



digital monitoring relay residual current monitoring (with current transformer 3UL23)
adjustment range 0.03...40 A supply voltage 24 V DC ON delay and tripping delay
0.1...999.9 s 1 changeover contact spring-loaded terminal

product brand name	SIRIUS
product designation	Residual current monitoring relay with digital setting
design of the product	monitoring of residual current, external power supply with auxiliary voltage for IO-Link
product type designation	3UG5
General technical data	
product function	residual current monitoring relay
design of the display	LCD
insulation voltage	
• rated value	690 V
• for overvoltage category III according to IEC 60664	
— with degree of pollution 2 rated value	690 V
— with degree of pollution 3 rated value	690 V
degree of pollution	3
type of voltage	
• for monitoring	AC/DC
• of the control supply voltage	DC
protection class IP	
• 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	f = 4 ... 5,81 Hz, dmax = 15 mm; f = 5,81 ... 500 Hz, Amax = 20 m/s ² ; 10 cycles
mechanical service life (operating cycles) typical	10 000 000
electrical endurance (operating 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
Substance Prohibition (Date)	06/01/2023
SVHC substance name	Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8
Weight	0.16 kg
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
• auto-RESET	Yes
• manual RESET	Yes

Control circuit/ Control	
control supply voltage at DC rated value	24 V
control supply voltage at DC rated value	24 ... 24 V
operating range factor control supply voltage rated value at DC	
• initial value	0.7
• full-scale value	1.25
operating range factor control supply voltage rated value at AC at 60 Hz	
• full-scale value	1.1
Measuring circuit	
measurable current	30 ... 40 000 mA
measurable line frequency	16 ... 400 Hz
adjustable operating delay time	0 ... 999.9 s
adjustable current response value current	
• 1	30 mA ... 40 A
• 2	30 mA ... 40 A
adjustable response delay time	0 ... 999.9 s
adjustable response delay time when starting	0 ... 999.9 s
adjustable switching hysteresis for measured current value	0 mA
accuracy of digital display	+/-1 digit
Communication/ Protocol	
protocol is supported IO-Link protocol	Yes
IO-Link transfer rate	COM2 (38,4 kBaud)
point-to-point cycle time between master and IO-Link device minimum	5 ms
type of voltage supply via input/output link master	Yes
data volume	
• of the address range of the inputs with cyclical transfer total	4 byte
• of the address range of the outputs with cyclical transfer total	2 byte
Auxiliary circuit	
number of NC contacts delayed switching	0
number of NO contacts delayed switching	0
number of CO contacts	
• for auxiliary contacts	1
• delayed switching	1
Main circuit	
type of voltage	DC
operating voltage rated value	24 ... 24 V
operating frequency rated value	16 ... 400 Hz
ampacity of the output relay at AC-15	
• at 230 V at 50/60 Hz	3 A
• at 250 V at 50/60 Hz	3 A
• at 400 V at 50/60 Hz	3 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
ampacity of the semiconductor output in SIO mode	200 mA
operational current at 17 V minimum	5 mA
continuous current of the DIAZED fuse link of the output relay	6 A
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	Yes
Electrical Safety	
protection class IP on the front according to IEC 60529	IP20

Further information

Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

Information for data generation and storage

<https://support.industry.siemens.com/cs/ww/en/view/109995012>

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=3UG5825-2AA40>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UG5825-2AA40>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3UG5825-2AA40>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3UG5825-2AA40&lang=en





