



Analog monitoring relay Phase sequence monitoring 3 x 320...500 V  
50...60 Hz AC 2 change-over contacts screw terminal Successor product  
for 3UG3511-1BQ50

product brand name	SIRIUS
product designation	Network monitoring relay with analog setting
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	
• for monitoring	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	
• undervoltage detection	No
• overvoltage detection	No
• phase sequence recognition	Yes
• phase failure detection	No
• asymmetry detection	No
• overvoltage detection 3 phase	No
• undervoltage detection 3 phases	No
• voltage window recognition 3 phase	No
• adjustable open/closed-circuit current principle	No
• auto-RESET	Yes

### Control circuit/ Control

control supply voltage at AC	
• at 50 Hz rated value	320 ... 500 V
• at 60 Hz rated value	320 ... 500 V
operating range factor control supply voltage rated	

<b>value at AC at 50 Hz</b>	
• initial value	1
• full-scale value	1
<b>operating range factor control supply voltage rated value at AC at 60 Hz</b>	
• initial value	1
• full-scale value	1
<b>Measuring circuit</b>	
<b>measurable voltage at AC</b>	320 ... 500 V
<b>Auxiliary circuit</b>	
number of NC contacts delayed switching	0
number of NO contacts delayed switching	0
number of CO contacts delayed switching	2
<b>operating frequency with 3RT2 contactor maximum</b>	5 000 1/h
<b>Main circuit</b>	
<b>number of poles for main current circuit</b>	3
<b>ampacity of the output relay at AC-15</b>	
• at 250 V at 50/60 Hz	3 A
• at 400 V at 50/60 Hz	3 A
<b>ampacity of the output relay at DC-13</b>	
• at 24 V	1 A
• at 125 V	0.2 A
• at 250 V	0.1 A
<b>operational current at 17 V minimum</b>	5 mA
<b>continuous current of the DIAZED fuse link of the output relay</b>	4 A
<b>Electromagnetic compatibility</b>	
<b>conducted interference</b>	
• due to burst according to IEC 61000-4-4	2 kV
• due to conductor-earth surge according to IEC 61000-4-5	2 kV
• due to conductor-conductor surge according to IEC 61000-4-5	1 kV
<b>field-based interference according to IEC 61000-4-3</b>	10 V/m
<b>electrostatic discharge according to IEC 61000-4-2</b>	6 kV contact discharge / 8 kV air discharge
<b>Galvanic isolation</b>	
<b>galvanic isolation</b>	
• between input and output	Yes
• between the outputs	Yes
• between the voltage supply and other circuits	Yes
<b>Connections/ Terminals</b>	
<b>product component removable terminal for auxiliary and control circuit</b>	Yes
<b>type of electrical connection</b>	screw-type terminals
<b>type of connectable conductor cross-sections</b>	
• solid	1x (0.5 ... 4 mm <sup>2</sup> ), 2x (0.5 ... 2.5 mm <sup>2</sup> )
• finely stranded with core end processing	1x (0.5 ... 2.5 mm <sup>2</sup> ), 2x (0.5 ... 1.5 mm <sup>2</sup> )
• at AWG cables solid	2x (20 ... 14)
• at AWG cables stranded	2x (20 ... 14)
<b>connectable conductor cross-section</b>	
• solid	0.5 ... 4 mm <sup>2</sup>
• finely stranded with core end processing	0.5 ... 2.5 mm <sup>2</sup>
<b>AWG number as coded connectable conductor cross section</b>	
• solid	20 ... 14
• stranded	20 ... 14
<b>tightening torque with screw-type terminals</b>	0.8 ... 1.2 N·m
<b>Installation/ mounting/ dimensions</b>	
<b>mounting position</b>	any
<b>fastening method</b>	snap-on mounting
<b>height</b>	92 mm
<b>width</b>	22.5 mm
<b>depth</b>	91 mm

#### required spacing

- with side-by-side mounting
  - forwards
  - backwards
  - upwards
  - downwards
  - at the side
- for grounded parts
  - forwards
  - backwards
  - upwards
  - at the side
  - downwards
- for live parts
  - forwards
  - backwards
  - upwards
  - downwards
  - at the side

0 mm  
0 mm  
0 mm  
0 mm  
0 mm  
  
0 mm  
0 mm  
0 mm  
0 mm  
0 mm  
  
0 mm  
0 mm  
0 mm  
0 mm  
0 mm

#### Ambient conditions

installation altitude at height above sea level maximum

2 000 m

#### ambient temperature

- during operation
- during storage
- during transport

-25 ... +60 °C  
-40 ... +85 °C  
-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

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=3UG4511-1BP20>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UG4511-1BP20>

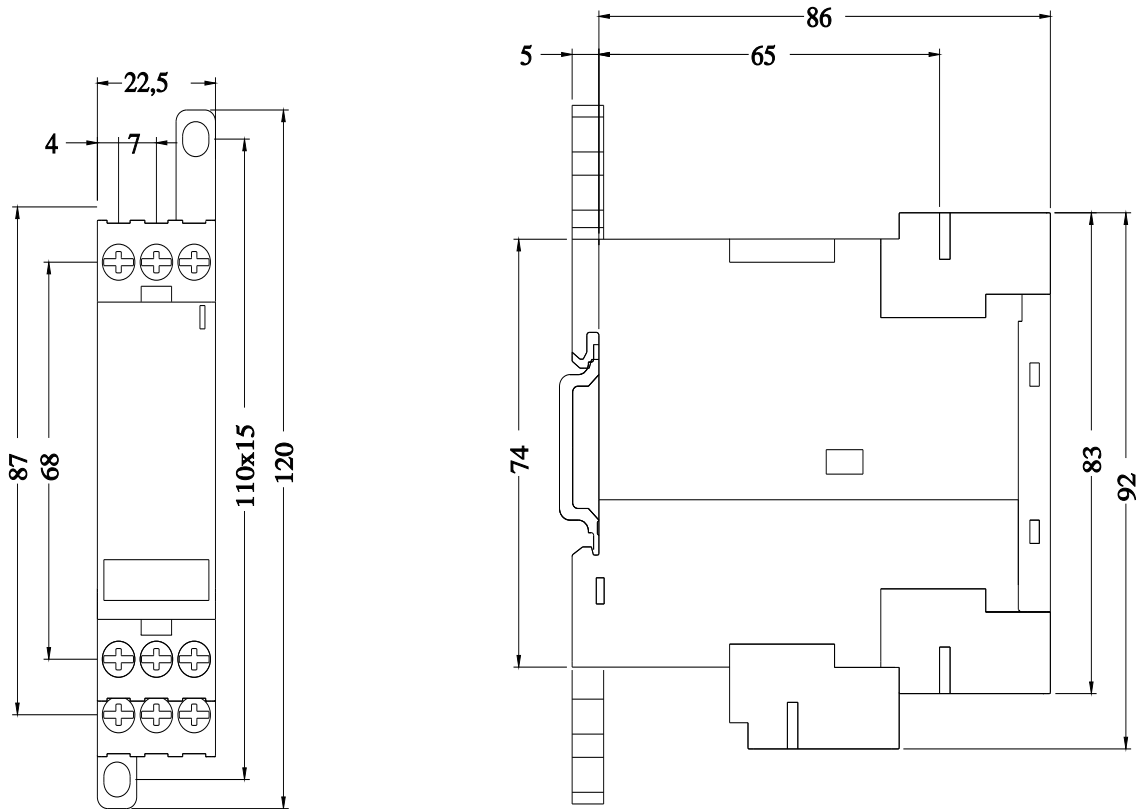
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3UG4511-1BP20>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3UG4511-1BP20&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3UG4511-1BP20&lang=en)

Characteristic: Derating



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12/21/2020 