



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 acc. to IEC 60068-2-27	sinusoidal half-wave 15g / 11 ms
vibration resistance acc. 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 acc. to IEC 81346-2	K
relative repeat accuracy	1 %
Substance Prohibittance (Date)	14.02.2013
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	
• initial value	0.85
• full-scale value	1.1
operating range factor control supply voltage rated value at AC at 50 Hz	
• initial value	0.85
• full-scale value	1.1
operating range factor control supply voltage rated value at AC at 60 Hz	
• initial value	0.85
• full-scale value	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	
• 1	30 mA ... 40 A
• 2	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	
• for auxiliary contacts	2
• delayed switching	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	
• at 250 V at 50/60 Hz	3 A
• at 400 V at 50/60 Hz	0 A
ampacity of the output relay at DC-13	
• at 24 V	1 A
• at 125 V	0.2 A
• at 250 V	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	
• due to burst acc. to IEC 61000-4-4	2 kV
• due to conductor-earth surge acc. to IEC 61000-4-5	2 kV
• due to conductor-conductor surge acc. to IEC 61000-4-5	1 kV
field-based interference acc. to IEC 61000-4-3	10 V/m
electrostatic discharge acc. to IEC 61000-4-2	4 kV contact discharge / 8 kV air discharge
Galvanic isolation	
design of the electrical isolation	galvanic isolation

galvanic isolation			
• between input and output		Yes	
• between the outputs		Yes	
• between the voltage supply and other circuits		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			
• solid		2x (0.25 ... 1.5 mm²)	
• finely stranded with core end processing		2 x (0.25 ... 1.5 mm²)	
• finely stranded without core end processing		2x (0.25 ... 1.5 mm²)	
• at AWG cables solid		2x (24 ... 16)	
• at AWG cables stranded		2x (24 ... 16)	
connectable conductor cross-section			
• solid		0.25 ... 1.5 mm²	
• finely stranded with core end processing		0.25 ... 1.5 mm²	
• finely stranded without core end processing		0.25 ... 1.5 mm²	
AWG number as coded connectable conductor cross section			
• solid		24 ... 16	
• stranded		24 ... 16	
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			
• 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	
Ambient conditions			
installation altitude at height above sea level maximum		2 000 m	
ambient temperature			
• 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



[Type Test Certificates/Test Report](#)

Test Certificates	other	Railway
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[Special Test Certificate](#)

[Confirmation](#)

[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,...)

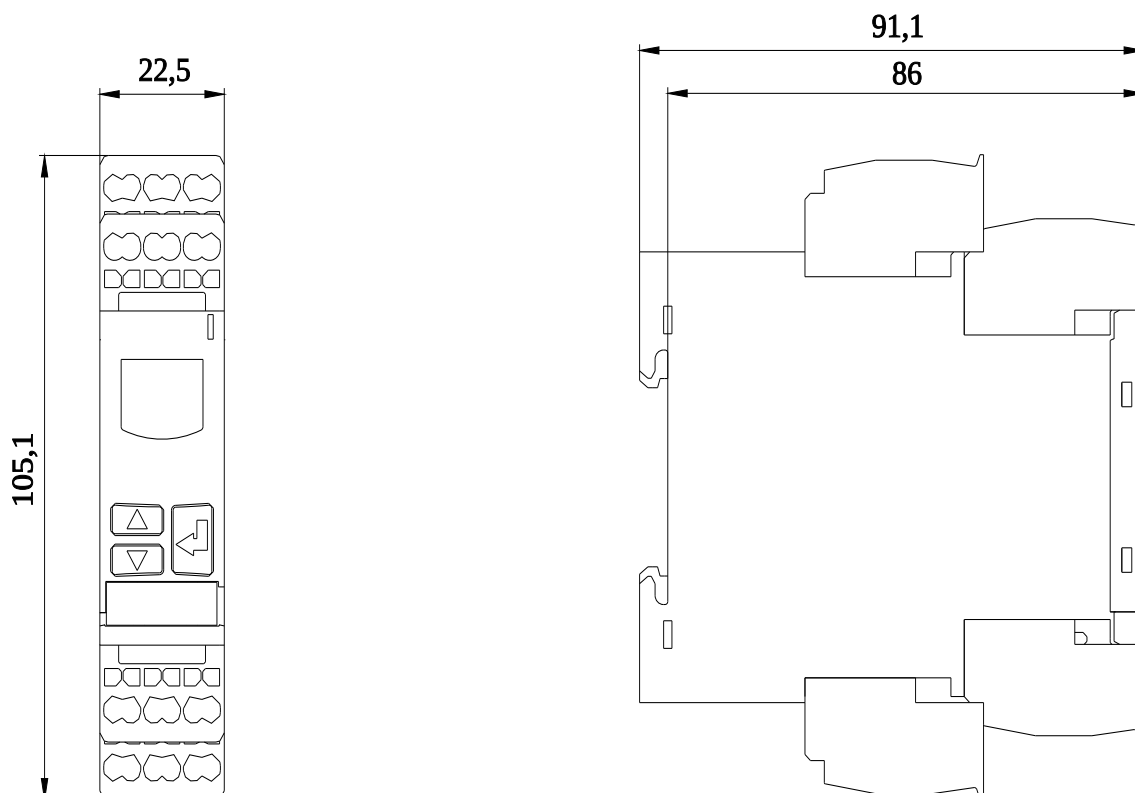
<https://support.industry.siemens.com/cs/ww/en/ps/3UG4625-2CW30>

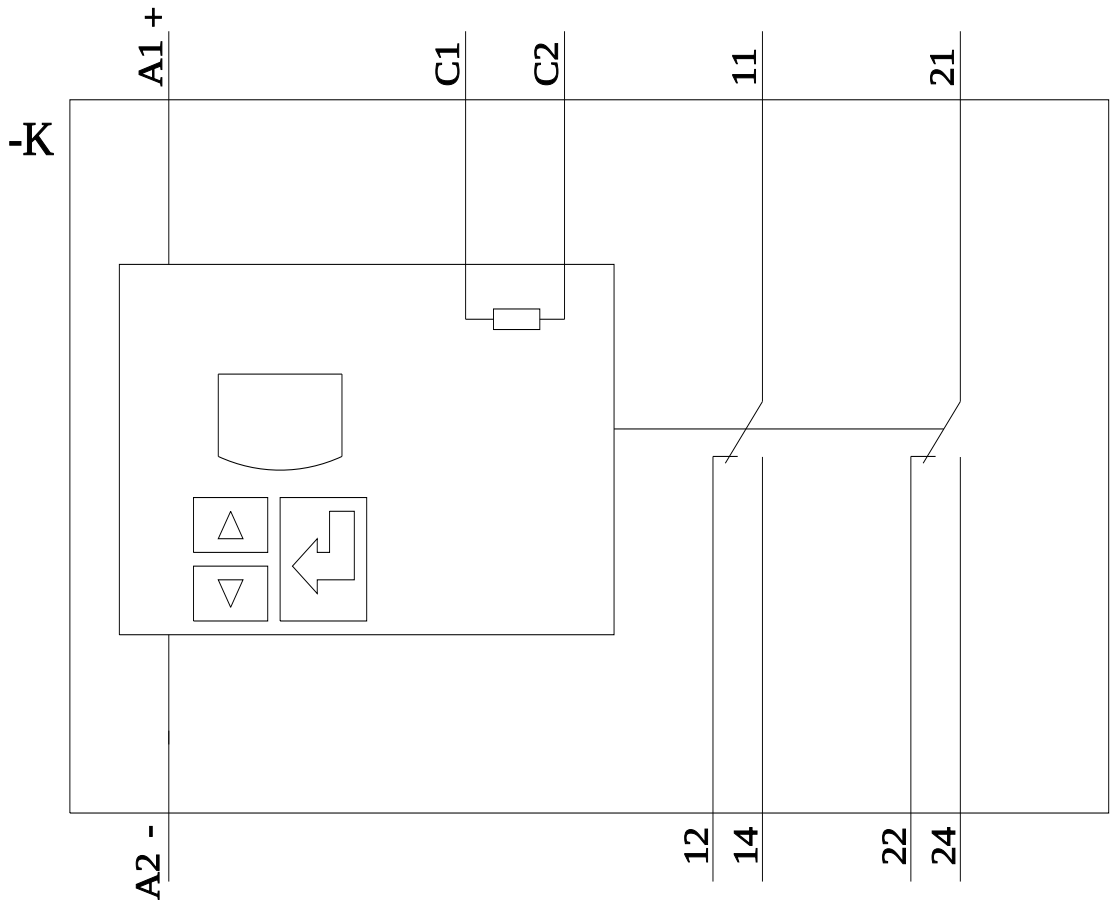
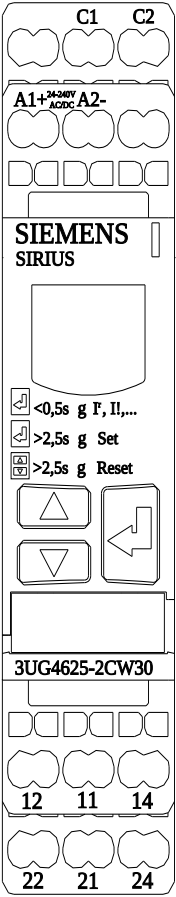
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

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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