SIEMENS

Data sheet 3UG4581-1AW31



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	- U		
	1		
delayed switching Main circuit			
Main circuit	50 60 Hz		
operating frequency rated value Connections/ Terminals	50 60 HZ	_	_
product component removable terminal for auxiliary and	No		
control circuit	110		
type of electrical connection	screw-type terminals		
type of connectable conductor cross-sections			
• solid	1x (0.5 4.0 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 D	NN 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	V 11111		
— forwards	0 mm		
— backwards	0 mm		
— upwards	0 mm		
— at the side	0 mm		
— at the side — downwards	0 mm		
downwards for live parts	O IIIIII		
•	0 mm		
— forwards	0 mm		
— backwards	0 mm		
— upwards	0 mm		
— downwards	0 mm		
— at the side	0 mm		
Ambient conditions	05 .00.00		
ambient temperature during operation	-25 +60 °C		
Certificates/ approvals			
General Product Approval		EMC	Declaration of Conformity











Declaration of Conformity

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,...)

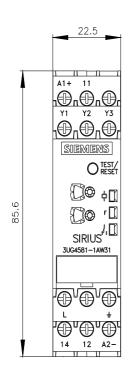
https://support.industry.siemens.com/cs/ww/en/ps/3UG4581-1AW31

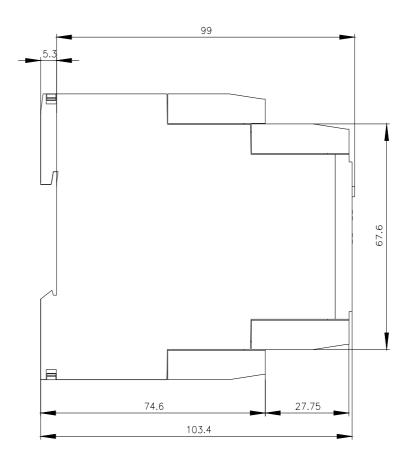
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

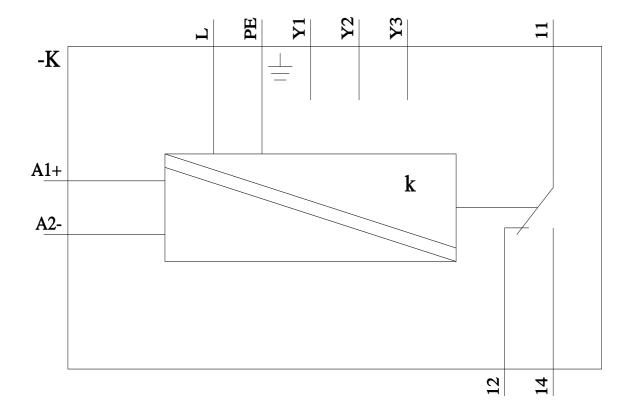
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3UG4581-1AW31&lang=en

Characteristic: Derating

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







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