



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 spring-loaded terminal (push-in)

<b>product brand name</b>	SIRIUS
<b>product designation</b>	Insulation monitoring relay with analog setting
<b>product type designation</b>	3UG4
<b>General technical data</b>	
<b>product function</b>	Insulation monitor
<b>type of voltage</b>	
• for monitoring	AC
• of the operating voltage for actuation	AC/DC
• of the control supply voltage	AC/DC
<b>surge voltage resistance rated value</b>	6 000 V
<b>protection class IP</b>	IP20
<b>thermal current of the switching element with contacts maximum</b>	4 A
<b>reference code according to IEC 81346-2</b>	K
<b>Substance Prohibitance (Date)</b>	05/01/2012
<b>Product Function</b>	
<b>product function</b>	
• error memory	Yes
• adjustable open/closed-circuit current principle	No
• manual RESET	Yes
<b>Control circuit/ Control</b>	
<b>control supply voltage at AC</b>	
• 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
<b>operating range factor control supply voltage rated value at DC</b>	
• initial value	0.85
• full-scale value	1.1
<b>operating range factor control supply voltage rated value at AC at 50 Hz</b>	
• initial value	0.85
• full-scale value	1.1
<b>operating range factor control supply voltage rated value at AC at 60 Hz</b>	
• initial value	0.85
• full-scale value	1.1
<b>Measuring circuit</b>	
<b>measurable line frequency</b>	50 ... 60 Hz
<b>measurable voltage at AC</b>	0 ... 400 V
<b>Auxiliary circuit</b>	

<b>number of NC contacts for auxiliary contacts</b>	0	
number of NC contacts delayed switching	0	
<b>number of NO contacts for auxiliary contacts</b>	0	
number of NO contacts delayed switching	0	
<b>number of CO contacts</b>		
• delayed switching	1	
<b>Main circuit</b>		
<b>operating frequency rated value</b>	50 ... 60 Hz	
<b>Connections/ Terminals</b>		
<b>product component removable terminal for auxiliary and control circuit</b>	No	
<b>type of electrical connection</b>	spring-loaded terminals	
<b>type of connectable conductor cross-sections</b>		
• solid	2x (0.5 ... 1.5 mm <sup>2</sup> )	
• finely stranded with core end processing	2x (0.5 ... 1.5 mm <sup>2</sup> )	
• finely stranded without core end processing	2x (0.5 ... 1.5 mm <sup>2</sup> )	
• for AWG cables solid	2x (20 ... 16)	
• for AWG cables stranded	2x (18 ... 16)	
<b>connectable conductor cross-section</b>		
• solid	0.5 ... 1.5 mm <sup>2</sup>	
• finely stranded with core end processing	0.5 ... 1.5 mm <sup>2</sup>	
• finely stranded without core end processing	0.5 ... 1.5 mm <sup>2</sup>	
<b>AWG number as coded connectable conductor cross section</b>		
• solid	20 ... 16	
• stranded	18 ... 16	
<b>Installation/ mounting/ dimensions</b>		
<b>mounting position</b>	any	
<b>fastening method</b>	snap-on fastening on 35 mm DIN rail	
<b>height</b>	78 mm	
<b>width</b>	22.5 mm	
<b>depth</b>	100 mm	
<b>required spacing</b>		
• 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	
<b>Ambient conditions</b>		
ambient temperature during operation	-25 ... +60 °C	
<b>Approvals Certificates</b>		
General Product Approval	EMC	Declaration of Conformity



[Confirmation](#)



Declaration of Conformity	Marine / Shipping	other
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[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=3UG4581-2AW31>

Cax online generator

<http://support.automation.siemens.com/WWW/CAXorder/default.aspx?lang=en&mlfb=3UG4581-2AW31>

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

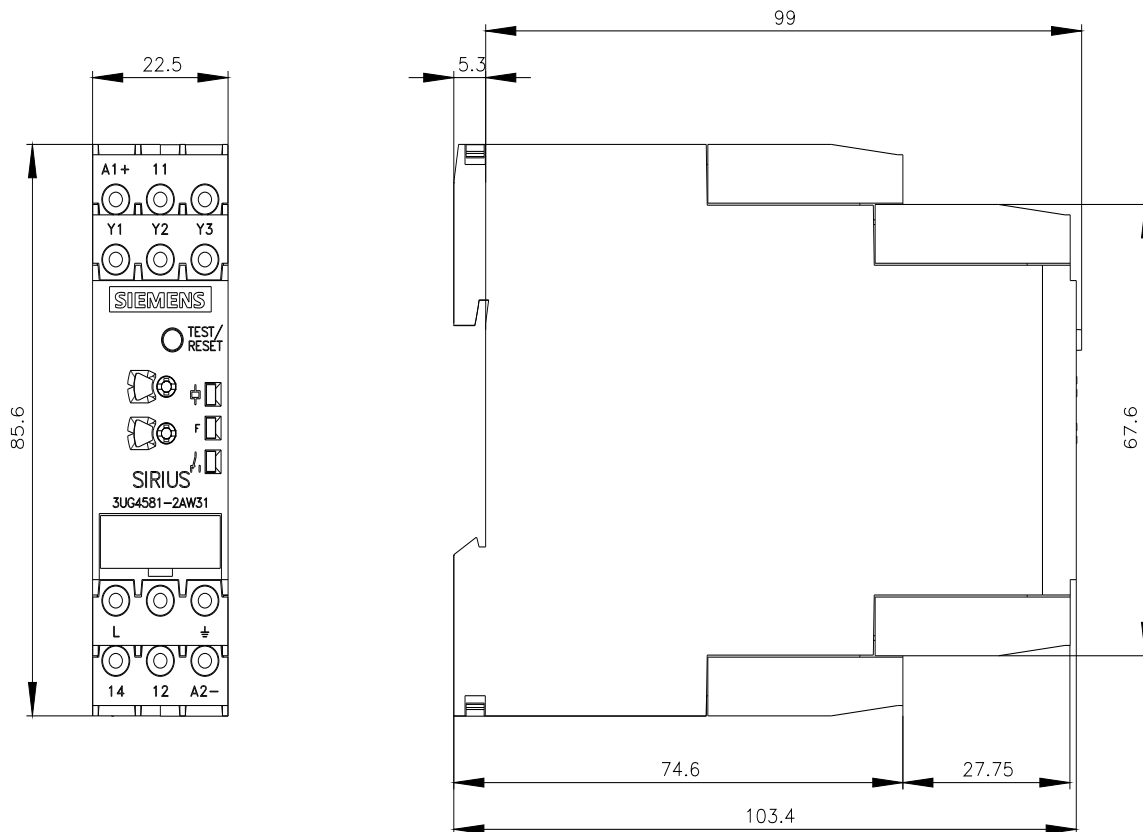
<https://support.industry.siemens.com/cs/ww/en/ps/3UG4581-2AW31>

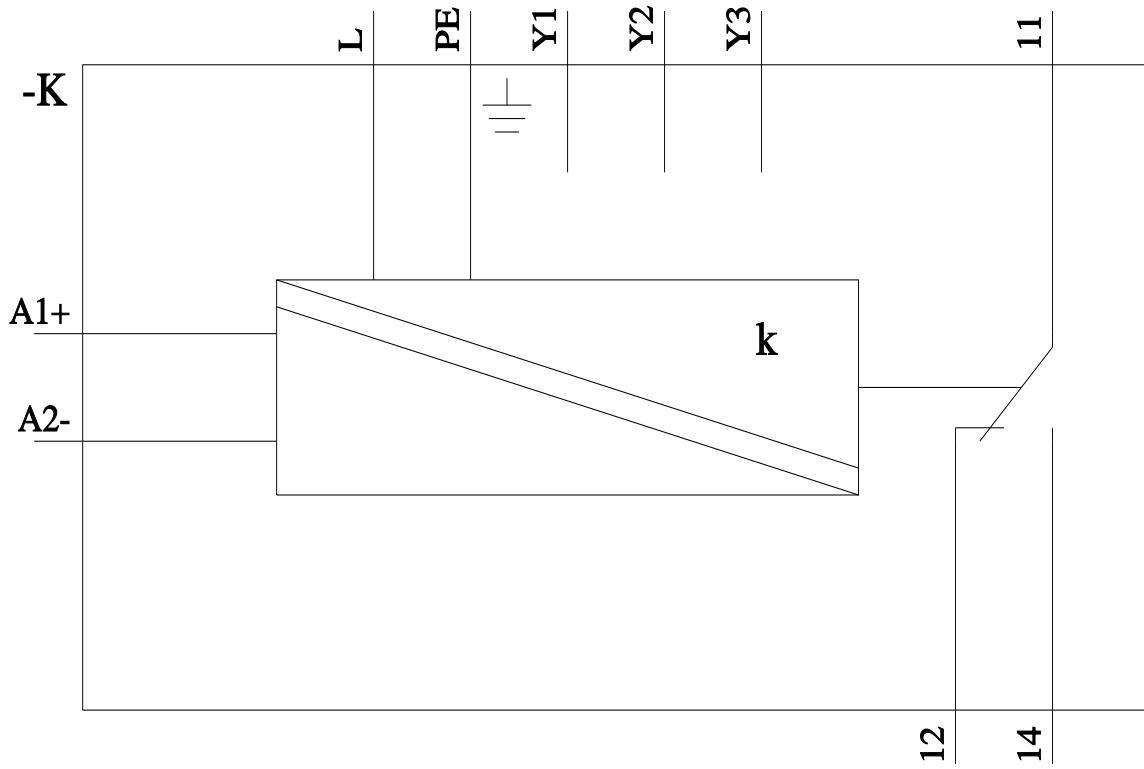
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3UG4581-2AW31&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3UG4581-2AW31&lang=en)

Characteristic: Derating

<https://support.industry.siemens.com/cs/ww/en/ps/3UG4581-2AW31/manual>





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3/31/2023 