



Figure similar

Digital monitoring relay 3-phase supply voltage Phase sequence can be activated Phase failure 3 x 160 to 690 V 50 to 60 Hz AC Undervoltage and overvoltage 160-690 V Hysteresis 1-20 V 0-20 s each for Umin and Umax 1 CO for Umin 1 CO for Umax screw terminal Successor product for 3UG3041-1BP50

<b>product brand name</b>	SIRIUS	
<b>product designation</b>	Network monitoring relay with digital setting	
<b>design of the product</b>	5 functions	
<b>product type designation</b>	3UG4	
<b>General technical data</b>		
<b>product function</b>	Phase monitoring relay	
<b>display version LED</b>	No	
<b>design of the display</b>	LCD	
insulation voltage for overvoltage category III according to IEC 60664	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	
shock resistance acc. to IEC 60068-2-27	sinusoidal half-wave 15g / 11 ms	
vibration resistance acc. 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 (switching cycles) at AC-15 at 230 V typical	100 000	
<b>thermal current of the switching element with contacts maximum</b>	5 A	
<b>reference code acc. to IEC 81346-2</b>	K	
<b>relative repeat accuracy</b>	1 %	
Substance Prohibitance (Date)	01.05.2012 00:00:00	
<b>Product Function</b>		
<b>product function</b>	Yes	
• undervoltage detection		
• overvoltage detection		
• phase sequence recognition		
• phase failure detection		
• asymmetry detection		Yes; not adjustable, indirectly by monitoring the voltage limit values
• overvoltage detection 3 phase		
• undervoltage detection 3 phases		
• voltage window recognition 3 phase		

<ul style="list-style-type: none"> <li>adjustable open/closed-circuit current principle</li> <li>auto-RESET</li> </ul>	<p>Yes</p> <p>Yes</p>
<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>	<p>160 ... 690 V</p> <p>160 ... 690 V</p>
<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>	<p>1</p> <p>1</p>
<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>	<p>1</p> <p>1</p>
<b>Measuring circuit</b>	
<b>adjustable response delay time</b>	
<ul style="list-style-type: none"> <li>with lower or upper limit violation</li> </ul>	0.1 ... 20 s
<b>accuracy of digital display</b>	+/-1 digit
<b>Precision</b>	
<b>relative metering precision</b>	5 %
<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>Outputs</b>	
<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>	<p>3 A</p> <p>3 A</p>
<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>	<p>1 A</p> <p>0.2 A</p> <p>0.1 A</p>
<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 acc. to IEC 61000-4-4</li> <li>due to conductor-earth surge acc. to IEC 61000-4-5</li> <li>due to conductor-conductor surge acc. to IEC 61000-4-5</li> </ul>	<p>2 kV</p> <p>2 kV</p> <p>1 kV</p>
<b>field-based interference acc. to IEC 61000-4-3</b>	10 V/m
<b>electrostatic discharge acc. 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>	<p>Yes</p> <p>Yes</p> <p>Yes</p>
<b>Connections/ Terminals</b>	
product function removable terminal for auxiliary and control circuit	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> </ul>	<p>1x (0.5 ... 4 mm<sup>2</sup>), 2x (0.5 ... 2.5 mm<sup>2</sup>)</p> <p>1x (0.5 ... 2.5 mm<sup>2</sup>), 2x (0.5 ... 1.5 mm<sup>2</sup>)</p>

<ul style="list-style-type: none"> <li>• at AWG cables solid</li> <li>• at AWG cables stranded</li> </ul>	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

<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
<b>required spacing</b>	
<ul style="list-style-type: none"> <li>• with side-by-side mounting <ul style="list-style-type: none"> <li>— forwards</li> <li>— backwards</li> <li>— upwards</li> <li>— downwards</li> <li>— at the side</li> </ul> </li> <li>• for grounded parts <ul style="list-style-type: none"> <li>— forwards</li> <li>— backwards</li> <li>— upwards</li> <li>— at the side</li> <li>— downwards</li> </ul> </li> <li>• for live parts <ul style="list-style-type: none"> <li>— forwards</li> <li>— backwards</li> <li>— upwards</li> <li>— downwards</li> <li>— at the side</li> </ul> </li> </ul>	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
<b>ambient temperature</b>	
<ul style="list-style-type: none"> <li>• during operation</li> <li>• during storage</li> <li>• during transport</li> </ul>	-25 ... +60 °C -40 ... +85 °C -40 ... +85 °C

### Certificates/ approvals

General Product Approval	EMC	Declaration of Conformity	Test Certificates
			
CCC	UL	RCM	EG-Konf.

[Miscellaneous](#)

[Type Test Certificates/Test Report](#)

Test Certificates	Marine / Shipping	other	Railway
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[Special Test Certificate](#)



[Confirmation](#)

[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=3UG4615-1CR20>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UG4615-1CR20>

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

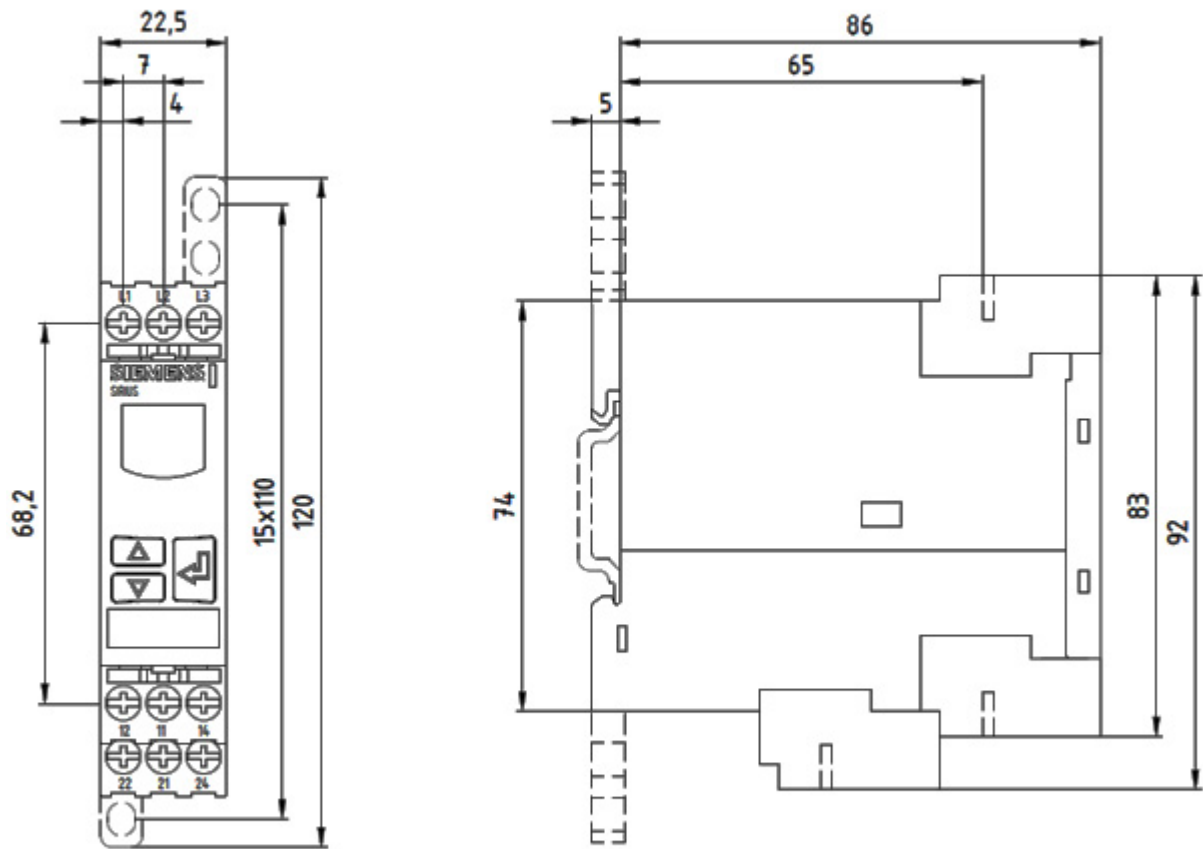
<https://support.industry.siemens.com/cs/ww/en/ps/3UG4615-1CR20>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3UG4615-1CR20&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3UG4615-1CR20&lang=en)

Characteristic: Derating

<https://support.industry.siemens.com/cs/ww/en/ps/3UG4615-1CR20/manual>



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