## **SIEMENS**

Data sheet 3UG4511-2BQ20



Analog monitoring relay Phase sequence monitoring 3 x 420...690 V 50...60 Hz AC 2 change-over contacts spring-type connection system

Figure similar

product brand name	SIRIUS		
product designation	Line monitoring relay		
design of the product	1 function		
product type designation	3UG4		
General technical data			
product function	Phase monitoring relay		
display version LED	Yes		
insulation voltage for overvoltage category III according to IEC 60664			
with degree of pollution 3 rated value	690 V		
degree of pollution	3		
type of voltage			
<ul><li>for monitoring</li></ul>	AC		
of the control supply voltage	AC		
surge voltage resistance rated value	6 kV		
protection class IP	IP20		
shock resistance according to IEC 60068-2-27	sinusoidal half-wave 15g / 11 ms		
vibration resistance according to IEC 60068-2-6	1 6 Hz: 15 mm, 6 500 Hz: 2g		
mechanical service life (operating cycles) typical	10 000 000		
electrical endurance (operating cycles) at AC-15 at 230 V typical	100 000		
thermal current of the switching element with contacts maximum	5 A		
reference code according to IEC 81346-2	K		
Substance Prohibitance (Date)	05/01/2012		
Product Function			
product function			
<ul> <li>undervoltage detection</li> </ul>	No		
overvoltage detection	No		
<ul> <li>phase sequence recognition</li> </ul>	Yes		
<ul> <li>phase failure detection</li> </ul>	No		
<ul> <li>asymmetry detection</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>adjustable open/closed-circuit current principle</li> </ul>	No		
• auto-RESET	Yes		
Control circuit/ Control			
control supply voltage at AC			
• at 50 Hz rated value	420 690 V		

at 60 Hz rated value	420 690 V		
operating range factor control supply voltage rated value at	420 690 V		
AC at 50 Hz			
• initial value	1		
• full-scale value	1		
operating range factor control supply voltage rated value at AC at 60 Hz			
• initial value	1		
• full-scale value	1		
Measuring circuit			
measurable voltage at AC	420 690 V		
Auxiliary circuit			
number of NC contacts delayed switching	0		
number of NO contacts delayed switching	0		
number of CO contacts			
<ul> <li>for auxiliary contacts</li> </ul>	2		
delayed switching	2		
operating frequency with 3RT2 contactor maximum	5 000 1/h		
Main circuit			
number of poles for main current circuit	3		
ampacity of the output relay at AC-15			
● at 250 V at 50/60 Hz	3 A		
• at 400 V at 50/60 Hz	3 A		
ampacity of the output relay at DC-13			
• at 24 V	1 A		
● at 125 V	0.2 A		
● at 250 V	0.1 A		
operational current at 17 V minimum	5 mA		
continuous current of the DIAZED fuse link of the output relay	4 A		
Electromagnetic compatibility			
conducted interference			
<ul> <li>due to burst according to IEC 61000-4-4</li> </ul>	2 kV		
<ul> <li>due to conductor-earth surge according to IEC 61000-4-5</li> </ul>	2 kV		
<ul> <li>due to conductor-conductor surge according to IEC 61000-4-5</li> </ul>	1 kV		
field-based interference according to IEC 61000-4-3	10 V/m		
electrostatic discharge according to IEC 61000-4-2	6 kV contact discharge / 8 kV air discharge		
Galvanic isolation			
galvanic isolation			
<ul> <li>between input and output</li> </ul>	Yes		
<ul> <li>between the outputs</li> </ul>	Yes		
<ul> <li>between the voltage supply and other circuits</li> </ul>	Yes		
Connections/ Terminals			
product component removable terminal for auxiliary and control circuit	Yes		
type of electrical connection	spring-loaded terminals		
type of connectable conductor cross-sections			
• solid	2x (0.25 1.5 mm²)		
<ul> <li>finely stranded with core end processing</li> </ul>	2 x (0.25 1.5 mm²)		
<ul> <li>finely stranded without core end processing</li> </ul>	2x (0.25 1.5 mm²)		
<ul> <li>for AWG cables solid</li> </ul>	2x (24 16)		
for AWG cables stranded	2x (24 16)		
connectable conductor cross-section			
• solid	0.25 1.5 mm <sup>2</sup>		
<ul> <li>finely stranded with core end processing</li> </ul>	0.25 1.5 mm <sup>2</sup>		
finely stranded without core end processing	0.25 1.5 mm <sup>2</sup>		
AWG number as coded connectable conductor cross section			
• solid	24 16		
• stranded	24 16		
Installation/ mounting/ dimensions			

mounting position	any		
fastening method	snap-on mounting		
height	94 mm		
width	22.5 mm		
depth	91 mm		
required spacing			
<ul><li>with side-by-side mounting</li></ul>			
— forwards	0 mm		
— backwards	0 mm		
— upwards	0 mm		
— downwards	0 mm		
— at the side	0 mm		
<ul> <li>for grounded parts</li> </ul>			
— forwards	0 mm		
— backwards	0 mm		
— upwards	0 mm		
— at the side	0 mm		
— downwards	0 mm		
for live parts			
— forwards	0 mm		
— backwards	0 mm		
— upwards	0 mm		
— downwards	0 mm		
— at the side	0 mm		
Ambient conditions			
installation altitude at height above sea level maximum	2 000 m		
ambient temperature			
during operation	-25 +60 °C		
<ul> <li>during storage</li> </ul>	-40 +85 °C		
during transport	-40 +85 °C		
Certificates/ approvals			
General Product Approval		EMC	Declaration of Conformity



Confirmation









**Declaration of Conformity** 

**Test Certificates** 

Marine / Shipping

other



Special Test Certificate

Type Test Certificates/Test Report





Confirmation

## Railway

Vibration and Shock

## Further information

Siemens has decided to exit the Russian market (see here).

https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

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

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3UG4511-2BQ20

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UG4511-2BQ20

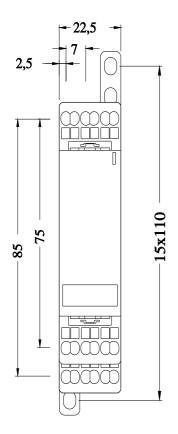
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

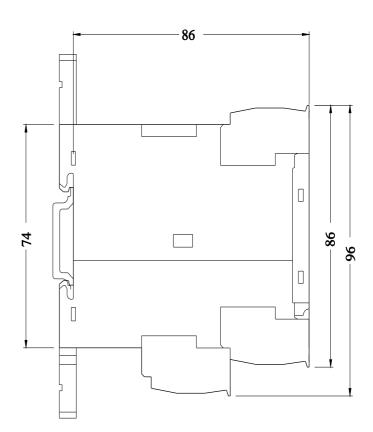
https://support.industry.siemens.com/cs/ww/en/ps/3UG4511-2BQ20

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

**Characteristic: Derating** 

https://support.industry.siemens.com/cs/ww/en/ps/3UG4511-2BQ20/manual





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