



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
<b>General technical data</b>	
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
<b>Product Function</b>	
product function	
• error memory	Yes
• adjustable open/closed-circuit current principle	No
• manual RESET	Yes
<b>Control circuit/ Control</b>	
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
<b>Measuring circuit</b>	
measurable line frequency	50 ... 60 Hz
measurable voltage at AC	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>	screw terminal
<b>type of connectable conductor cross-sections</b>	
• solid	1x (0.5 ... 4.0 mm <sup>2</sup> ), 2x (0.5 ... 2.5 mm <sup>2</sup> )
• finely stranded with core end processing	1x (0.5 ... 2.5 mm <sup>2</sup> ), 2x (0.5 ... 1.5 mm <sup>2</sup> )
• finely stranded without core end processing	1x (0.5 ... 2.5 mm <sup>2</sup> ), 2x (0.5 ... 1.5 mm <sup>2</sup> )
• for AWG cables solid	1x (20 ... 12), 2x (20 ... 14)
• for AWG cables stranded	1x (18 ... 14), 2x (18 ... 16)
<b>connectable conductor cross-section</b>	
• solid	0.5 ... 4 mm <sup>2</sup>
• finely stranded with core end processing	0.5 ... 2.5 mm <sup>2</sup>
• finely stranded without core end processing	0.5 ... 2.5 mm <sup>2</sup>
<b>AWG number as coded connectable conductor cross section</b>	
• solid	20 ... 12
• stranded	18 ... 14
tightening torque with screw-type terminals	0.6 ... 0.8 N·m
<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>	
<b>General Product Approval</b>	



[Confirmation](#)



EG-Konf.



CCC



UL





[KC](#)



[Confirmation](#)

[Environmental Confirmations](#)

**Further information**

**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,...)**

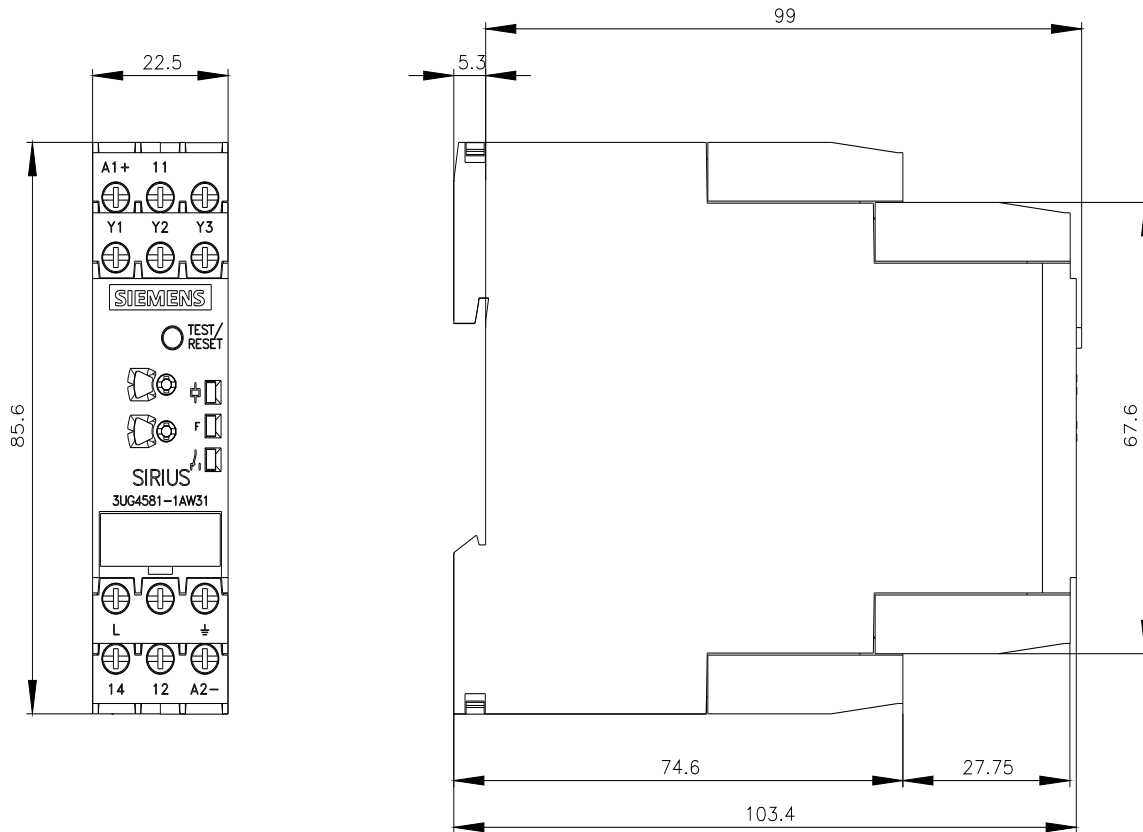
<https://support.industry.siemens.com/cs/ww/en/ps/3UG4581-1AW31>

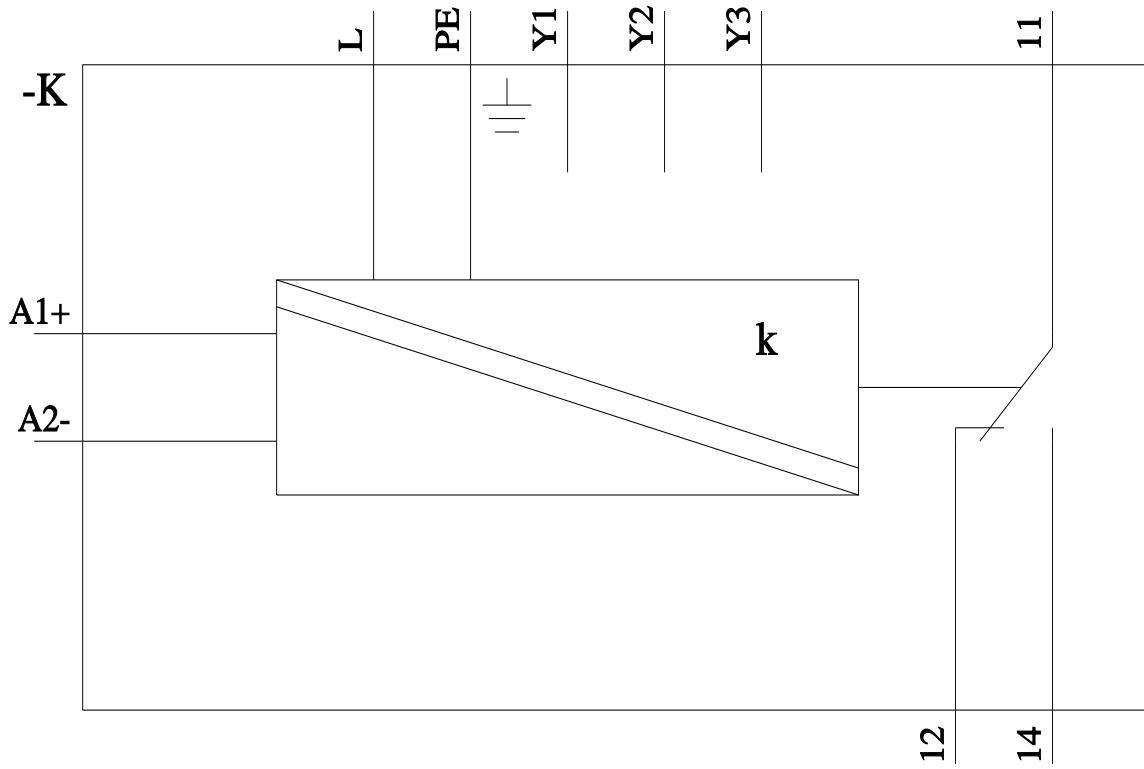
**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)**

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3UG4581-1AW31&lang=en](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>





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