SIEMENS

Data sheet 3UG4625-1CW30

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
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
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 DIN 40719 extended according to IEC 204-2 acc. to IEC 750	K
Reference code acc. to DIN EN 81346-2	K
Reference code acc. to DIN EN 61346-2	K
Relative repeat accuracy	1 %

Product Function

Product function	
• difference current indication	Yes
• Fault storage	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 pick-up value current	
• 1	30 mA ... 40 A
• 2	30 mA ... 40 A
Adjustable response delay time	0 ... 20
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 NO contacts for auxiliary contacts	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

Outputs

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
Operating 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-bound parasitic coupling 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 entrance and outlet	Yes
• between the outputs	Yes
• between the voltage supply and other circuits	No

Connections/ Terminals

Product function	
• 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 mm²), 2x (0.5 ... 2.5 mm²)
• finely stranded with core end processing	1x (0.5 ... 2.5 mm²), 2x (0.5 ... 1.5 mm²)
• at AWG conductors solid	2x (20 ... 14)
• at AWG conductors stranded	2x (20 ... 14)
Connectable conductor cross-section	
• solid	0.5 ... 4 mm²
• finely stranded with core end processing	0.5 ... 2.5 mm²
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
Mounting type	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

Certificates/ approvals

General Product Approval		EMC	Declaration of Conformity		Test Certificates
 UL		 RCM	 EG-Konf.	Miscellaneous	Type Test Certificates/Test Report

Test Certificates	Marine / Shipping	other	Railway
Special Test Certificate		Confirmation	Vibration and Shock

Further information

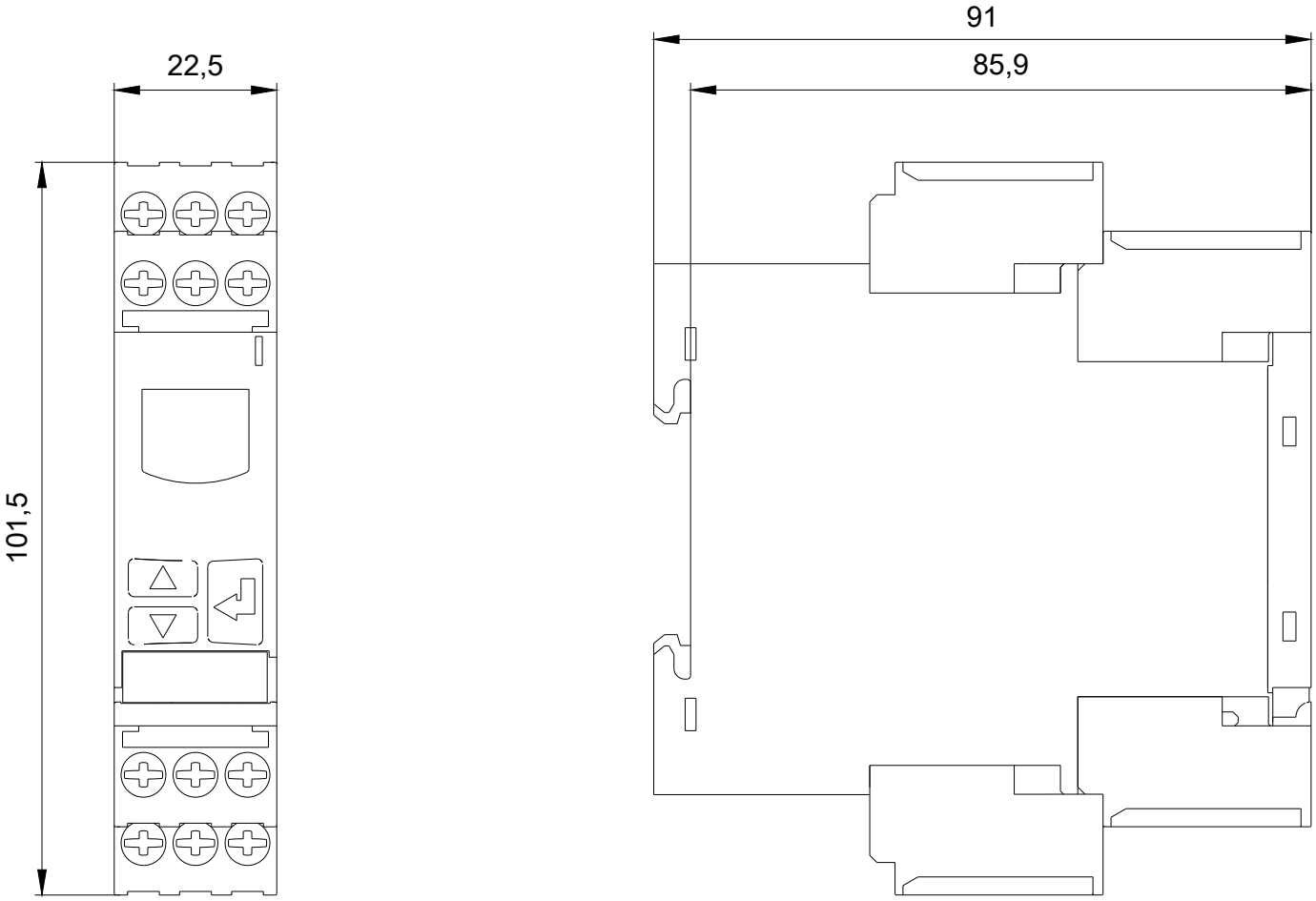
Information- and Downloadcenter (Catalogs, Brochures,…)
www.siemens.com/sirius/catalogs

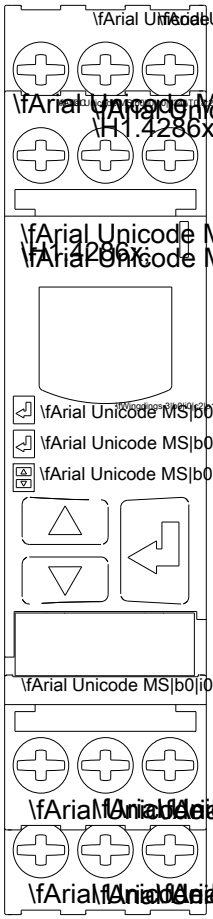
Industry Mall (Online ordering system)
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3UG4625-1CW30

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





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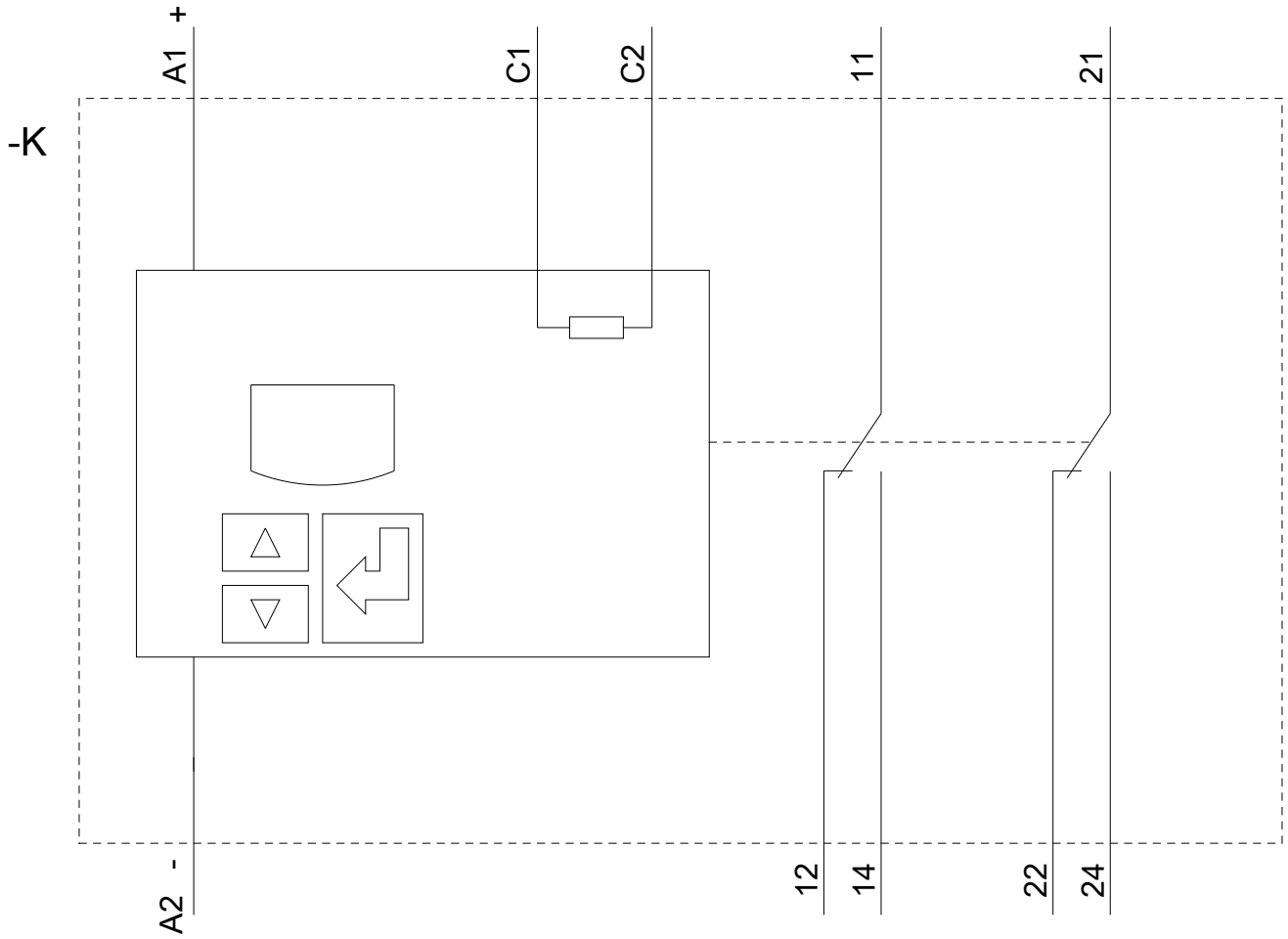

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