



insulation monitoring relay for ungrounded (IT) networks up to 400 V AC, 50-60 Hz
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
• of the operating voltage for actuation	AC/DC
• of the control supply voltage	AC/DC
surge voltage resistance rated value	6 000 V
protection class IP	IP20
thermal current of the switching element with contacts maximum	4 A
reference code according to IEC 81346-2	K
Substance Prohibitance (Date)	05/01/2012
Product Function	
product function	
• 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
Measuring circuit	
measurable line frequency	50 ... 60 Hz
measurable voltage at AC	0 ... 400 V
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	50 ... 60 Hz
Connections/ Terminals	
product component removable terminal for auxiliary and control circuit	No
type of electrical connection	screw-type terminals
type of connectable conductor cross-sections	
• solid	1x (0.5 ... 4.0 mm ²), 2x (0.5 ... 2.5 mm ²)
• finely stranded with core end processing	1x (0.5 ... 2.5 mm ²), 2x (0.5 ... 1.5 mm ²)
• finely stranded without core end processing	1x (0.5 ... 2.5 mm ²), 2x (0.5 ... 1.5 mm ²)
• 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 mm ²
• finely stranded with core end processing	0.5 ... 2.5 mm ²
• finely stranded without core end processing	0.5 ... 2.5 mm ²
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
— 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	
General Product Approval	



[Confirmation](#)



EMV	Marine / Shipping	other
-----	-------------------	-------



[Confirmation](#)

Further information

Siemens has decided to exit the Russian market (see here).

<https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business>

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

Information on the packaging

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

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=3UG4581-1AW31>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UG4581-1AW31>

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

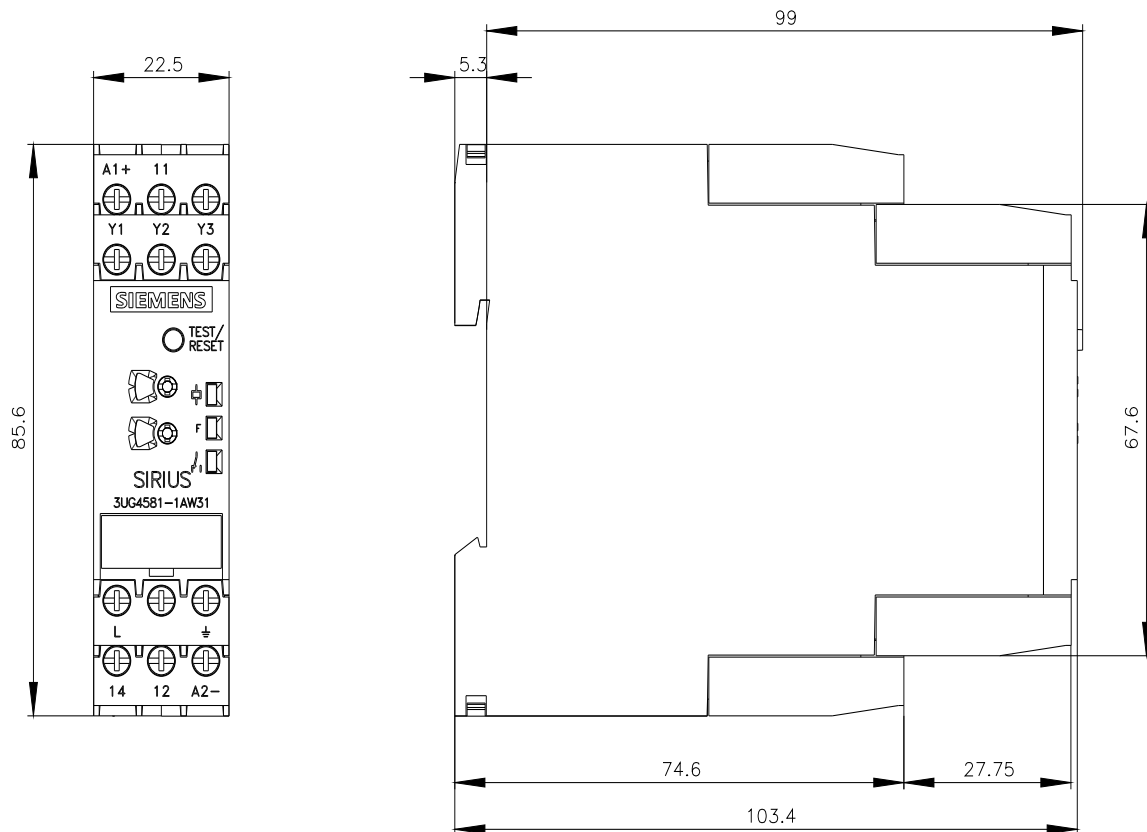
<https://support.industry.siemens.com/cs/ww/en/ps/3UG4581-1AW31>

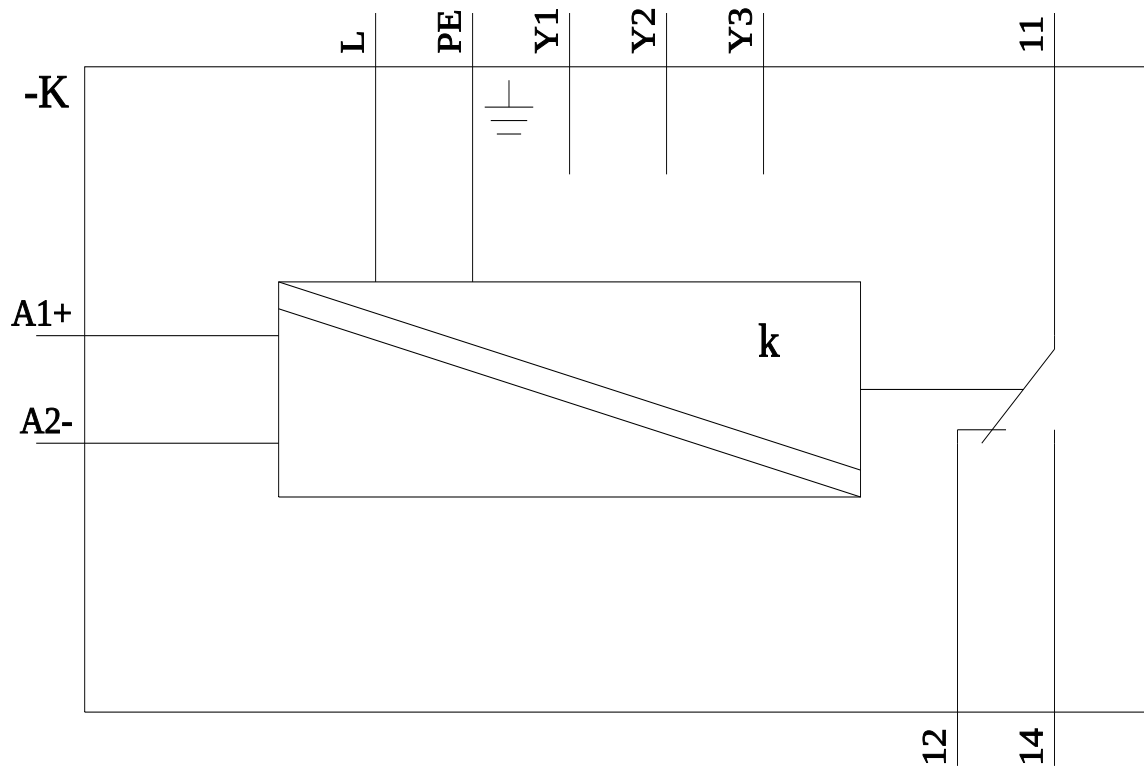
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3UG4581-1AW31&lang=en

Characteristic: Derating

<https://support.industry.siemens.com/cs/ww/en/ps/3UG4581-1AW31/manual>





last modified:

3/31/2023 