SIEMENS

Data sheet 3UG4511-1AP20



Analog monitoring relay Phase sequence monitoring 3 x 320...500 V 50...60 Hz AC 1 change-over contact screw terminal Successor product for 3UG3511-1AQ50

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	320 500	
General technical data			
Display version LED		Yes	
Product function			
 undervoltage detection 		No	
 Overvoltage detection 		No	
 phase sequence recognition 		Yes	
Phase failure detection		Yes	
Phase unbalance		No	
 Overvoltage detection 3 phase 		No	
 undervoltage detection 3 phases 		No	
 Voltage window recognition 3 phase 		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	320 500
— at 60 Hz rated value	V	320 500
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 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		
during operation	°C	-25 +60
during storage	°C	-40 +85
during transport	°C	-40 +85
Galvanic isolation		
 between entrance and outlet 		Yes
• between the outputs		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
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-sections		
• solid		1x (0.5 4 mm2), 2x (0.5 2.5 mm2)
• finely stranded		
— with core end processing		1x (0.5 2.5 mm2), 2x (0.5 1.5 mm2)
• at AWG conductors		
— 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

General Product Approval EMC Declaration of Test Certific-Conformity ates











Special Test Certificate

Test Certific- ates	Shipping Ap- proval	other	Railway
Type Test Certific-		Confirmation	Vibration and Shock

ates/Test Report



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Further information

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

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

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3UG4511-1AP20

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UG4511-1AP20

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

https://support.industry.siemens.com/cs/ww/en/ps/3UG4511-1AP20

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3UG4511-1AP20&lang=en



