# SIEMENS

### Data sheet

## 3UG4511-1AP20

ANALOG MONITORING RELAY PHASE SEQUENCE MONITORING 3X 360 TO 520V AC 50 TO 60 HZ 1 CHANGEOVER CONTACT SCREW TERMINAL REPLACEMENT PRODUCT FOR 3UG3511-1AQ50



1

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 with AC	V	320 500			
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			
<ul> <li>Phase failure detection</li> </ul>		No			
<ul> <li>Asymmetry recognition</li> </ul>		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			
<ul> <li>Adjustable open/closed-circuit current principle</li> </ul>		No			
Startup 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					
• with AC					

— at 50 Hz Rated value	V	320 500
	V	320 500
— at 60 Hz Rated value	V	520 500
Operating range factor control supply voltage rated value		
• with AC		
— at 50 Hz		11
		11
— at 60 Hz	1.57	
Surge voltage resistance Rated value	kV	6
Active power consumption	W	2
Protection class IP		
		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
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
<ul> <li>during storage</li> </ul>	°C	-40 +85
<ul> <li>during transport</li> </ul>	°C	-40 +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

forwardsBackwards

Required spacing for grounded parts

mm

mm

any

0

0

	100 100	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
• downwards	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-section		
• solid		1x (0.5 4 mm2), 2x (0.5 2.5 mm2)
<ul> <li>finely stranded</li> </ul>		
— with core end processing		1x (0.5 2.5 mm2), 2x (0.5 1.5 mm2)
<ul> <li>for 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	А	3
— at 200 V at 50/60 Hz	A	3
• at DC-13		
	А	1
— at 24 V		
— at 125 V	A	0.2
— at 250 V	A	0.1
Thermal current of the switching element with contacts maximum	A	5
Operating current at 17 V minimum	mA	5

Continuous curre output relay	ent of the DIAZED fus	e link of the	A	4		
Mechanical service life (switching cycles) typical			10 000 000			
Electrical endura 230 V typical	ance (switching cycles	) at AC-15 at	_	100 000		
Operating freque	ency with 3RT2 contac	ctor maximum	1/h	5 000		
Certificates/ approvals:						
General Product Approval		EN	1C	Test Certificates		
CCC	EHC			ТІСК	Special Test Certificate	<u>Type Test</u> Certificates/Test <u>Report</u>

Shipping Approval			other	other		
ĴÅ DNV	GL	Lloyd's Register	other	Declaration of Conformity		
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=3UG45111AP20

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3UG45111AP20

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3UG45111AP20&lang=en

