



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	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	
• 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 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
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		
• 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	screw-type terminals	
type of connectable conductor cross-sections		
• solid	1x (0.5 ... 4.0 mm ²), 2x (0.5 ... 2.5 mm ²)	
• finely stranded with core end processing	1x (0.5 ... 2.5 mm ²), 2x (0.5 ... 1.5 mm ²)	
• at AWG cables solid	2x (20 ... 14)	
• at AWG cables stranded	2x (20 ... 14)	
connectable conductor cross-section		
• solid	0.5 ... 4 mm ²	
• finely stranded with core end processing	0.5 ... 2.5 mm ²	
AWG number as coded connectable conductor cross section		
• solid	20 ... 14	
• stranded	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 standard mounting rail	
height	102 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



[Confirmation](#)



Test Certificates	other	Railway
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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=3UG4625-1CW30>

Cax online generator

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

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

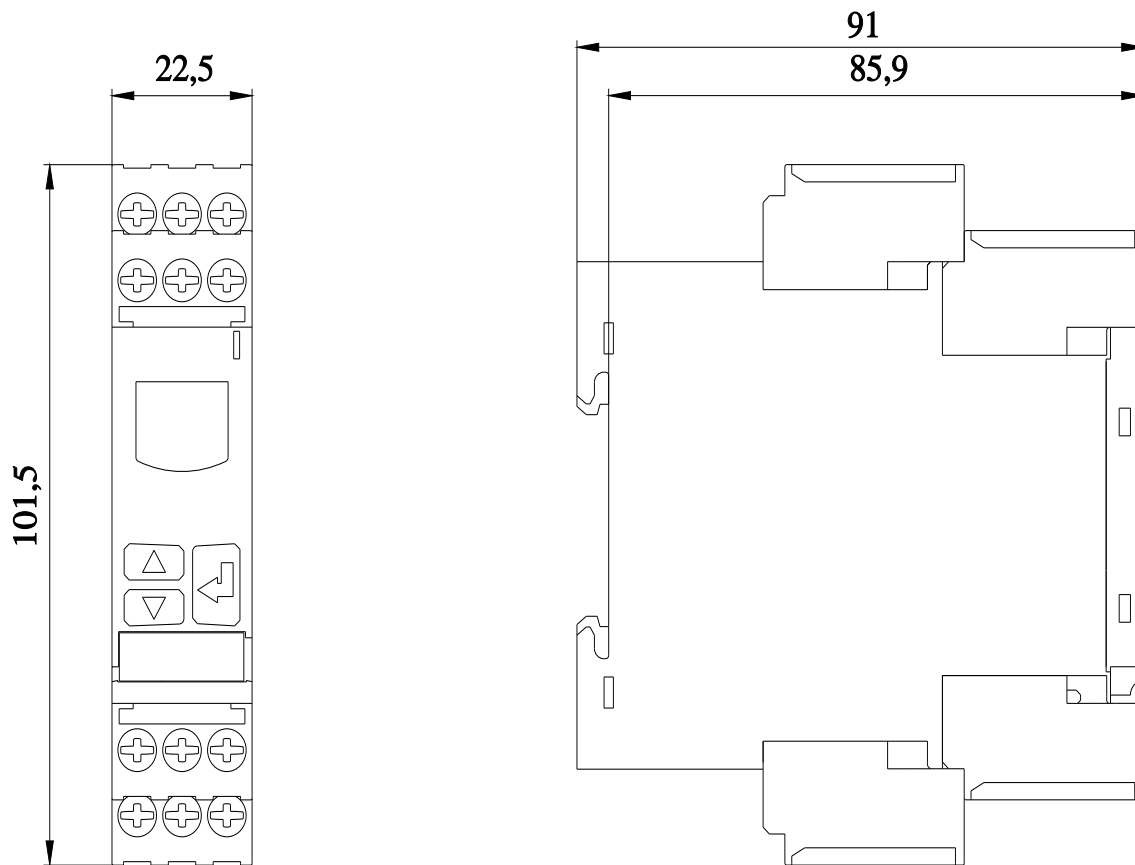
<https://support.industry.siemens.com/cs/ww/en/ps/3UG4625-1CW30>

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

Characteristic: Derating

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



last modified:

12/21/2020