## **SIEMENS**

Data sheet 3UG4511-2BN20



ANALOG MONITORING RELAY PHASE SEQUENCE MONITORING 3X 160 TO 260V AC 50 TO 60 HZ 2 CHANGEOVER CONTACTS SPRING LOADED CONNECTION

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	160 260

General technical data:		
Display version LED		Yes
Product function		
<ul> <li>undervoltage detection</li> </ul>		No
Overvoltage detection		No
<ul> <li>phase sequence recognition</li> </ul>		Yes
Phase failure detection		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
<ul><li>Auto-reset</li></ul>		Yes
Adjustable open/closed-circuit current principle		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	160 260
	V	160 260
— at 60 Hz Rated value	V	100 200
Operating range factor control supply voltage rated value		
• with AC		
— at 50 Hz		11
— at 60 Hz		11
Surge voltage resistance Rated value	kV	6
Active power consumption	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		
during operation	°C	-25 <b>+</b> 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	94
Depth	mm	91
mounting position		any
Required spacing for grounded parts		
<ul><li>forwards</li></ul>	mm	0
<ul> <li>Backwards</li> </ul>	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		spring-loaded terminals
Type of connectable conductor cross-section		, S
• solid		2x (0.25 1.5 mm²)
• finely stranded		
with core end processing		2 x (0.25 1.5 mm²)
without core end processing		2x (0.25 1.5 mm²)
• for AWG conductors		
— solid		2x (24 16)
— stranded		2x (24 16)
		,
Outputs:		
Number of NO contacts delayed switching		0
Number of NC contacts delayed switching		0
Number of CO contacts delayed switching		2
Ampacity of the output relay  ● at AC-15		
	Α	3
— at 250 V at 50/60 Hz	A	3
— at 400 V at 50/60 Hz	A	3
• at DC-13	٨	1
— at 24 V	A	0.2
— at 125 V	A	
— at 250 V	A	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 Test Certificates









Special Test Certificate

Type Test
Certificates/Test
Report

## **Shipping Approval**

other





GL



Declaration of Conformity other

## 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=3UG45112BN20

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

https://support.industry.siemens.com/cs/ww/en/ps/3UG45112BN20

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3UG45112BN20&lang=en



