# **SIEMENS**

Data sheet 3UG4511-1AN20



Analog monitoring relay Phase sequence monitoring 3 x 160...260 V 50...60 Hz AC 1 change-over contact screw terminal Successor product for 3UG3511-1AQ50 or 3UG3511-1AV50

## Figure similar

Product function		Phase monitoring relay
Measuring circuit		
Type of voltage for monitoring		AC
Number of poles for main current circuit		3
Measurable voltage at AC	V	160 260
General technical data		
Display version LED		Yes
Product function		
<ul> <li>undervoltage detection</li> </ul>		No
<ul> <li>Overvoltage detection</li> </ul>		No
<ul> <li>phase sequence recognition</li> </ul>		Yes
Phase failure detection		No
Phase unbalance		No
<ul> <li>Overvoltage detection 3 phase</li> </ul>		No
<ul> <li>undervoltage detection 3 phases</li> </ul>		No
<ul> <li>Voltage window recognition 3 phase</li> </ul>		No
Auto-reset		Yes

Adjustable open/closed-circuit current principle		No
Starting time after the control supply voltage has been applied	ms	200
Response time maximum	ms	450
Type of voltage of the control supply voltage		AC
Control supply voltage		
● at AC		
— at 50 Hz rated value	V	160 260
— at 60 Hz rated value	V	160 260
Operating range factor control supply voltage rated value		
• at AC		
— at 50 Hz		11
— at 60 Hz		11
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	m	2 000
maximum		
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
Insulation voltage for overvoltage category III according to IEC 60664 with degree of pollution 3 rated value	V	690
Degree of pollution		3
Ambient temperature		
<ul><li>during operation</li></ul>	°C	-25 +60
during storage	°C	-40 +85
during transport	°C	-40 <b>+</b> 85
Galvanic isolation		
<ul> <li>between entrance and outlet</li> </ul>		Yes
<ul><li>between the outputs</li></ul>		Yes
• between the voltage supply and other circuits		Yes

## Mechanical data

Width	mm	22.5
Height	mm	83
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
<ul><li>downwards</li></ul>	mm	0
Required spacing with side-by-side mounting		
• forwards	mm	0
Backwards	mm	0
• at the side	mm	0
• upwards	mm	0
<ul><li>downwards</li></ul>	mm	0
Required spacing for live parts		
• forwards	mm	0
Backwards	mm	0
• at the side	mm	0
• upwards	mm	0
<ul><li>downwards</li></ul>	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		
<ul><li>— with core end processing</li></ul>		1x (0.5 2.5 mm2), 2x (0.5 1.5 mm2)
<ul> <li>at AWG conductors</li> </ul>		
— solid		2x (20 14)
— stranded		2x (20 14)
Tightening torque with screw-type terminals	N·m	0.8 1.2
Outputs		
Number of NO contacts delayed switching		0
Number of NC contacts delayed switching		0
Number of CO contacts delayed switching		1
Ampacity of the output relay		
● at AC-15		
— at 250 V at 50/60 Hz	Α	3
— at 400 V at 50/60 Hz	Α	3

• at DC-13		
— at 24 V	Α	1
— at 125 V	Α	0.2
— at 250 V	Α	0.1
Thermal current of the switching element with contacts maximum	Α	5
Operating current at 17 V minimum	mA	5
Continuous current of the DIAZED fuse link of the output relay	Α	4
Mechanical service life (switching cycles) typical		10 000 000
Electrical endurance (switching cycles) at AC-15 at 230 V typical		100 000
Operating frequency with 3RT2 contactor maximum	1/h	5 000

#### Certificates/approvals

General Product Approval EMC Declaration of Conformity Certificates











Special Test Certificate

Test Certificates	Shipping Approval	other	Railway
Type Test Certificates/Test Report	Lloyd's Register	Confirmation	Vibration and Shock

### Further information

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

LRS

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

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3UG4511-1AN20

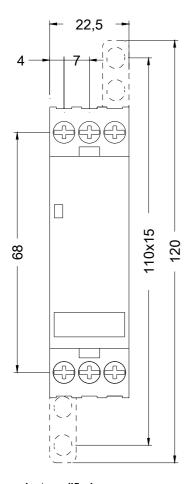
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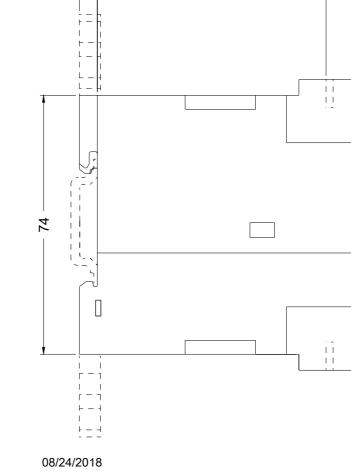
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UG4511-1AN20

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

https://support.industry.siemens.com/cs/ww/en/ps/3UG4511-1AN20

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3UG4511-1AN20&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3UG4511-1AN20&lang=en</a>





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