



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	
• 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 (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 Prohibittance (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 value at DC	
<ul style="list-style-type: none"> initial value full-scale value 	0.85 1.1
operating range factor control supply voltage rated value at AC at 50 Hz	
<ul style="list-style-type: none"> initial value full-scale value 	0.85 1.1
operating range factor control supply voltage rated value at AC at 60 Hz	
<ul style="list-style-type: none"> initial value full-scale value 	0.85 1.1
Measuring circuit	
type of current for monitoring	AC
measurable current	10 mA ... 43 A
measurable line frequency	16 ... 400 Hz
adjustable operating delay time	0.1 ... 20 s
adjustable current response value current	
<ul style="list-style-type: none"> 1 2 	30 mA ... 40 A 30 mA ... 40 A
adjustable response delay time	0 ... 20 s
adjustable response delay time when starting	0.1 ... 20 s
buffering time in the event of power failure minimum	10 ms
accuracy of digital display	+/-1 digit
Precision	
relative metering precision	5 %
temperature drift per °C	0.1 %/°C
Auxiliary circuit	
number of NC contacts for auxiliary contacts	0
number of NC contacts delayed switching	0
number of NO contacts for auxiliary contacts	0
number of NO contacts delayed switching	0
number of CO contacts	
<ul style="list-style-type: none"> for auxiliary contacts delayed switching 	2 2
operating frequency with 3RT2 contactor maximum	5 000 1/h
Main circuit	
type of voltage	AC/DC
operating voltage rated value	24 ... 240 V
operating frequency rated value	16 ... 400 Hz
ampacity of the output relay at AC-15	
<ul style="list-style-type: none"> at 250 V at 50/60 Hz at 400 V at 50/60 Hz 	3 A 0 A
ampacity of the output relay at DC-13	
<ul style="list-style-type: none"> at 24 V at 125 V at 250 V 	1 A 0.2 A 0.1 A
operational current at 17 V minimum	5 mA
continuous current of the DIAZED fuse link of the output relay	4 A
Electromagnetic compatibility	
conducted interference	
<ul style="list-style-type: none"> due to burst according to IEC 61000-4-4 due to conductor-earth surge according to IEC 61000-4-5 due to conductor-conductor surge according to IEC 61000-4-5 	2 kV 2 kV 1 kV
field-based interference according to IEC 61000-4-3	10 V/m
electrostatic discharge according to IEC 61000-4-2	4 kV contact discharge / 8 kV air discharge
Galvanic isolation	
design of the electrical isolation	galvanic isolation

galvanic isolation		
<ul style="list-style-type: none"> • between input and output • between the outputs • between the voltage supply and other circuits 	<p>Yes</p> <p>Yes</p> <p>No</p>	
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"> • solid • finely stranded with core end processing • finely stranded without core end processing • at AWG cables solid • at AWG cables stranded 	<p>2x (0.25 ... 1.5 mm²)</p> <p>2 x (0.25 ... 1.5 mm²)</p> <p>2x (0.25 ... 1.5 mm²)</p> <p>2x (24 ... 16)</p> <p>2x (24 ... 16)</p>	
connectable conductor cross-section		
<ul style="list-style-type: none"> • solid • finely stranded with core end processing • finely stranded without core end processing 	<p>0.25 ... 1.5 mm²</p> <p>0.25 ... 1.5 mm²</p> <p>0.25 ... 1.5 mm²</p>	
AWG number as coded connectable conductor cross section		
<ul style="list-style-type: none"> • solid • stranded 	<p>24 ... 16</p> <p>24 ... 16</p>	
Installation/ mounting/ dimensions		
mounting position	any	
fastening method	screw and snap-on mounting onto 35 mm standard mounting rail	
height	103 mm	
width	22.5 mm	
depth	91 mm	
required spacing		
<ul style="list-style-type: none"> • with side-by-side mounting <ul style="list-style-type: none"> — forwards — backwards — upwards — downwards — at the side • for grounded parts <ul style="list-style-type: none"> — forwards — backwards — upwards — at the side — downwards • for live parts <ul style="list-style-type: none"> — forwards — backwards — upwards — downwards — at the side 	<p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p>	
Ambient conditions		
installation altitude at height above sea level maximum	2 000 m	
ambient temperature		
<ul style="list-style-type: none"> • during operation • during storage • during transport 	<p>-25 ... +60 °C</p> <p>-40 ... +85 °C</p> <p>-40 ... +85 °C</p>	
Certificates/ approvals		
General Product Approval	EMC	Declaration of Conformity



[Confirmation](#)



EG-Konf.

Test Certificates other Railway

[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)

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[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=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,...)

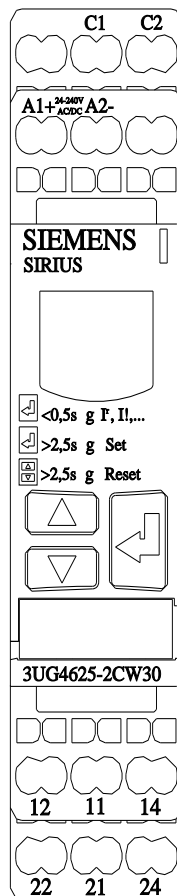
<https://support.industry.siemens.com/cs/ww/en/ps/3UG4625-2CW30>

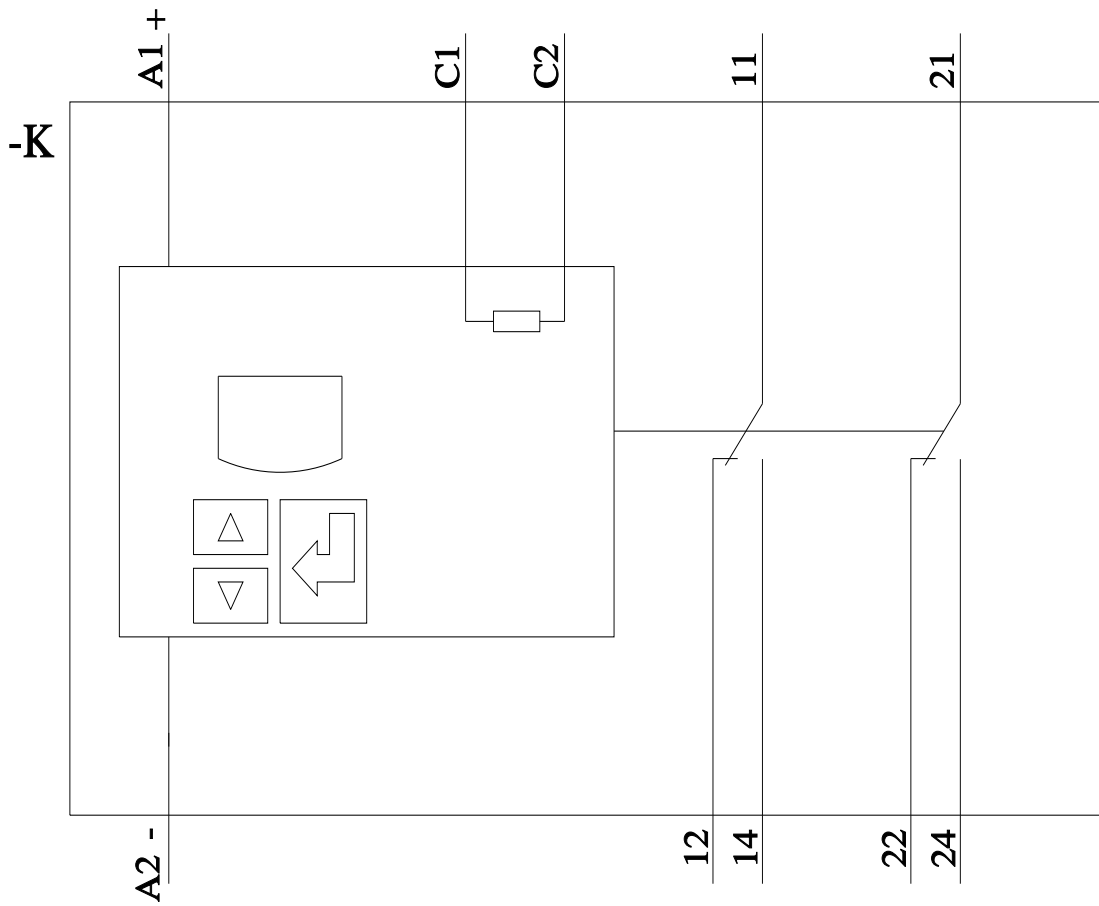
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3UG4625-2CW30&lang=en

Characteristic: Derating

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





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