SIEMENS

Data sheet 3UG4825-2CA40

Figure similar

DIGITAL MONITORING RELAY FOR FAULT CURRENT MONITORING (W. DIFFERENTIAL CT 3UL23) FOR IO-LINK SETTING RANGE 0.03A TO 40A SEPARATE FOR ALARM THRESHOLD AND SWITCH-OFF VALUE STARTUP AND TRIPPING DELAY 0 TO 999.9S SWITCH-OFF HYSTERESIS UP TO 50% ALARM HYSTERESIS 5% FIXED WIDTH 22.5 MM, 2 CO CONTACTS W. OR W/O ERROR LOG SPRING-LOADED TERMINAL

Product function		for three-phase supplies

Measuring circuit:		
Type of current for monitoring		AC
Measurable current	mA	10 ... 43 000
Measurable line frequency	Hz	16 ... 400
Adjustable response value current		
• 1	mA	30 ... 40 A
• 2	mA	30 ... 40 A
Adjustable response delay time when starting	s	0 ... 999.9
Buffering time in the event of power failure minimum	ms	10
Operating voltage Rated value	V	24 ... 24
Relative metering precision	%	5
Accuracy of digital display		+/-1 digit
Temperature drift per °C	%/°C	0.1
Relative repeat accuracy	%	1

General technical data:		
Design of the display		LCD
Product function		
• difference current indication		Yes
• Fault storage		Yes
• Overcurrent detection 1 phase		Yes
• undercurrent detection 1 phase		No
• External reset		Yes
• Adjustable open/closed-circuit current principle		Yes

Startup time after the control supply voltage has been applied	ms	1 600
Response time maximum	ms	150
Type of voltage of the control supply voltage		DC
Control supply voltage		
• for DC Rated value	V	24 ... 24
Operating range factor control supply voltage rated value		
• for DC		0.85 ... 1.1
Surge voltage resistance Rated value	kV	4
Active power consumption	W	2
Protection class IP		IP20
Electromagnetic compatibility		IEC 60947-1 / IEC 61000-6-2 / IEC 61000-6-4
Vibration resistance acc. to IEC 60068-2-6		1 ... 6 Hz: 15 mm, 6 ... 500 Hz: 2g
Shock resistance acc. to IEC 60068-2-27		sinusoidal half-wave 15g / 11 ms
Installation altitude at height above sea level maximum	m	2 000
Conducted interference due to burst acc. to IEC 61000-4-4		2 kV
Conducted interference due to conductor-earth surge acc. to IEC 61000-4-5		2 kV
Conducted interference due to conductor-conductor surge acc. to IEC 61000-4-5		1 kV
Electrostatic discharge acc. to IEC 61000-4-2		4 kV contact discharge / 8 kV air discharge
Field-bound parasitic coupling acc. to IEC 61000-4-3		10 V/m
Insulation voltage for overvoltage category III according to IEC 60664 with degree of pollution 3 Rated value	V	300
Degree of pollution		3
Ambient temperature		
• during operation	°C	-25 ... +60
• during storage	°C	-40 ... +85
• during transport	°C	-40 ... +85
Design of the electrical isolation		galvanic
Galvanic isolation		
• between entrance and outlet		Yes
• between the outputs		Yes
• between the voltage supply and other circuits		No

Communication/ Protocol:		
Type of voltage supply via input/output link master		Yes
IO-Link transfer rate		COM2 (38,4 kBaud)
Protocol is supported IO-Link protocol		Yes
Amount of data		

• of the address area of the outputs with cyclical transfer total	byte	2
• of the address area of the inputs with cyclical transfer total	byte	4
Point-to-point cycle time between master and IO-Link device minimum	ms	10

Mechanical data:		
Width	mm	22.5
Height	mm	103
Depth	mm	91
mounting position		any
Required spacing for grounded parts		
• forwards	mm	0
• Backwards	mm	0
• at the side	mm	0
• upwards	mm	0
• downwards	mm	0
Required spacing with side-by-side mounting		
• forwards	mm	0
• Backwards	mm	0
• at the side	mm	0
• upwards	mm	0
• downwards	mm	0
Required spacing for live parts		
• forwards	mm	0
• Backwards	mm	0
• at the side	mm	0
• upwards	mm	0
• downwards	mm	0
Mounting type		screw and snap-on mounting onto 35 mm standard mounting rail
Product function removable terminal for auxiliary and control circuit		Yes
Type of electrical connection		spring-loaded terminals
Type of connectable conductor cross-section		
• solid		2x (0.25 ... 1.5 mm²)
• finely stranded		
— with core end processing		2 x (0.25 ... 1.5 mm²)
— without core end processing		2x (0.25 ... 1.5 mm²)
• for AWG conductors		
— solid		2x (24 ... 16)
— stranded		2x (24 ... 16)

Outputs:		
Number of NO contacts delayed switching		0
Number of NC contacts delayed switching		0
Number of CO contacts delayed switching		2
Ampacity of the output relay		
• at AC-15		
— at 250 V at 50/60 Hz	A	3
— at 400 V at 50/60 Hz	A	0
• at DC-13		
— at 24 V	A	1
— at 125 V	A	0.2
— at 250 V	A	0.1
Operating current at 17 V minimum	mA	5
Continuous current of the DIAZED fuse link of the output relay	A	4
Thermal current of the switching element with contacts maximum	A	5
Mechanical service life (switching cycles) typical		10 000 000
Electrical endurance (switching cycles) at AC-15 at 230 V typical		100 000
Operating frequency with 3RT2 contactor maximum	1/h	5 000

Certificates/ approvals:

General Product Approval				Test Certificates	
CCC	Manufacturer declartion	EAC	UL	Type Test Certificates/Test Report	Special Test Certificate

other	
other	Declaration of Conformity

Further information

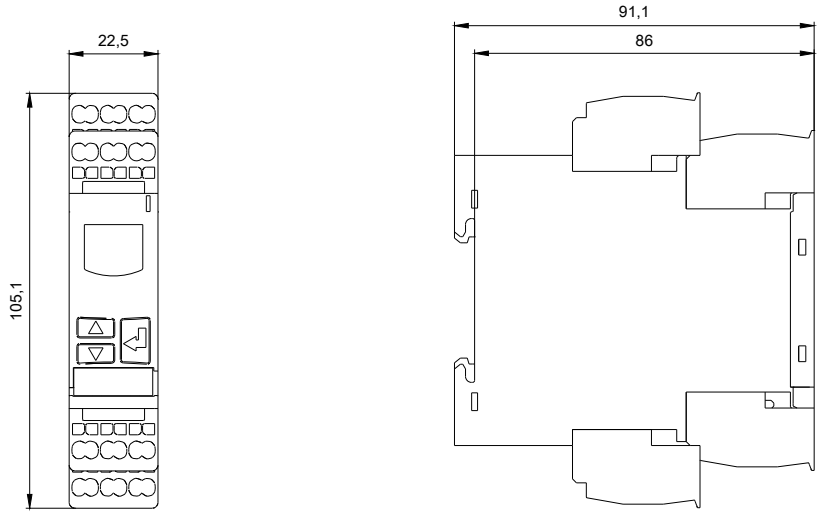
Information- and Downloadcenter (Catalogs, Brochures,…)
http://www.siemens.com/industrial-controls/catalogs

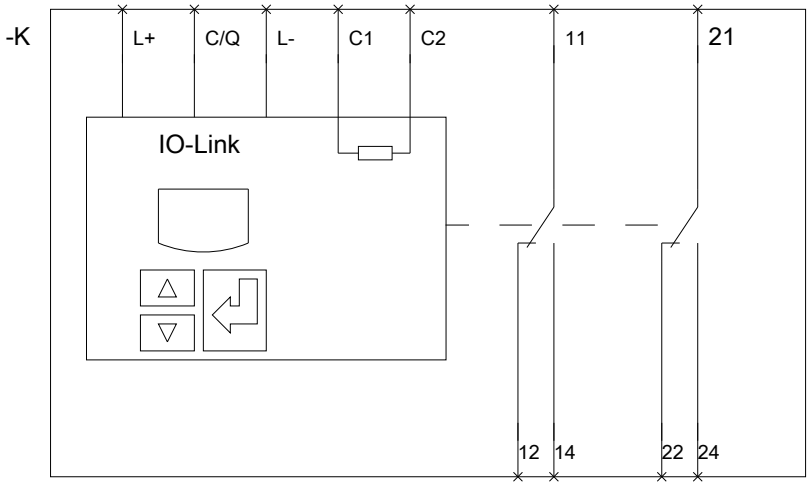
Industry Mall (Online ordering system)
http://www.siemens.com/industrymall

Cax online generator
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UG48252CA40

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3UG48252CA40

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3UG48252CA40&lang=en





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