



Digital monitoring relay for residual current monitoring (with current transformer 3UL23) Setting range 0.03...40 A separate for warning threshold and switch-off value supply voltage 24 ... 240 V AC/DC, 50 .. 60Hz ON delay and tripping delay 0.1 to 20 s Shutdown hysteresis up to 50% Warning hysteresis 5% fixed Width 22.5 mm, 2 change-over contacts with or without fault buffer spring-type connection system

Product brand name	SIRIUS
Product designation	Residual current monitoring relay with digital setting
Product type designation	3UG4

General technical data	
Product function	for three-phase supplies
Design of the display	LCD
Insulation voltage	
<ul style="list-style-type: none"> <li>rated value</li> </ul>	300 V
<ul style="list-style-type: none"> <li>for overvoltage category III according to IEC 60664</li> </ul>	
<ul style="list-style-type: none"> <li>— with degree of pollution 3 rated value</li> </ul>	300 V
Degree of pollution	3
<ul style="list-style-type: none"> <li>Type of voltage of the control supply voltage</li> </ul>	AC/DC
Surge voltage resistance rated value	4 kV
Protection class IP	IP20
<ul style="list-style-type: none"> <li>of the enclosure</li> </ul>	IP20
<ul style="list-style-type: none"> <li>of the terminal</li> </ul>	IP20
Shock resistance	
<ul style="list-style-type: none"> <li>acc. to IEC 60068-2-27</li> </ul>	sinusoidal half-wave 15g / 11 ms

<b>Vibration resistance</b>	
<ul style="list-style-type: none"> <li>• acc. to IEC 60068-2-6</li> </ul>	1 ... 6 Hz: 15 mm, 6 ... 500 Hz: 2g
<b>Mechanical service life (switching cycles)</b>	
<ul style="list-style-type: none"> <li>• typical</li> </ul>	10 000 000
<b>Electrical endurance (switching cycles)</b>	
<ul style="list-style-type: none"> <li>• at AC-15 at 230 V typical</li> </ul>	100 000
<b>Thermal current of the switching element with contacts maximum</b>	5 A
<b>Reference code acc. to DIN EN 81346-2</b>	K
<b>Relative repeat accuracy</b>	1 %

### Product Function

<b>Product function</b>	
<ul style="list-style-type: none"> <li>• difference current indication</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Fault storage</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Overcurrent detection 1 phase</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• undercurrent detection 1 phase</li> </ul>	No
<ul style="list-style-type: none"> <li>• Adjustable open/closed-circuit current principle</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• External reset</li> </ul>	Yes

### Control circuit/ Control

<b>Control supply voltage at AC</b>	
<ul style="list-style-type: none"> <li>• at 50 Hz rated value</li> </ul>	24 ... 240 V
<ul style="list-style-type: none"> <li>• at 60 Hz rated value</li> </ul>	24 ... 240 V
<b>Control supply voltage at DC</b>	
<ul style="list-style-type: none"> <li>• rated value</li> </ul>	24 ... 240 V
<b>Operating range factor control supply voltage rated value at DC</b>	
<ul style="list-style-type: none"> <li>• initial value</li> </ul>	0.85
<ul style="list-style-type: none"> <li>• Full-scale value</li> </ul>	1.1
<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>	0.85
<ul style="list-style-type: none"> <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> </ul>	0.85
<ul style="list-style-type: none"> <li>• Full-scale value</li> </ul>	1.1

### Measuring circuit

<b>Type of current for monitoring</b>	AC
<b>Measurable current</b>	10 mA ... 43 A
<b>Measurable line frequency</b>	16 ... 400 Hz
<b>Adjustable operating delay time</b>	0.1 ... 20 s
<b>Adjustable pick-up value current</b>	

• 1	30 mA ... 40 A
• 2	30 mA ... 40 A
<b>Adjustable response delay time</b>	0 ... 20 s
<b>Adjustable response delay time</b>	
• when starting	0.1 ... 20 s
<b>Buffering time in the event of power failure minimum</b>	10 ms
<b>Accuracy of digital display</b>	+/-1 digit

<b>Precision</b>	
<b>Relative metering precision</b>	5 %
<b>Temperature drift per °C</b>	0.1 %/°C

<b>Auxiliary circuit</b>	
<b>Number of NC contacts for auxiliary contacts</b>	0
<b>Number of NC contacts</b>	
• delayed switching	0
<b>Number of NO contacts for auxiliary contacts</b>	0
<b>Number of NO contacts</b>	
• delayed switching	0
<b>Number of CO contacts</b>	
• for auxiliary contacts	2
• delayed switching	2
<b>Operating frequency with 3RT2 contactor maximum</b>	5 000 1/h

<b>Main circuit</b>	
<b>Type of voltage</b>	AC/DC
<b>Operating voltage</b>	
• rated value	24 ... 240 V
<b>Operating frequency rated value</b>	16 ... 400 Hz

<b>Outputs</b>	
<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	0 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>Operating 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 acc. to IEC 61000-4-4	2 kV

<ul style="list-style-type: none"> <li>• due to conductor-earth surge acc. to IEC 61000-4-5</li> </ul>	2 kV
<ul style="list-style-type: none"> <li>• due to conductor-conductor surge acc. to IEC 61000-4-5</li> </ul>	1 kV
<b>Field-bound parasitic coupling acc. to IEC 61000-4-3</b>	10 V/m
<b>Electrostatic discharge acc. to IEC 61000-4-2</b>	4 kV contact discharge / 8 kV air discharge

Galvanic isolation	
<b>Design of the electrical isolation</b>	galvanic isolation
<b>Galvanic isolation</b>	
<ul style="list-style-type: none"> <li>• between entrance and outlet</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>	No

Connections/ Terminals	
<b>Product function</b>	
<ul style="list-style-type: none"> <li>• removable terminal for auxiliary and control circuit</li> </ul>	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>• at AWG conductors solid</li> </ul>	2x (24 ... 16)
<ul style="list-style-type: none"> <li>• at AWG conductors 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
<ul style="list-style-type: none"> <li>• stranded</li> </ul>	24 ... 16






Installation/ mounting/ dimensions	
<b>Mounting position</b>	any
<b>Mounting type</b>	screw and snap-on mounting onto 35 mm standard mounting rail
<b>Height</b>	103 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> </ul> </li> </ul>	0 mm 0 mm 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

### Ambient conditions

<b>Installation altitude at height above sea level</b>	
• maximum	2 000 m
<b>Ambient temperature</b>	
• during operation	-25 ... +60 °C
• during storage	-40 ... +85 °C
• during transport	-40 ... +85 °C

### Certificates/ approvals

General Product Approval	EMC	Declaration of Conformity	Test Certificates
 UL		 RCM	 EG-Konf.
			<a href="#">Miscellaneous</a> <a href="#">Special Test Certificate</a>
Test Certificates	Marine / Shipping	other	Railway
<a href="#">Type Test Certificates/Test Report</a>	 DNV-GL DNVGL.COM/AF	<a href="#">Confirmation</a>	<a href="#">Vibration and Shock</a>

### 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=3UG4625-2CW30>

**Cax online generator**

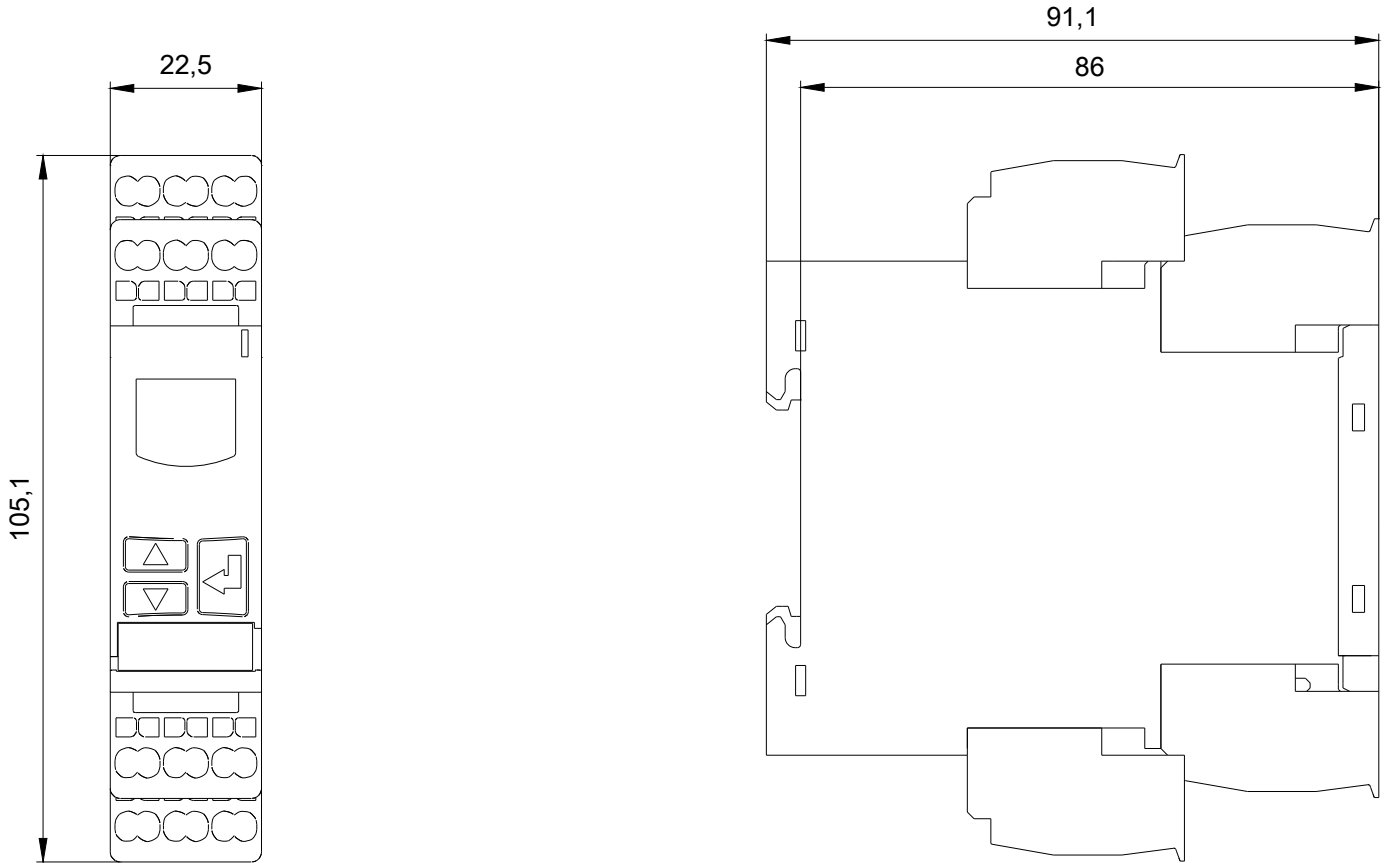
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mfb=3UG4625-2CW30>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3UG4625-2CW30>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mfb=3UG4625-2CW30&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mfb=3UG4625-2CW30&lang=en)



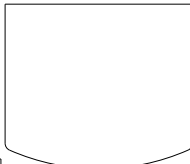
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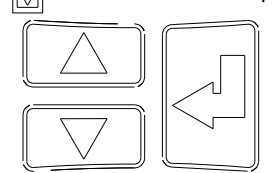
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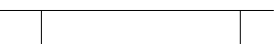
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\fArial Unicode MS|b0|i0|c0|p34;>2,5s \fWingdings 3|b0|i0|c2|p18;H1.0833x;g



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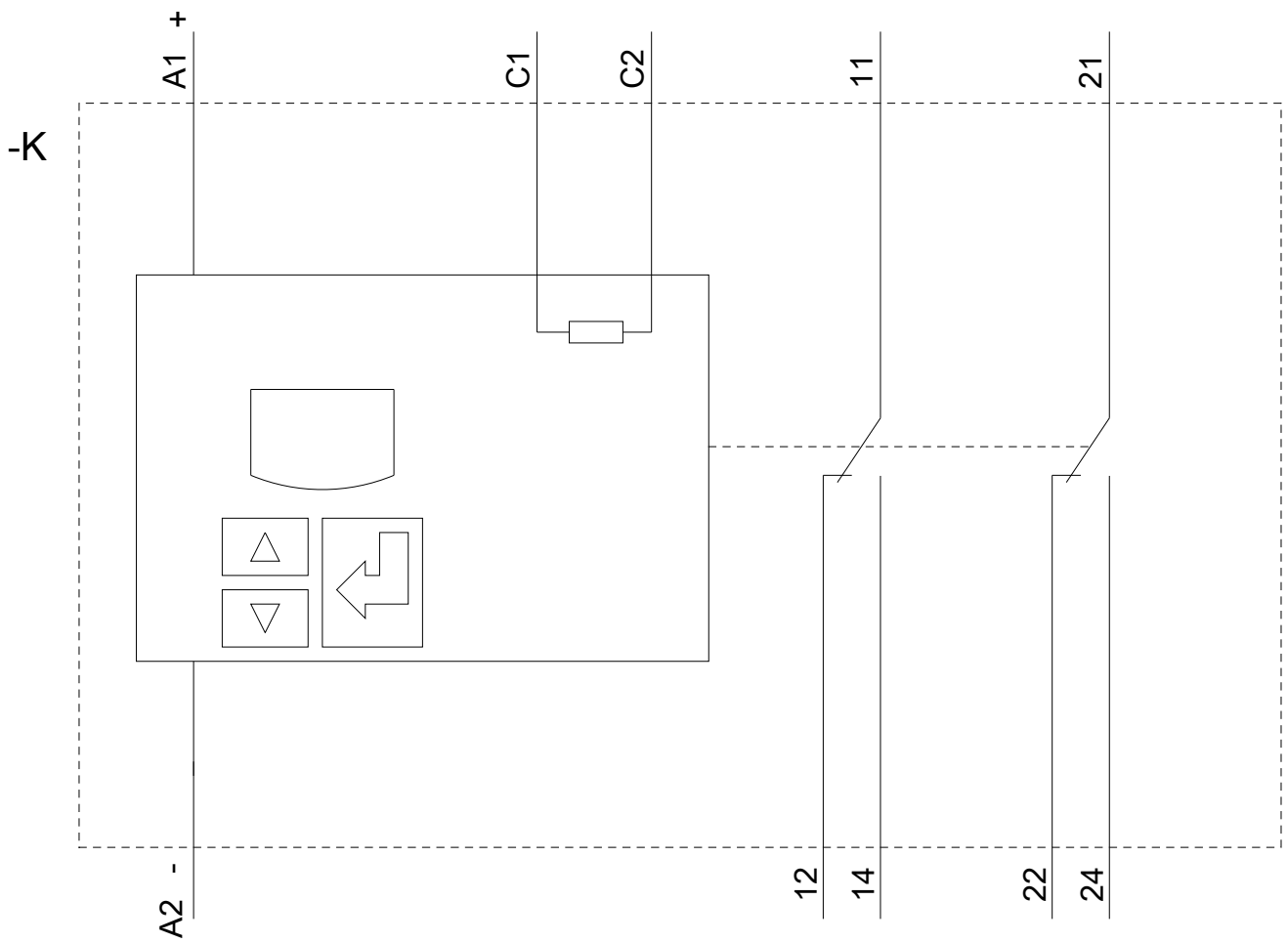


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