG conductors <ul style="list-style-type: none"> <li>— solid</li> <li>— stranded</li> </ul> </li> </ul>		1x (0.5 ... 2.5 mm <sup>2</sup> ), 2x (0.5 ... 1.5 mm <sup>2</sup> )
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	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	Declaration of Conformity	Test Certificates
 CCC	 UL	 EAC	 C-Tick
		 EG-Konf.	<a href="#">Type Test Certificates/Test Report</a>

Test Certificates	Shipping Approval	other	Railway
<a href="#">Special Test Certificate</a>	 LRS	<a href="#">Confirmation</a>	<a href="#">Vibration and Shock</a>

#### Further information

##### Information- and Downloadcenter (Catalogs, Brochures,...)

<http://www.siemens.com/industrial-controls/catalogs>

##### Industry Mall (Online ordering system)

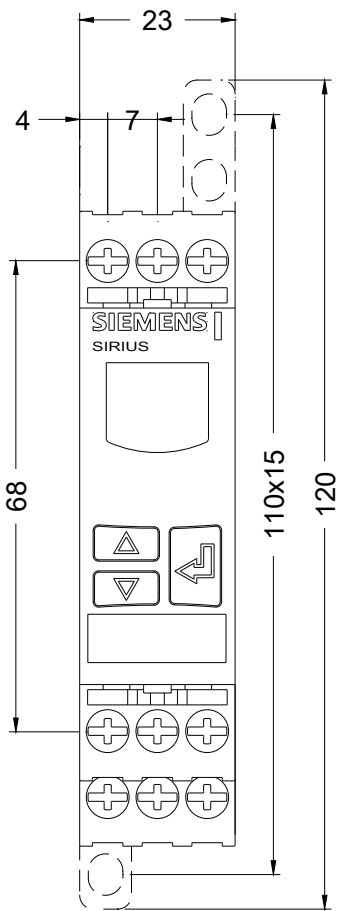
<http://www.siemens.com/industrymall>

##### Cax online generator

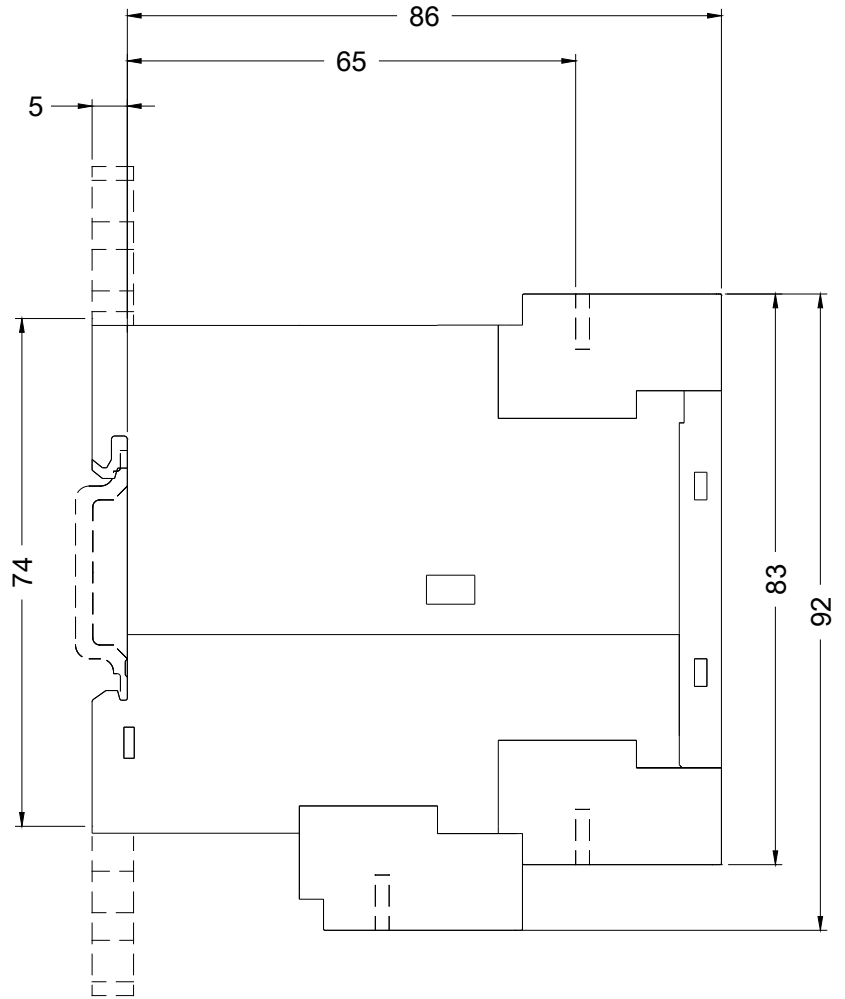
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UG4631-1AW30>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3UG4631-1AW30>



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