



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 screw terminal

product brand name  
product designation  
product type designation

SIRIUS  
Residual current monitoring relay with digital setting  
3UG4

### General technical data

product function	for three-phase supplies
design of the display	LCD
insulation voltage	
• rated value	300 V
• for overvoltage category III according to IEC 60664	
— with degree of pollution 3 rated value	300 V
degree of pollution	3
type of voltage of the control supply voltage	AC/DC
surge voltage resistance rated value	4 kV
protection class IP	IP20
• of the enclosure	IP20
• of the terminal	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
relative repeat accuracy	1 %
Substance Prohibitance (Date)	02/14/2013






### Product Function

product function	
• residual current display	Yes
• error memory	Yes
• overcurrent detection 1 phase	Yes
• undercurrent detection 1 phase	No
• adjustable open/closed-circuit current principle	Yes
• external reset	Yes

### Control circuit/ Control

control supply voltage at AC	
• at 50 Hz rated value	24 ... 240 V
• at 60 Hz rated value	24 ... 240 V
control supply voltage at DC	
• rated value	24 ... 240 V
operating range factor control supply voltage rated	

<b>value at DC</b>	
• initial value	0.85
• full-scale value	1.1
<b>operating range factor control supply voltage rated value at AC at 50 Hz</b>	
• initial value	0.85
• full-scale value	1.1
<b>operating range factor control supply voltage rated value at AC at 60 Hz</b>	
• initial value	0.85
• full-scale value	1.1
<b>Measuring circuit</b>	
<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 current response value current</b>	
• 1	30 mA ... 40 A
• 2	30 mA ... 40 A
<b>adjustable response delay time</b>	0 ... 20 s
adjustable response delay time 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
number of NC contacts delayed switching	0
<b>number of NO contacts for auxiliary contacts</b>	0
number of NO contacts 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
operating voltage rated value	24 ... 240 V
<b>operating frequency rated value</b>	16 ... 400 Hz
<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>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>	4 kV contact discharge / 8 kV air discharge
<b>Galvanic isolation</b>	
<b>design of the electrical isolation</b>	galvanic isolation
<b>galvanic isolation</b>	
• between input and output	Yes
• between the outputs	Yes

<ul style="list-style-type: none"><li>• between the voltage supply and other circuits</li></ul>	No				
Connections/ Terminals					
product component removable terminal for auxiliary and control circuit	Yes				
type of electrical connection	screw-type terminals				
type of connectable conductor cross-sections					
<ul style="list-style-type: none"><li>• solid</li></ul>	1x (0.5 ... 4.0 mm <sup>2</sup> ), 2x (0.5 ... 2.5 mm <sup>2</sup> )				
<ul style="list-style-type: none"><li>• finely stranded with core end processing</li></ul>	1x (0.5 ... 2.5 mm <sup>2</sup> ), 2x (0.5 ... 1.5 mm <sup>2</sup> )				
<ul style="list-style-type: none"><li>• at AWG cables solid</li></ul>	2x (20 ... 14)				
<ul style="list-style-type: none"><li>• at AWG cables stranded</li></ul>	2x (20 ... 14)				
connectable conductor cross-section					
<ul style="list-style-type: none"><li>• solid</li></ul>	0.5 ... 4 mm <sup>2</sup>				
<ul style="list-style-type: none"><li>• finely stranded with core end processing</li></ul>	0.5 ... 2.5 mm <sup>2</sup>				
AWG number as coded connectable conductor cross section					
<ul style="list-style-type: none"><li>• solid</li></ul>	20 ... 14				
<ul style="list-style-type: none"><li>• stranded</li></ul>	20 ... 14				
tightening torque with screw-type terminals	0.8 ... 1.2 N·m				
Installation/ mounting/ dimensions					
mounting position	any				
fastening method	screw and snap-on mounting onto 35 mm DIN rail				
height	102 mm				
width	22.5 mm				
depth	91 mm				
required spacing					
<ul style="list-style-type: none"><li>• with side-by-side mounting</li></ul>					
<ul style="list-style-type: none"><li><ul style="list-style-type: none"><li>— forwards</li></ul></li></ul>	0 mm				
<ul style="list-style-type: none"><li><ul style="list-style-type: none"><li>— backwards</li></ul></li></ul>	0 mm				
<ul style="list-style-type: none"><li><ul style="list-style-type: none"><li>— upwards</li></ul></li></ul>	0 mm				
<ul style="list-style-type: none"><li><ul style="list-style-type: none"><li>— downwards</li></ul></li></ul>	0 mm				
<ul style="list-style-type: none"><li><ul style="list-style-type: none"><li>— at the side</li></ul></li></ul>	0 mm				
<ul style="list-style-type: none"><li>• for grounded parts</li></ul>					
<ul style="list-style-type: none"><li><ul style="list-style-type: none"><li>— forwards</li></ul></li></ul>	0 mm				
<ul style="list-style-type: none"><li><ul style="list-style-type: none"><li>— backwards</li></ul></li></ul>	0 mm				
<ul style="list-style-type: none"><li><ul style="list-style-type: none"><li>— upwards</li></ul></li></ul>	0 mm				
<ul style="list-style-type: none"><li><ul style="list-style-type: none"><li>— at the side</li></ul></li></ul>	0 mm				
<ul style="list-style-type: none"><li><ul style="list-style-type: none"><li>— downwards</li></ul></li></ul>	0 mm				
<ul style="list-style-type: none"><li>• for live parts</li></ul>					
<ul style="list-style-type: none"><li><ul style="list-style-type: none"><li>— forwards</li></ul></li></ul>	0 mm				
<ul style="list-style-type: none"><li><ul style="list-style-type: none"><li>— backwards</li></ul></li></ul>	0 mm				
<ul style="list-style-type: none"><li><ul style="list-style-type: none"><li>— upwards</li></ul></li></ul>	0 mm				
<ul style="list-style-type: none"><li><ul style="list-style-type: none"><li>— downwards</li></ul></li></ul>	0 mm				
<ul style="list-style-type: none"><li><ul style="list-style-type: none"><li>— at the side</li></ul></li></ul>	0 mm				
Ambient conditions					
installation altitude at height above sea level maximum	2 000 m				
ambient temperature					
<ul style="list-style-type: none"><li>• during operation</li></ul>	-25 ... +60 °C				
<ul style="list-style-type: none"><li>• during storage</li></ul>	-40 ... +85 °C				
<ul style="list-style-type: none"><li>• during transport</li></ul>	-40 ... +85 °C				
Certificates/ approvals					
General Product Approval	EMC	Declaration of Conformity			
 CCC	<a href="#">Confirmation</a>	 UL		 RCM	 UKCA
Declaration of Conformity	Test Certificates	other	Railway		

#### Further information

**Siemens has decided to exit the Russian market (see here).**

<https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business>

**Siemens is working on the renewal of the current EAC certificates.**

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

**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=3UG4625-1CW30>

**Cax online generator**

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UG4625-1CW30>

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

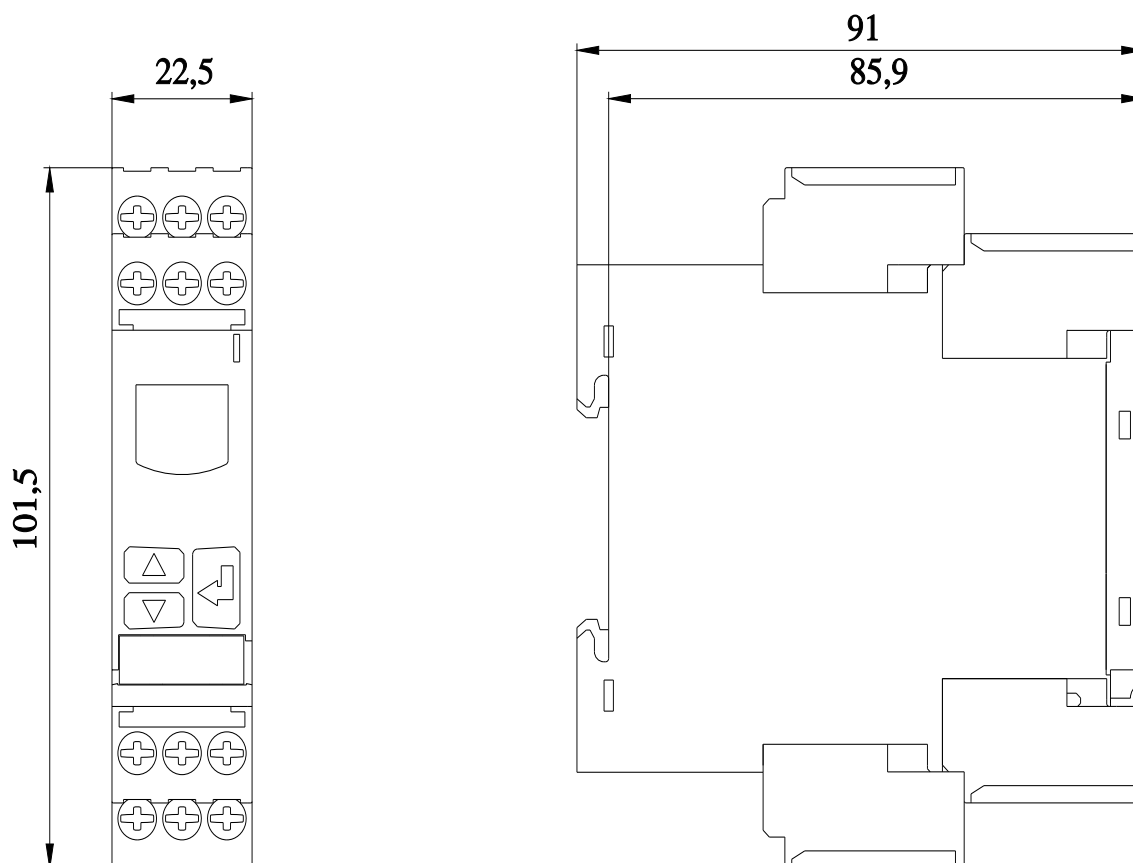
<https://support.industry.siemens.com/cs/ww/en/ps/3UG4625-1CW30>

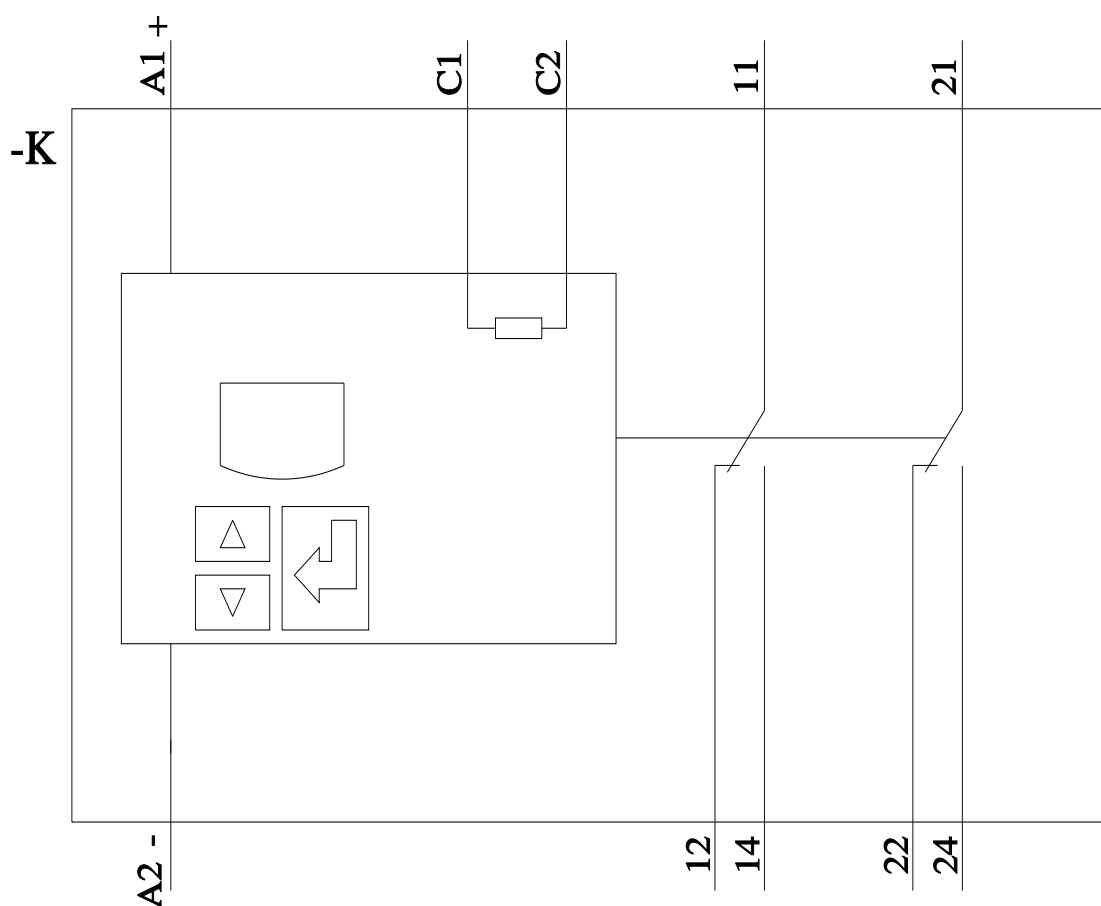
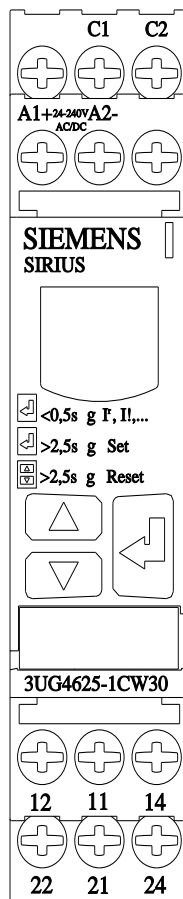
**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)**

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3UG4625-1CW30&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3UG4625-1CW30&lang=en)

**Characteristic: Derating**

<https://support.industry.siemens.com/cs/ww/en/ps/3UG4625-1CW30/manual>





last modified:

11/21/2022