SIEMENS

Data sheet 3UG4582-1AW31



insulation monitoring relay for non-grounded (IT) networks up to 250 V AC, 15-400 Hz and up to 300 V DC measuring range 1-100 kOhm supply voltage 24-240 V AC/DC 22.5 mm, 1 changeover contact screw terminal

product brand name	SIRIUS
product designation	Insulation monitoring relay with analog setting
product type designation	3UG4
General technical data	
product function	Insulation monitor
type of voltage	
● for monitoring	AC/DC
● of the operating voltage for actuation	AC/DC
● of the control supply voltage	AC/DC
surge voltage resistance rated value	6 000 V
thermal current of the switching element with contacts maximum	4 A
reference code according to IEC 81346-2	K
Substance Prohibitance (day/month/year)	05/01/2012
Net Weight	0.172 kg
Product Function	
product function	
● phase sequence recognition	No
● phase failure detection	No
● asymmetry detection	No
● error memory	Yes
● adjustable open/closed-circuit current principle	No
● manual 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

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Measuring circuit	
measurable line frequency	15 ... 400 Hz
measurable voltage at AC	0 ... 250 V
measurable voltage at DC	0 ... 300 V
Communication/ Protocol	
protocol is supported IO-Link protocol	No
Auxiliary circuit	
number of NC contacts for auxiliary contacts	0
number of NC contacts delayed switching	0
number of NO contacts for auxiliary contacts	0
number of NO contacts delayed switching	0
number of CO contacts	
● delayed switching	1
Main circuit	
operating frequency rated value	15 ... 400 Hz
Safety related data	
product function suitable for safety function	No
Electrical Safety	
protection class IP on the front according to IEC 60529	IP20
Connections/ Terminals	
product component removable terminal for auxiliary and control circuit	No
type of electrical connection	screw terminal
type of connectable conductor cross-sections	
● solid	1x (0.5 ... 4 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)
● finely stranded without core end processing	1x (0.5 ... 2.5 mm²), 2x (0.5 ... 1.5 mm²)
● for AWG cables solid	1x (20 ... 12), 2x (20 ... 14)
● for AWG cables stranded	1x (18 ... 14), 2x (18 ... 16)
connectable conductor cross-section	
● solid	0.5 ... 4 mm²
● finely stranded with core end processing	0.5 ... 2.5 mm²
● finely stranded without core end processing	0.5 ... 2.5 mm²
AWG number as coded connectable conductor cross section	
● solid	20 ... 12
● stranded	18 ... 14
tightening torque with screw-type terminals	0.6 ... 0.8 N·m
Installation/ mounting/ dimensions	
mounting position	any
fastening method	snap-on fastening on 35 mm DIN rail
height	78 mm
width	22.5 mm
depth	100 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

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— backwards	0 mm
— upwards	0 mm
— downwards	0 mm
— at the side	0 mm

Ambient conditions	
ambient temperature during operation	-25 ... +60 °C

Approvals Certificates	
Environmental Product Declaration	
• global warming potential [CO2 eq] / during manufacturing	3.51 kg
• global warming potential [CO2 eq] / during sales	0.0276 kg
• global warming potential [CO2 eq] / during operation	13.7 kg
• global warming potential [CO2 eq] / after end of life	-1.12 kg
• global warming potential [CO2 eq] / total	16.1 kg

Environment

Environmental Confirmations

General Product Approval

General Product Approval

EMV

Maritime application

other

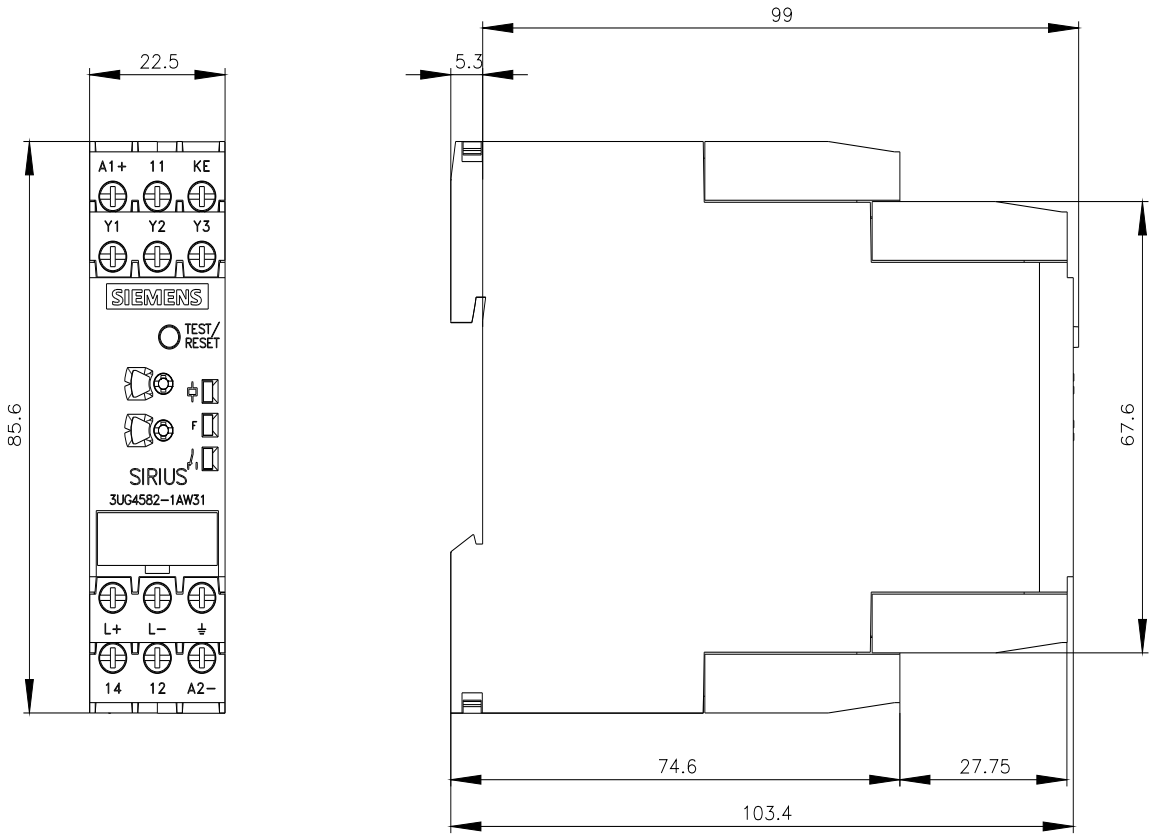
Confirmation

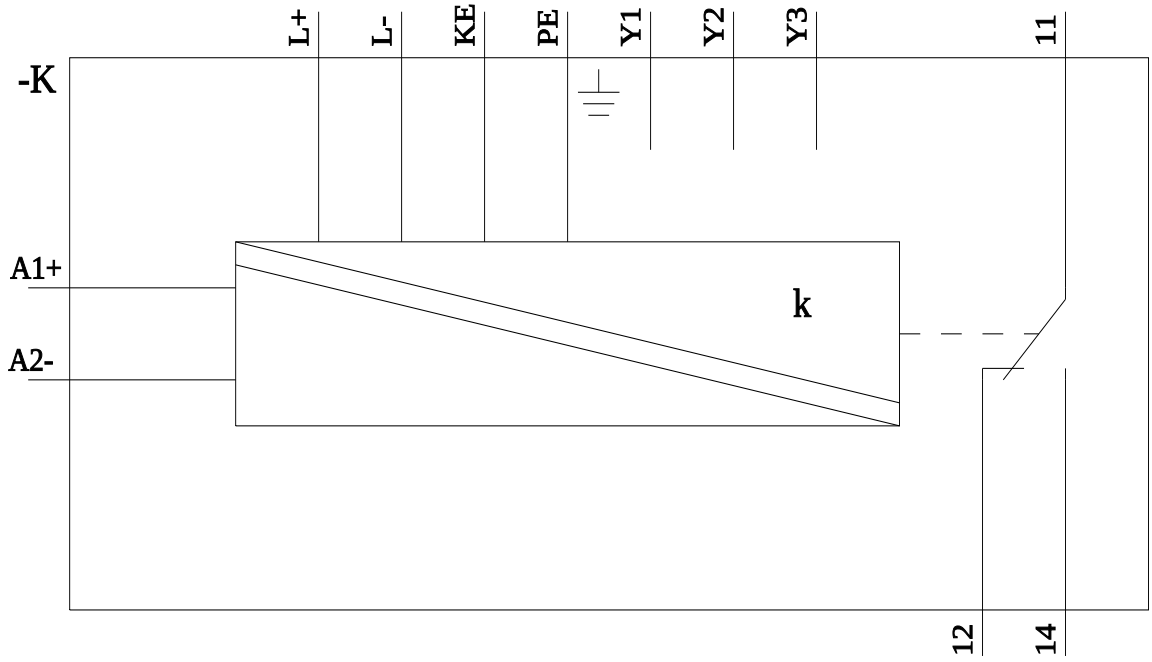
other

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=3UG4582-1AW31
Cax online generator
https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UG4582-1AW31
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3UG4582-1AW31
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3UG4582-1AW31&lang=en

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