

Siemens
EcoTech



analog monitoring relay voltage monitoring from 20 to 275 V AC/DC overshoot and undershoot with internal power supply 24 to 240 V DC and AC 50 to 60 Hz ON delay and tripping delay 0.1 .. 30 s 1 changeover contact screw terminal

product brand name	SIRIUS
product designation	Analog setting voltage monitoring relay
design of the product	monitoring of undervoltage and overvoltage, internally powered without auxiliary voltage
product type designation	3UG5
General technical data	
product function	Voltage monitoring relay
insulation voltage 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	AC/DC
surge voltage resistance rated value	6 kV
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
Net Weight	0.145 kg
Product Function	
product function	
• undervoltage detection	Yes
• overvoltage detection	Yes
• overvoltage detection 1 phase	Yes
• overvoltage detection 3 phase	No
• overvoltage detection DC	Yes
• undervoltage detection 1 phase	Yes
• undervoltage detection 3 phases	No
• undervoltage detection DC	Yes

• voltage window recognition 1 phase	Yes
• voltage window recognition 3 phase	No
• voltage window recognition DC	Yes
• auto-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	
measurable voltage at AC	20 ... 275 V
measurable voltage at DC	20 ... 275 V
adjustable response delay time	
• when starting	30 s
• with lower or upper limit violation	0.5 ... 30 s
Auxiliary circuit	
number of NC contacts delayed switching	0
number of NO contacts delayed switching	0
number of CO contacts delayed switching	1
Main circuit	
number of poles for main current circuit	1
operating voltage	
• at AC	
— at 50 Hz rated value	240 ... 240 V
— at 60 Hz rated value	240 ... 240 V
• at DC rated value	24 ... 24 V
ampacity of the output relay at AC-15 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	
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
Connections/ Terminals	
product component removable terminal for auxiliary and control circuit	Yes
type of electrical connection	screw terminal
type of connectable conductor cross-sections	
• solid	1x (0.5 ... 4 mm ²), 2x (0.5 ... 2.5 mm ²)

<ul style="list-style-type: none"> finely stranded with core end processing for AWG cables solid 	1x (0.5 ... 4 mm ²), 2x (0.5 ... 2.5 mm ²) 1x (20 ... 12), 2x (20 ... 14)
connectable conductor cross-section <ul style="list-style-type: none"> solid finely stranded with core end processing 	0.5 ... 4 mm ² 0.5 ... 4 mm ²
AWG number as coded connectable conductor cross section <ul style="list-style-type: none"> solid stranded 	20 ... 12 20 ... 12
tightening torque with screw-type terminals	0.6 ... 0.8 N·m

Installation/ mounting/ dimensions

mounting position	any
fastening method	screw and snap-on mounting
height	100 mm
width	22.5 mm
depth	90 mm
required spacing <ul style="list-style-type: none"> with side-by-side mounting <ul style="list-style-type: none"> forwards backwards upwards downwards at the side for grounded parts <ul style="list-style-type: none"> forwards backwards upwards at the side downwards for live parts <ul style="list-style-type: none"> forwards backwards upwards at the side 	0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm

Ambient conditions

installation altitude at height above sea level maximum	2 000 m
ambient temperature <ul style="list-style-type: none"> during operation during storage during transport 	-25 ... +60 °C -40 ... +80 °C -40 ... +80 °C

Approvals Certificates

General Product Approval	other
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[Confirmation](#)



Environment



[Environmental Confirmations](#)

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?mfb=3UG5533-1AL30>

Cax online generator

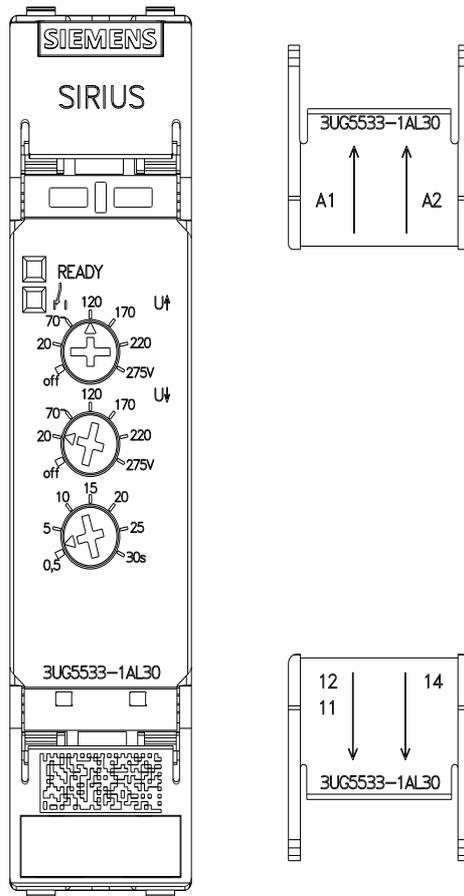
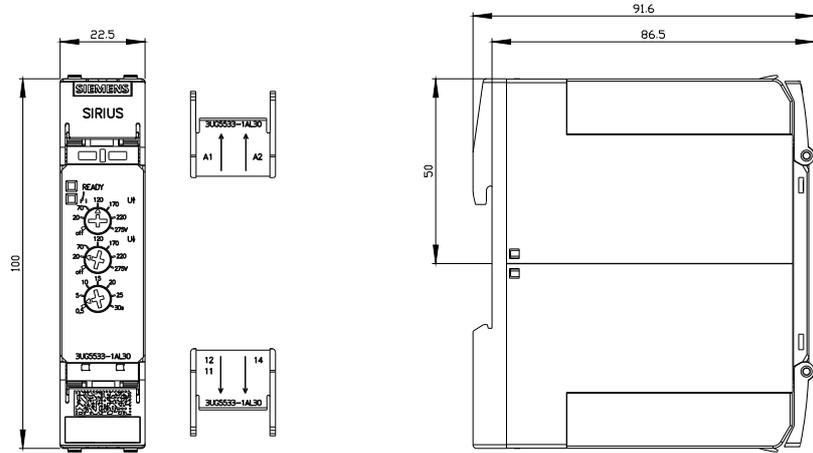
<https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mfb=3UG5533-1AL30>

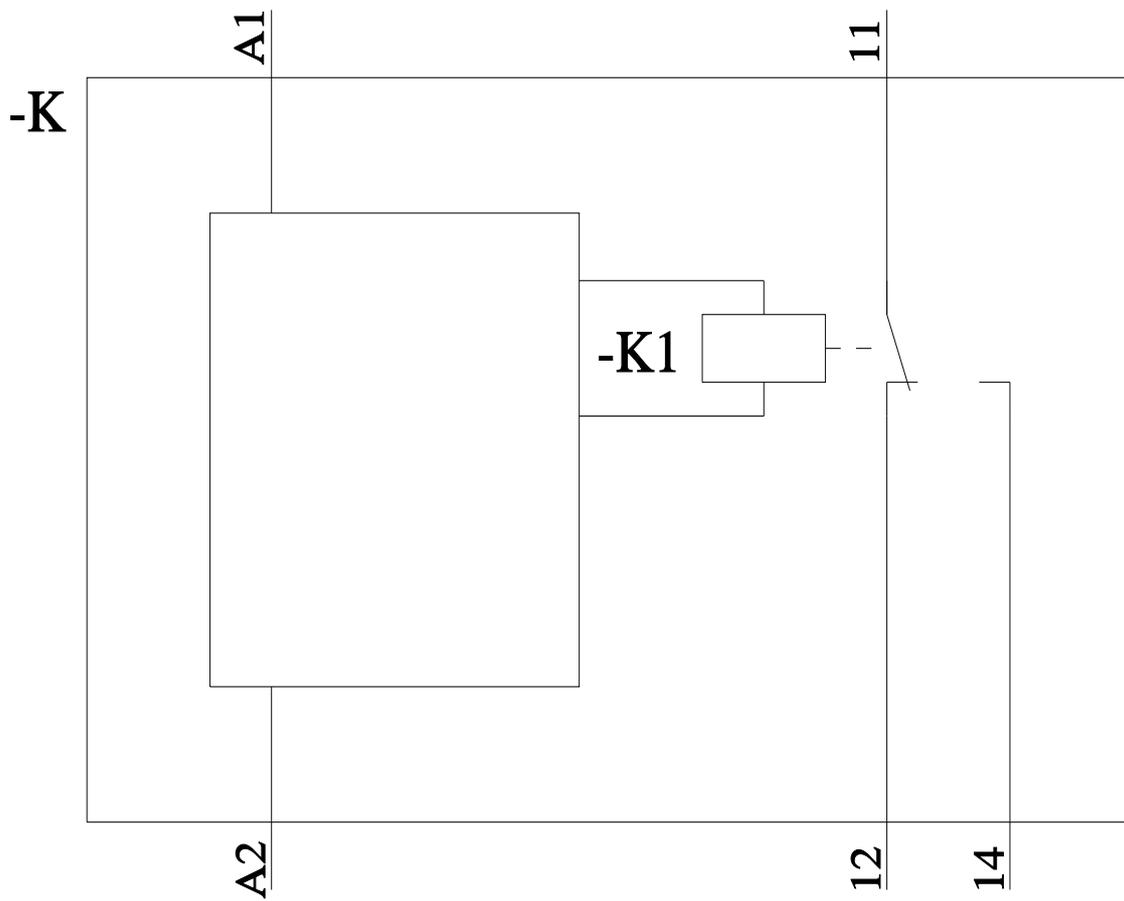
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3UG5533-1AL30>

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

https://www.automation.siemens.com/bilddb/cax_de.aspx?mfb=3UG5533-1AL30&lang=en





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