# **SIEMENS**

Product data sheet 3UG4511-2AP20



ANALOG MONITORING RELAY PHASE SEQUENCE MONITORING 3X 360 TO 520V AC 50 TO 60 HZ 1 CHANGEOVER CONTACT SPRING LOADED CONNECTION

Product function		Phase monitoring relay
Measuring circuit:		
Type of voltage / for monitoring		AC
Number of poles / for main current circuit		3
Measurable voltage		
• for AC	V	320 500

General technical details:		
Type of display / LED		Yes
Product function		
undervoltage recognition		No
overvoltage recognition		No
phase sequence recognition		Yes
phase disturbance recognition		No
asymmetry recognition		No
<ul> <li>overvoltage recognition of 3 phases</li> </ul>		No
<ul> <li>undervoltage recognition of 3 phases</li> </ul>		No
• tension window recognition of 3 phases		No
• self-reset		Yes
open-circuit or 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 controlled supply voltage		AC
Control supply voltage		
• at 50 Hz / at AC		
• rated value	V	320 500
• at 60 Hz / at AC		
• rated value	V	320 500
Operating range factor control supply voltage rated value		
• at 50 Hz		
• for AC		11
• at 60 Hz		
• for AC		1 1
Impulse voltage resistance / rated value	kV	6
Recorded real power	W	2
Protection class IP		IP20
Electromagnetic compatibility		IEC 60947-1 / IEC 61000-6-2 / IEC 61000-6-4
Resistance against vibration / according to IEC 60068-2-6		1 6 Hz: 15 mm, 6 500 Hz: 2g
Resistance against shock / according to IEC 60068-2-27		sinusoidal half-wave 15g / 11 ms
Installation altitude / at a height over sea level / maximum	m	2,000
Conductor-bound parasitic coupling BURST / according to IEC 61000-4-4		2 kV
Conductor-bound parasitic coupling conductor-earth SURGE / according to IEC 61000-4-5		2 kV
Conductor-bound parasitic coupling conductor-conductor SURGE / according to IEC 61000-4-5		1 kV
Electrostatic discharge / according to IEC 61000-4-2		6 kV contact discharge / 8 kV air discharge
Field-bound parasitic coupling / according 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 operating	°C	-25 +60
during storage	°C	-40 <b>+</b> 85
during transport	°C	-40 <b>+</b> 85
Galvanic isolation		
between entrance and outlet		Yes
between the outputs		Yes
<ul> <li>between the voltage supply and other circuits</li> </ul>		Yes

Mechanical design:		
Width	mm	22.5

Height	mm	84
Depth	mm	91
mounting position		any
Distance, to be maintained, to earthed part		
• forwards	mm	0
• backwards	mm	0
• sidewards	mm	0
• upwards	mm	0
• downwards	mm	0
Distance, to be maintained, to the ranks assembly		
• forwards	mm	0
• backwards	mm	0
• sidewards	mm	0
• upwards	mm	0
• downwards	mm	0
Distance, to be maintained, conductive elements		
• forwards	mm	0
• backwards	mm	0
• sidewards	mm	0
• upwards	mm	0
• downwards	mm	0
Type of mounting		snap-on mounting
Product function / removable terminal for auxiliary and control circuit		Yes
Design of the electrical connection		spring-loaded terminals
Type of the connectable conductor cross-section		
• solid		2x (0.25 1.5 mm²)
• finely stranded		
with wire end processing		2 x (0.25 1.5 mm²)
without wire end processing		2x (0.25 1.5 mm²)
• for AWG conductors		
• solid		2x (24 16)
• stranded		2x (24 16)
Outputs:		

Outputs:	
Number of NO contacts / delayed switching	0
Number of NC contacts / delayed switching	0
Number of change-over switches / delayed switching	1
Current carrying capacity / of 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 contact-affected switching element / 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 operating cycles as operating time / typical		10,000,000
Electrical operating cycles as operating time / at AC-15 / at 230 V / typical		100,000
Operating cycles / with 3RT2 contactor / maximum	1/h	5,000

## Certificates/approvals:

#### **General Product Approval**









**EMC** 

other

Special Test Certificate

**Test Certificates** 

### **Shipping Approval**







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/industrial-controls/mall

Cax online generator:

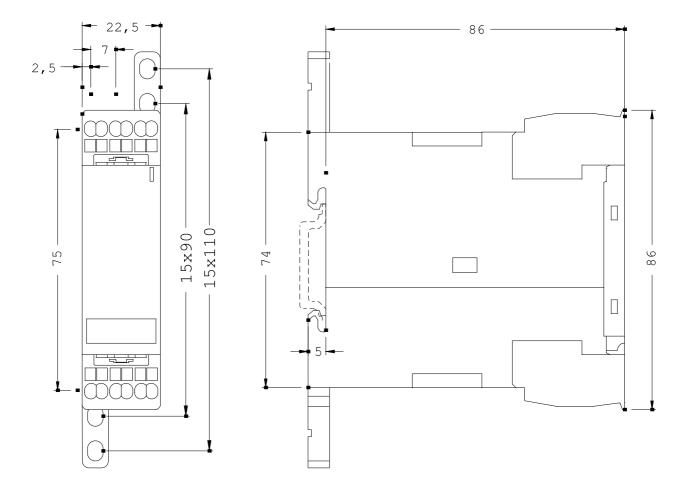
http://www.siemens.com/cax

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

http://support.automation.siemens.com/WW/view/en/3UG4511-2AP20/all

 $Image\ database\ (product\ images,\ 2D\ dimension\ drawings,\ 3D\ models,\ device\ circuit\ diagrams,\ ...)$ 

 $\underline{http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3UG4511-2AP20}$ 



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