



Figure similar

Analog monitoring relay Phase sequence monitoring 3 x 320...500 V
50...60 Hz AC 1 change-over contact screw terminal Successor product for
3UG3511-1AQ50

product brand name	SIRIUS	
product designation	Network monitoring relay with analog setting	
design of the product	1 function	
product type designation	3UG4	
General technical data		
product function	Phase monitoring relay	
display version LED	Yes	
insulation voltage for overvoltage category III according to IEC 60664	690 V	
• with degree of pollution 3 rated value		
degree of pollution	3	
type of voltage	AC	
• for monitoring		
• of the control supply voltage	AC	
surge voltage resistance rated value	6 kV	
protection class IP	IP20	
shock resistance according to IEC 60068-2-27	sinusoidal half-wave 15g / 11 ms	
vibration resistance according to IEC 60068-2-6	1 ... 6 Hz: 15 mm, 6 ... 500 Hz: 2g	
mechanical service life (switching cycles) typical	10 000 000	
electrical endurance (switching cycles) at AC-15 at 230 V typical	100 000	
thermal current of the switching element with contacts maximum	5 A	
reference code according to IEC 81346-2	K	
Substance Prohibitance (Date)	05/01/2012	
Product Function		
product function	<ul style="list-style-type: none"> • undervoltage detection No • overvoltage detection No • phase sequence recognition Yes • phase failure detection Yes; available but limited, detection is problematic with high levels of regenerative power recovery • asymmetry detection No • overvoltage detection 3 phase No • undervoltage detection 3 phases No • voltage window recognition 3 phase No • adjustable open/closed-circuit current principle No • auto-RESET Yes 	
• undervoltage detection		
• overvoltage detection		
• phase sequence recognition		
• phase failure detection		
• asymmetry detection		
• overvoltage detection 3 phase		
• undervoltage detection 3 phases		
• voltage window recognition 3 phase		
• adjustable open/closed-circuit current principle		
• auto-RESET		
Control circuit/ Control		

control supply voltage at AC	
<ul style="list-style-type: none"> at 50 Hz rated value at 60 Hz rated value 	320 ... 500 V 320 ... 500 V
operating range factor control supply voltage rated value at AC at 50 Hz	
<ul style="list-style-type: none"> initial value full-scale value 	1 1
operating range factor control supply voltage rated value at AC at 60 Hz	
<ul style="list-style-type: none"> initial value full-scale value 	1 1
Measuring circuit	
measurable voltage at AC	500 ... 320 V
Auxiliary circuit	
number of NC contacts delayed switching	0
number of NO contacts delayed switching	0
number of CO contacts delayed switching	1
operating frequency with 3RT2 contactor maximum	5 000 1/h
Main circuit	
number of poles for main current circuit	3
ampacity of the output relay at AC-15	
<ul style="list-style-type: none"> at 250 V at 50/60 Hz at 400 V at 50/60 Hz 	3 A 3 A
ampacity of the output relay at DC-13	
<ul style="list-style-type: none"> at 24 V at 125 V at 250 V 	1 A 0.2 A 0.1 A
operational current at 17 V minimum	5 mA
continuous current of the DIAZED fuse link of the output relay	4 A
Electromagnetic compatibility	
conducted interference	
<ul style="list-style-type: none"> due to burst according to IEC 61000-4-4 due to conductor-earth surge according to IEC 61000-4-5 due to conductor-conductor surge according to IEC 61000-4-5 	2 kV 2 kV 1 kV
field-based interference according to IEC 61000-4-3	10 V/m
electrostatic discharge according to IEC 61000-4-2	6 kV contact discharge / 8 kV air discharge
Galvanic isolation	
galvanic isolation	
<ul style="list-style-type: none"> between input and output between the outputs between the voltage supply and other circuits 	Yes Yes Yes
Connections/ Terminals	
product component removable terminal for auxiliary and control circuit	Yes
type of electrical connection	screw-type terminals
type of connectable conductor cross-sections	
<ul style="list-style-type: none"> solid finely stranded with core end processing at AWG cables solid at AWG cables stranded 	1x (0.5 ... 4 mm ²), 2x (0.5 ... 2.5 mm ²) 1x (0.5 ... 2.5 mm ²), 2x (0.5 ... 1.5 mm ²) 2x (20 ... 14) 2x (20 ... 14)
connectable conductor cross-section	
<ul style="list-style-type: none"> solid finely stranded with core end processing 	0.5 ... 4 mm ² 0.5 ... 2.5 mm ²
AWG number as coded connectable conductor cross section	
<ul style="list-style-type: none"> solid stranded 	20 ... 14 20 ... 14
tightening torque with screw-type terminals	0.8 ... 1.2 N·m

Installation/ mounting/ dimensions	
mounting position	any
fastening method	snap-on mounting
height	83 mm
width	22.5 mm
depth	91 mm
required spacing	
<ul style="list-style-type: none"> • with side-by-side mounting <ul style="list-style-type: none"> — forwards 0 mm — backwards 0 mm — upwards 0 mm — downwards 0 mm — at the side 0 mm • for grounded parts <ul style="list-style-type: none"> — forwards 0 mm — backwards 0 mm — upwards 0 mm — at the side 0 mm — downwards 0 mm • for live parts <ul style="list-style-type: none"> — forwards 0 mm — backwards 0 mm — upwards 0 mm — downwards 0 mm — at the side 0 mm 	

Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
<ul style="list-style-type: none"> • during operation -25 ... +60 °C • during storage -40 ... +85 °C • during transport -40 ... +85 °C 	

Certificates/ approvals		
General Product Approval	EMC	Declaration of Conformity



[Confirmation](#)



Test Certificates	Marine / Shipping	other	Railway
-------------------	-------------------	-------	---------

[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



[Confirmation](#)

[Vibration and Shock](#)

Further information

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?mfb=3UG4511-1AP20>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mfb=3UG4511-1AP20>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3UG4511-1AP20>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mfb=3UG4511-1AP20&lang=en

Characteristic: Derating

<https://support.industry.siemens.com/cs/ww/en/ps/3UG4511-1AP20/manual>

last modified:

12/21/2020 