

Siemens
EcoTech



analog monitoring relay level monitoring resistance monitoring from 0.5 to 500 kohm overshoot and undershoot supply voltage 24...240 V AC/DC, 50...60 Hz 2-step or 1-step control tripping delay 0.5-30 s 1 changeover contact screw terminal SIL 1/PL c WHG

product brand name	SIRIUS
product designation	Level monitoring relay with analog setting
design of the product	level monitoring, externally supplied with auxiliary voltage for safety applications
product type designation	3UG5
General technical data	
product function	analog setting level monitoring relay
display version LED	Yes
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 operating voltage for actuation	AC/DC
• of the control supply voltage	AC/DC
surge voltage resistance rated value	6 kV
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 Prohibitance (Date)	06/01/2023
SVHC substance name	Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol - 79-94-7
Net Weight	0.155 kg
Product Function	
product function	
• outlet monitoring adjustable	Yes
• adjustable responsiveness	Yes
• inlet monitoring adjustable	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	
adjustable operating delay time	0.5 ... 30 s
adjustable response delay time	
• with lower or upper limit violation	0.5 ... 30 s
response time maximum	500 ms
physical measuring principle	conductive
Auxiliary circuit	
number of CO contacts	
• for auxiliary contacts	1
• delayed switching	1
Inputs/ Outputs	
number of inputs	2
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
operational current at 17 V minimum	5 mA
continuous current of the DIAZED fuse link of the output relay	6 A
Galvanic isolation	
galvanic isolation	
• between input and output	Yes
• between the voltage supply and other circuits	Yes
Safety related data	
product function suitable for safety function	Yes
function test interval maximum	1 a
IEC 62061	
Safety Integrity Level (SIL) according to IEC 62061	SIL 1
PFHD with high demand rate according to IEC 62061	9.3E-7 1/h
ISO 13849	
performance level (PL) according to ISO 13849-1	PL c
category according to ISO 13849-1	2
IEC 61508	
Safety Integrity Level (SIL) according to IEC 61508	1
safety device type according to IEC 61508-2	Type B
PFDAvg with low demand rate according to IEC 61508	0.0015
Safe failure fraction (SFF)	60 %
hardware fault tolerance according to IEC 61508	0

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=3UG5501-1AW31>

Cax online generator

<https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UG5501-1AW31>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3UG5501-1AW31>

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

https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3UG5501-1AW31&lang=en





