



!!! product phase-out !!! The preferred successor type is 3UG5511-2AR20 phase sequence monitoring 3x320-500 V 1 CO analog monitoring relay phase sequence monitoring 3 x 320...500 V 50...60 Hz AC 1 changeover contact spring-loaded connection system

product brand name	SIRIUS
product designation	Line monitoring relay
design of the product	1 function
product type designation	3UG4
<b>General technical data</b>	
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
SVHC substance name	Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol - 79-94-7
<b>Product Function</b>	
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
<b>Control circuit/ Control</b>	
control supply voltage at AC	

<ul style="list-style-type: none"> <li>• at 50 Hz rated value</li> </ul>	320 ... 500 V
<ul style="list-style-type: none"> <li>• at 60 Hz rated value</li> </ul>	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> </ul>	1
<ul style="list-style-type: none"> <li>• full-scale value</li> </ul>	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> </ul>	1
<ul style="list-style-type: none"> <li>• full-scale value</li> </ul>	1
<b>Measuring circuit</b>	
<b>measurable voltage at AC</b>	320 ... 500 V
<b>response time maximum</b>	450 ms
<b>Auxiliary circuit</b>	
number of NC contacts delayed switching	0
number of NO contacts delayed switching	0
<b>number of CO contacts</b>	
<ul style="list-style-type: none"> <li>• for auxiliary contacts</li> </ul>	1
<ul style="list-style-type: none"> <li>• delayed switching</li> </ul>	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> </ul>	3 A
<ul style="list-style-type: none"> <li>• at 400 V at 50/60 Hz</li> </ul>	3 A
<b>ampacity of the output relay at DC-13</b>	
<ul style="list-style-type: none"> <li>• at 24 V</li> </ul>	1 A
<ul style="list-style-type: none"> <li>• at 125 V</li> </ul>	0.2 A
<ul style="list-style-type: none"> <li>• at 250 V</li> </ul>	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> </ul>	2 kV
<ul style="list-style-type: none"> <li>• due to conductor-earth surge according to IEC 61000-4-5</li> </ul>	2 kV
<ul style="list-style-type: none"> <li>• due to conductor-conductor surge according to IEC 61000-4-5</li> </ul>	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> </ul>	Yes
<ul style="list-style-type: none"> <li>• between the outputs</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• between the voltage supply and other circuits</li> </ul>	Yes
<b>Connections/ Terminals</b>	
<b>product component removable terminal for auxiliary and control circuit</b>	Yes
<b>type of electrical connection</b>	spring-loaded terminals
<b>type of connectable conductor cross-sections</b>	
<ul style="list-style-type: none"> <li>• solid</li> </ul>	2x (0.25 ... 1.5 mm <sup>2</sup> )
<ul style="list-style-type: none"> <li>• finely stranded with core end processing</li> </ul>	2 x (0.25 ... 1.5 mm <sup>2</sup> )
<ul style="list-style-type: none"> <li>• finely stranded without core end processing</li> </ul>	2x (0.25 ... 1.5 mm <sup>2</sup> )
<ul style="list-style-type: none"> <li>• for AWG cables solid</li> </ul>	2x (24 ... 16)
<ul style="list-style-type: none"> <li>• for AWG cables stranded</li> </ul>	2x (24 ... 16)
<b>connectable conductor cross-section</b>	
<ul style="list-style-type: none"> <li>• solid</li> </ul>	0.25 ... 1.5 mm <sup>2</sup>
<ul style="list-style-type: none"> <li>• finely stranded with core end processing</li> </ul>	0.25 ... 1.5 mm <sup>2</sup>
<ul style="list-style-type: none"> <li>• finely stranded without core end processing</li> </ul>	0.25 ... 1.5 mm <sup>2</sup>
<b>AWG number as coded connectable conductor cross section</b>	
<ul style="list-style-type: none"> <li>• solid</li> </ul>	24 ... 16

- stranded

24 ... 16

### Installation/ mounting/ dimensions

<b>mounting position</b>	any
<b>fastening method</b>	snap-on mounting
<b>height</b>	84 mm
<b>width</b>	22.5 mm
<b>depth</b>	91 mm
<b>required spacing</b>	
<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
<b>ambient temperature</b>	
<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>	

### Approvals Certificates

#### General Product Approval



[Confirmation](#)



#### EMV



[KC](#)

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[Type Test Certificates/Test Report](#)



#### Test Certificates

#### Marine / Shipping

#### other

#### Railway

#### Environment

[Confirmation](#)

[Special Test Certificate](#)

[Environmental Confirmations](#)

### Further information

#### 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=3UG4511-2AP20>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UG4511-2AP20>

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

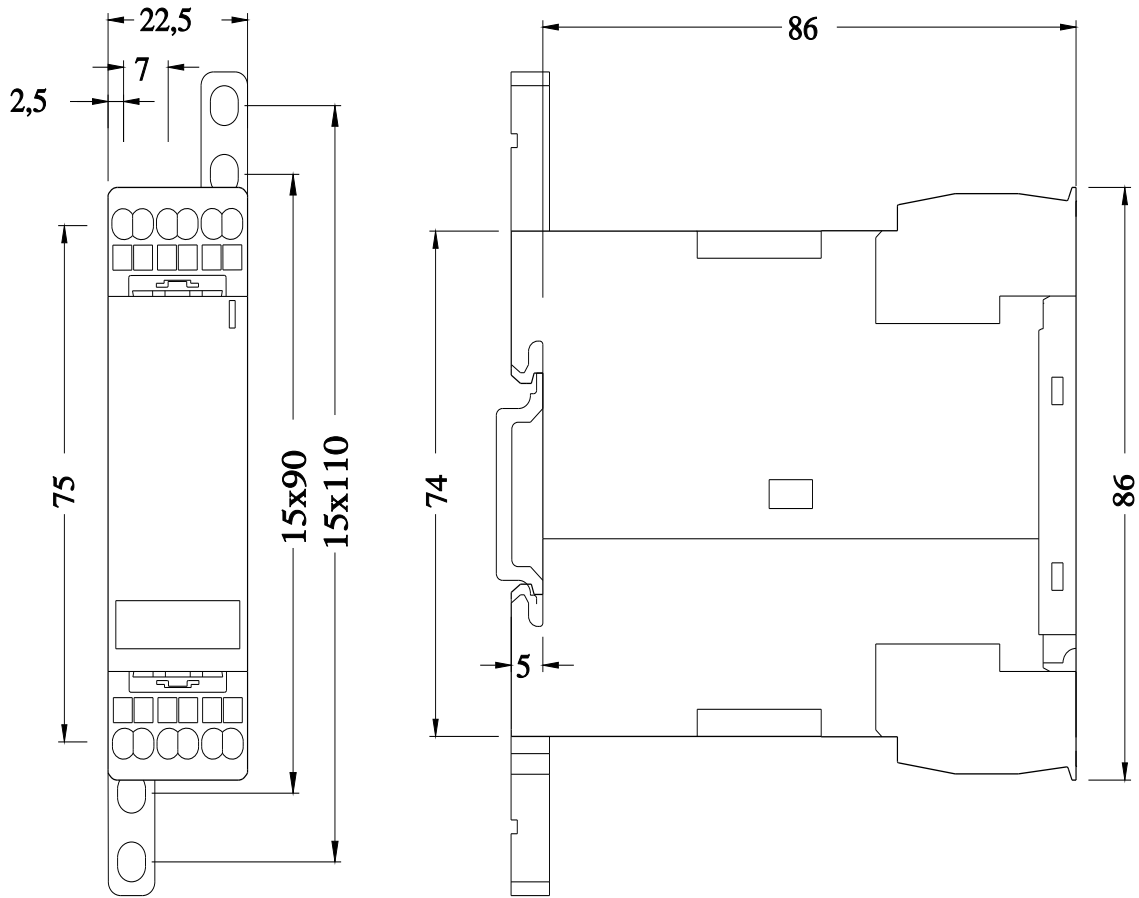
<https://support.industry.siemens.com/cs/ww/en/ps/3UG4511-2AP20>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3UG4511-2AP20&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3UG4511-2AP20&lang=en)

Characteristic: Derating

<https://support.industry.siemens.com/cs/ww/en/ps/3UG4511-2AP20/manual>



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