



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
<b>General technical data</b>	
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	
• of the enclosure	IP20
• of the terminal	IP20
shock resistance according to IEC 60068-2-27	sinusoidal half-wave 15g / 11 ms
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
SVHC substance name	Blei - 7439-92-1 Bleimonoxyd (Bleioxyd) - 1317-36-8
<b>Product Function</b>	
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
<b>Control circuit/ Control</b>	
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

<b>operating range factor control supply voltage rated 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
<b>adjustable response delay time when starting</b>	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
<b>operating voltage rated value</b>	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

<ul style="list-style-type: none"><li>• between the outputs</li><li>• between the voltage supply and other circuits</li></ul>	Yes No	
Connections/ Terminals		
product component removable terminal for auxiliary and control circuit	Yes	
type of electrical connection	spring-loaded terminals	
type of connectable conductor cross-sections	<ul style="list-style-type: none"><li>• solid2x (0.25 ... 1.5 mm²)</li><li>• finely stranded with core end processing2 x (0.25 ... 1.5 mm²)</li><li>• finely stranded without core end processing2x (0.25 ... 1.5 mm²)</li><li>• for AWG cables solid2x (24 ... 16)</li><li>• for AWG cables stranded2x (24 ... 16)</li></ul>	
connectable conductor cross-section	<ul style="list-style-type: none"><li>• solid0.25 ... 1.5 mm²</li><li>• finely stranded with core end processing0.25 ... 1.5 mm²</li><li>• finely stranded without core end processing0.25 ... 1.5 mm²</li></ul>	
AWG number as coded connectable conductor cross section	<ul style="list-style-type: none"><li>• solid24 ... 16</li><li>• stranded24 ... 16</li></ul>	
Installation/ mounting/ dimensions		
mounting position	any	
fastening method	screw and snap-on mounting onto 35 mm DIN rail	
height	103 mm	
width	22.5 mm	
depth	91 mm	
required spacing	<ul style="list-style-type: none"><li>• with side-by-side mounting<ul style="list-style-type: none"><li>— forwards0 mm</li><li>— backwards0 mm</li><li>— upwards0 mm</li><li>— downwards0 mm</li><li>— at the side0 mm</li></ul></li><li>• for grounded parts<ul style="list-style-type: none"><li>— forwards0 mm</li><li>— backwards0 mm</li><li>— upwards0 mm</li><li>— at the side0 mm</li><li>— downwards0 mm</li></ul></li><li>• for live parts<ul style="list-style-type: none"><li>— forwards0 mm</li><li>— backwards0 mm</li><li>— upwards0 mm</li><li>— downwards0 mm</li><li>— at the side0 mm</li></ul></li></ul>	
Ambient conditions		
installation altitude at height above sea level maximum	2 000 m	
ambient temperature	<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	EMC	Declaration of Con- formity



[Confirmation](#)



Declaration of Con-	Test Certificates	other	Railway
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#### 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=3UG4625-2CW30>

Cax online generator

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

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

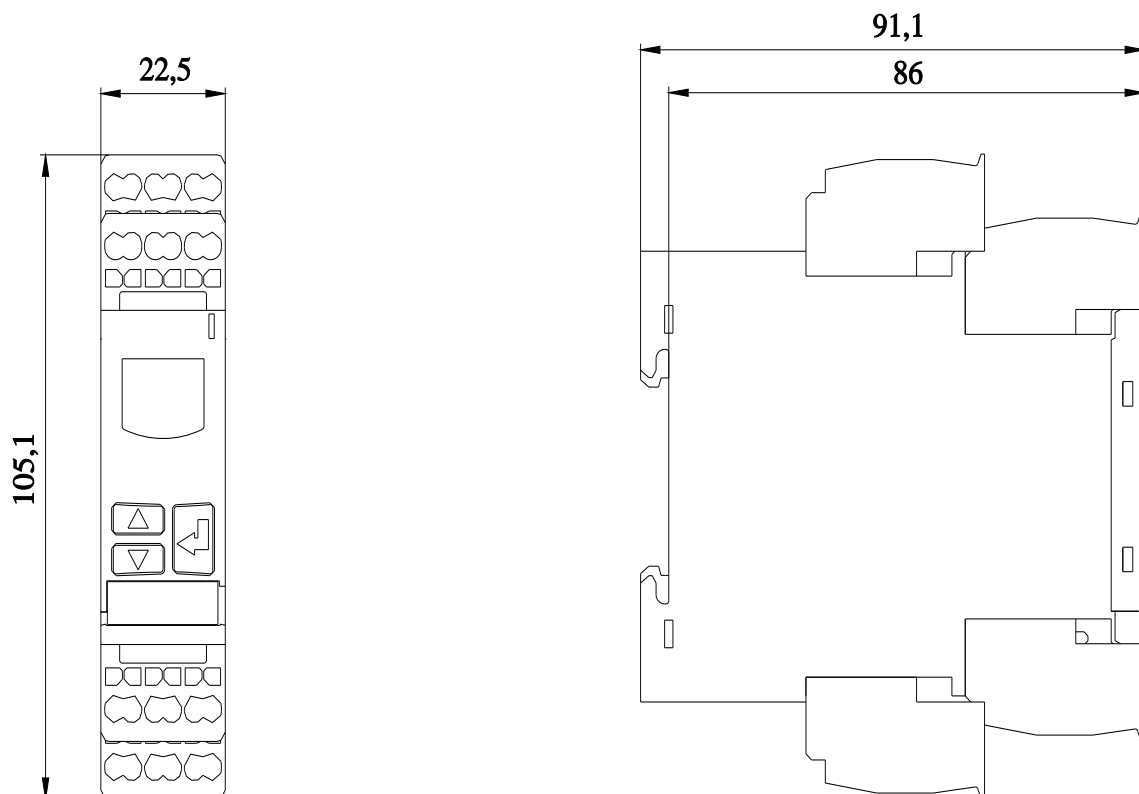
<https://support.industry.siemens.com/cs/ww/en/ps/3UG4625-2CW30>

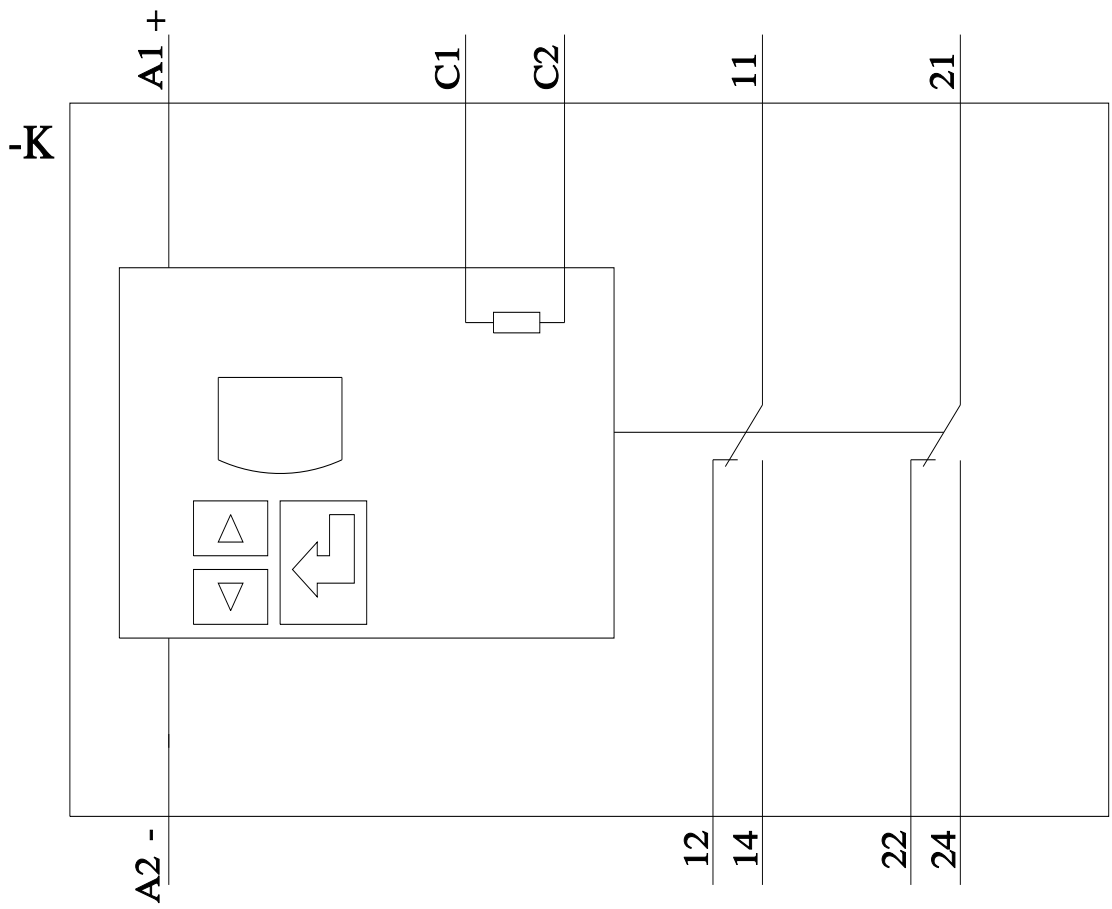
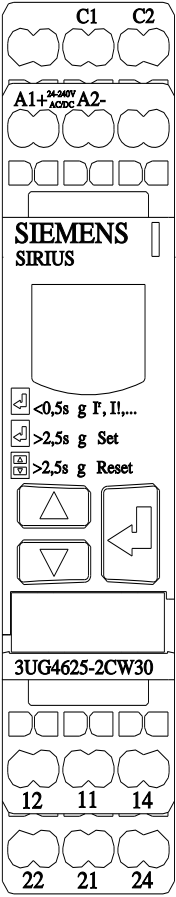
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

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

Characteristic: Derating

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





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