



Figure similar

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

<b>product brand name</b>	SIRIUS	
<b>product designation</b>	Network monitoring relay with analog setting	
<b>design of the product</b>	1 function	
<b>product type designation</b>	3UG4	
<b>General technical data</b>		
<b>product function</b>	Phase monitoring relay	
<b>display version LED</b>	Yes	
<b>insulation voltage for overvoltage category III according to IEC 60664</b>	690 V	
• with degree of pollution 3 rated value		
<b>degree of pollution</b>	3	
<b>type of voltage</b>	AC	
• for monitoring		
• of the control supply voltage	AC	
<b>surge voltage resistance rated value</b>	6 kV	
<b>protection class IP</b>	IP20	
<b>shock resistance according to IEC 60068-2-27</b>	sinusoidal half-wave 15g / 11 ms	
<b>vibration resistance according to IEC 60068-2-6</b>	1 ... 6 Hz: 15 mm, 6 ... 500 Hz: 2g	
<b>mechanical service life (switching cycles) typical</b>	10 000 000	
<b>electrical endurance (switching cycles) at AC-15 at 230 V typical</b>	100 000	
<b>thermal current of the switching element with contacts maximum</b>	5 A	
<b>reference code according to IEC 81346-2</b>	K	
<b>Substance Prohibitance (Date)</b>	05/01/2012	
<b>Product Function</b>		
<b>product function</b>	<ul style="list-style-type: none"> <li>No</li> <li>No</li> <li>Yes</li> <li>Yes; available but limited, detection is problematic with high levels of regenerative power recovery</li> <li>No</li> <li>No</li> <li>No</li> <li>No</li> <li>No</li> <li>No</li> <li>No</li> <li>Yes</li> </ul>	
• undervoltage detection		
• overvoltage detection		
• phase sequence recognition		
• phase failure detection		
• asymmetry detection		
• overvoltage detection 3 phase		
• undervoltage detection 3 phases		
• voltage window recognition 3 phase		
• adjustable open/closed-circuit current principle		
• auto-RESET		
<b>Control circuit/ Control</b>		

<b>control supply voltage at AC</b>	
<ul style="list-style-type: none"> <li>at 50 Hz rated value</li> <li>at 60 Hz rated value</li> </ul>	320 ... 500 V 320 ... 500 V
<b>operating range factor control supply voltage rated value at AC at 50 Hz</b>	
<ul style="list-style-type: none"> <li>initial value</li> <li>full-scale value</li> </ul>	1 1
<b>operating range factor control supply voltage rated value at AC at 60 Hz</b>	
<ul style="list-style-type: none"> <li>initial value</li> <li>full-scale value</li> </ul>	1 1
<b>Measuring circuit</b>	
<b>measurable voltage at AC</b>	500 ... 320 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	1
<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>	
<ul style="list-style-type: none"> <li>at 250 V at 50/60 Hz</li> <li>at 400 V at 50/60 Hz</li> </ul>	3 A 3 A
<b>ampacity of the output relay at DC-13</b>	
<ul style="list-style-type: none"> <li>at 24 V</li> <li>at 125 V</li> <li>at 250 V</li> </ul>	1 A 0.2 A 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>	
<ul style="list-style-type: none"> <li>due to burst according to IEC 61000-4-4</li> <li>due to conductor-earth surge according to IEC 61000-4-5</li> <li>due to conductor-conductor surge according to IEC 61000-4-5</li> </ul>	2 kV 2 kV 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>	
<ul style="list-style-type: none"> <li>between input and output</li> <li>between the outputs</li> <li>between the voltage supply and other circuits</li> </ul>	Yes Yes 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>	
<ul style="list-style-type: none"> <li>solid</li> <li>finely stranded with core end processing</li> <li>at AWG cables solid</li> <li>at AWG cables stranded</li> </ul>	1x (0.5 ... 4 mm <sup>2</sup> ), 2x (0.5 ... 2.5 mm <sup>2</sup> ) 1x (0.5 ... 2.5 mm <sup>2</sup> ), 2x (0.5 ... 1.5 mm <sup>2</sup> ) 2x (20 ... 14) 2x (20 ... 14)
<b>connectable conductor cross-section</b>	
<ul style="list-style-type: none"> <li>solid</li> <li>finely stranded with core end processing</li> </ul>	0.5 ... 4 mm <sup>2</sup> 0.5 ... 2.5 mm <sup>2</sup>
<b>AWG number as coded connectable conductor cross section</b>	
<ul style="list-style-type: none"> <li>solid</li> <li>stranded</li> </ul>	20 ... 14 20 ... 14
tightening torque with screw-type terminals	0.8 ... 1.2 N·m

Installation/ mounting/ dimensions	
mounting position	any
fastening method	snap-on mounting
height	83 mm
width	22.5 mm
depth	91 mm
required spacing	
<ul style="list-style-type: none"> <li>• with side-by-side mounting <ul style="list-style-type: none"> <li>— forwards 0 mm</li> <li>— backwards 0 mm</li> <li>— upwards 0 mm</li> <li>— downwards 0 mm</li> <li>— at the side 0 mm</li> </ul> </li> <li>• for grounded parts <ul style="list-style-type: none"> <li>— forwards 0 mm</li> <li>— backwards 0 mm</li> <li>— upwards 0 mm</li> <li>— at the side 0 mm</li> <li>— downwards 0 mm</li> </ul> </li> <li>• for live parts <ul style="list-style-type: none"> <li>— forwards 0 mm</li> <li>— backwards 0 mm</li> <li>— upwards 0 mm</li> <li>— downwards 0 mm</li> <li>— at the side 0 mm</li> </ul> </li> </ul>	

Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
<ul style="list-style-type: none"> <li>• during operation -25 ... +60 °C</li> <li>• during storage -40 ... +85 °C</li> <li>• during transport -40 ... +85 °C</li> </ul>	

Certificates/ approvals		
General Product Approval	EMC	Declaration of Conformity



[Confirmation](#)



Declaration of Conformity	Test Certificates	Marine / Shipping	other
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[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



[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=3UG4511-1AP20>

Cax online generator

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

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

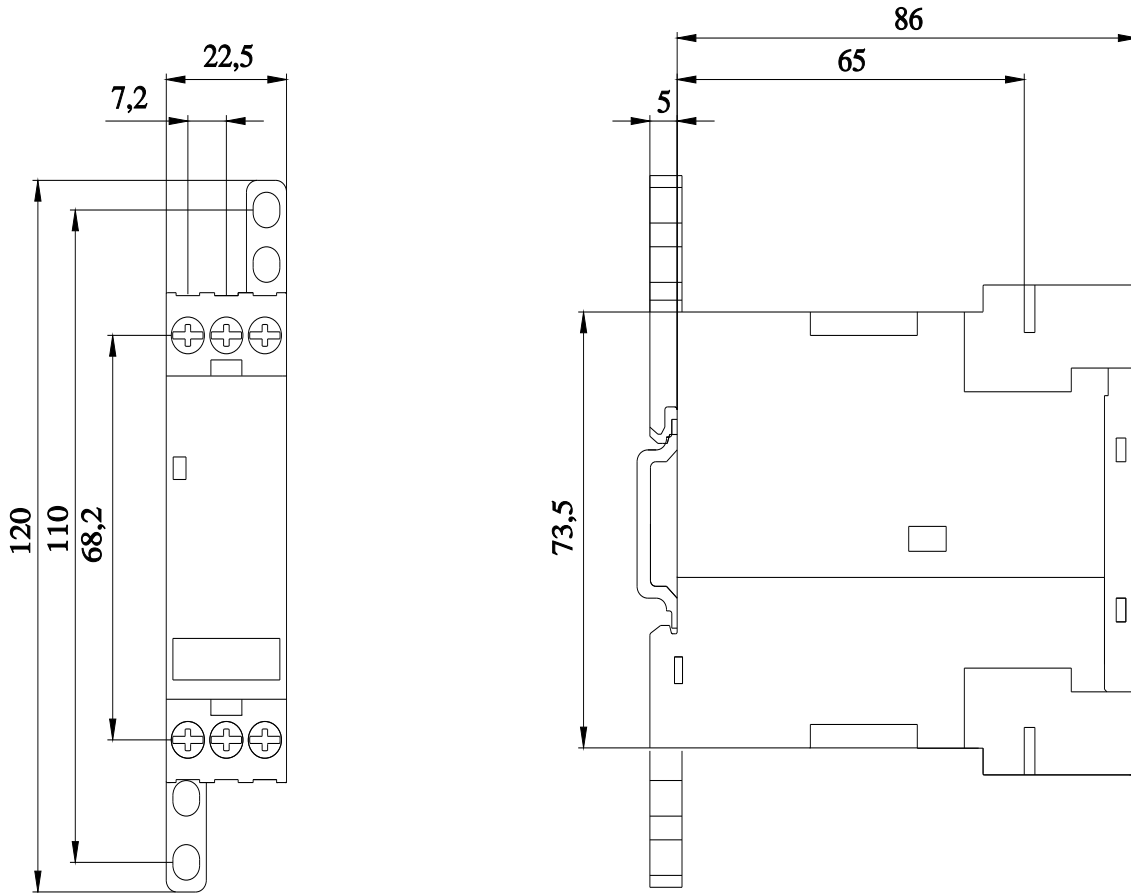
<https://support.industry.siemens.com/cs/ww/en/ps/3UG4511-1AP20>

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](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3UG4511-1AP20&lang=en)

Characteristic: Derating

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



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