



insulation monitoring relay for non-grounded (IT) networks up to 400 V AC, 15-400 Hz and up to 600 V DC measuring range 1-100 / 2-200 kOhm supply voltage 24-240 V AC/DC width 45 mm 1 + 1 or 2 changeover contacts screw terminal

<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/DC
• of the operating voltage for actuation	AC/DC
• of the control supply voltage	AC/DC
<b>surge voltage resistance rated value</b>	4 000 V
<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 (day/month/year)</b>	05/01/2012
<b>Net Weight</b>	0.28 kg
<b>Product Function</b>	
<b>product function</b>	
• phase sequence recognition	No
• phase failure detection	No
• asymmetry detection	No
• 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
<b>control supply voltage at DC rated value</b>	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

Measuring circuit	
measurable line frequency	15 ... 400 Hz
measurable voltage at AC	0 ... 400 V
measurable voltage at DC	0 ... 600 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	2
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 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)
connectable conductor cross-section	
• 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>
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	45 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
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#### 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

##### General Product Approval

[Environmental Confirmations](#)



##### General Product Approval

##### EMV

##### Maritime application



##### other



[Confirmation](#)

[Confirmation](#)

#### 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=3UG4583-1CW31>

##### Cax online generator

<https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UG4583-1CW31>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3UG4583-1CW31>

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

[https://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3UG4583-1CW31&lang=en](https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3UG4583-1CW31&lang=en)



