



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 spring-type connection system

product brand name	SIRIUS
product designation	Network monitoring relay with digital setting
design of the product	5 functions
product type designation	3UG4
<b>General technical data</b>	
product function	Phase monitoring relay
display version LED	No
design of the display	LCD
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 (switching cycles) typical	10 000 000
electrical endurance (switching 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
relative repeat accuracy	1 %
Substance Prohibitance (Date)	05/01/2012
<b>Product Function</b>	
product function	
• undervoltage detection	Yes
• overvoltage detection	Yes
• phase sequence recognition	Yes
• phase failure detection	Yes
• asymmetry detection	Yes
• overvoltage detection 3 phase	Yes
• undervoltage detection 3 phases	Yes
• voltage window recognition 3 phase	Yes
• adjustable open/closed-circuit current principle	Yes
• auto-RESET	Yes
<b>Control circuit/ Control</b>	

<b>control supply voltage at AC</b>	
• at 50 Hz rated value	160 ... 690 V
• at 60 Hz rated value	160 ... 690 V
<b>operating range factor control supply voltage rated 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>	690 ... 160 V
<b>adjustable response delay time</b>	
• with lower or upper limit violation	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>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>	spring-loaded terminals
<b>type of connectable conductor cross-sections</b>	
• solid	2x (0.25 ... 1.5 mm <sup>2</sup> )
• finely stranded with core end processing	2 x (0.25 ... 1.5 mm <sup>2</sup> )
• finely stranded without core end processing	2x (0.25 ... 1.5 mm <sup>2</sup> )
• at AWG cables solid	2x (24 ... 16)
• at AWG cables stranded	2x (24 ... 16)
<b>connectable conductor cross-section</b>	
• solid	0.25 ... 1.5 mm <sup>2</sup>

• finely stranded with core end processing	0.25 ... 1.5 mm <sup>2</sup>								
• finely stranded without core end processing	0.25 ... 1.5 mm <sup>2</sup>								
<b>AWG number as coded connectable conductor cross section</b>									
• solid	24 ... 16								
• stranded	24 ... 16								
<b>Installation/ mounting/ dimensions</b>									
<b>mounting position</b>	any								
<b>fastening method</b>	snap-on mounting								
<b>height</b>	94 mm								
<b>width</b>	22.5 mm								
<b>depth</b>	91 mm								
<b>required spacing</b>									
• with side-by-side mounting									
— forwards	0 mm								
— backwards	0 mm								
— upwards	0 mm								
— downwards	0 mm								
— at the side	0 mm								
• for grounded parts									
— 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								
<b>Ambient conditions</b>									
installation altitude at height above sea level maximum	2 000 m								
<b>ambient temperature</b>									
• during operation	-25 ... +60 °C								
• during storage	-40 ... +85 °C								
• during transport	-40 ... +85 °C								
<b>Certificates/ approvals</b>									
<b>General Product Approval</b>	<b>EMC</b>	<b>Declaration of Conformity</b>							
	<a href="#">Confirmation</a>								
<b>Test Certificates</b>	<b>Marine / Shipping</b>	<b>other</b>	<b>Railway</b>						
<a href="#">Type Test Certificate/Test Report</a>	<a href="#">Special Test Certificate</a>			<a href="#">Confirmation</a>	<a href="#">Vibration and Shock</a>				
<b>Further information</b>									
Information- and Downloadcenter (Catalogs, Brochures,...) <a href="https://www.siemens.com/ic10">https://www.siemens.com/ic10</a>									
Industry Mall (Online ordering system) <a href="https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3UG4615-2CR20">https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3UG4615-2CR20</a>									
Cax online generator									

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mfb=3UG4615-2CR20>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3UG4615-2CR20>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mfb=3UG4615-2CR20&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mfb=3UG4615-2CR20&lang=en)

Characteristic: Derating

<https://support.industry.siemens.com/cs/ww/en/ps/3UG4615-2CR20/manual>

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12/21/2020 