



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	
• with degree of pollution 3 rated value	690 V
degree of pollution	3
type of voltage	
• for monitoring	AC
• of the control supply voltage	AC
surge voltage resistance rated value	6 kV
protection class IP	IP20
shock resistance acc. to IEC 60068-2-27	sinusoidal half-wave 15g / 11 ms
vibration resistance acc. 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 acc. to IEC 81346-2	K
Product Function	
product function	
• 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

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
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
Outputs	
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 acc. to IEC 61000-4-4 • due to conductor-earth surge acc. to IEC 61000-4-5 • due to conductor-conductor surge acc. to IEC 61000-4-5 	2 kV 2 kV 1 kV
field-based interference acc. to IEC 61000-4-3	10 V/m
electrostatic discharge acc. 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 function 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)
<ul style="list-style-type: none"> • connectable conductor cross-section solid • connectable conductor cross-section finely stranded with core end processing 	0.5 ... 4 mm ² 0.5 ... 2.5 mm ²
<ul style="list-style-type: none"> • AWG number as coded connectable conductor cross section solid • AWG number as coded connectable conductor cross section 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
<ul style="list-style-type: none"> • ambient temperature during operation -25 ... +60 °C • ambient temperature during storage -40 ... +85 °C • ambient temperature during transport -40 ... +85 °C 	

Certificates/ approvals

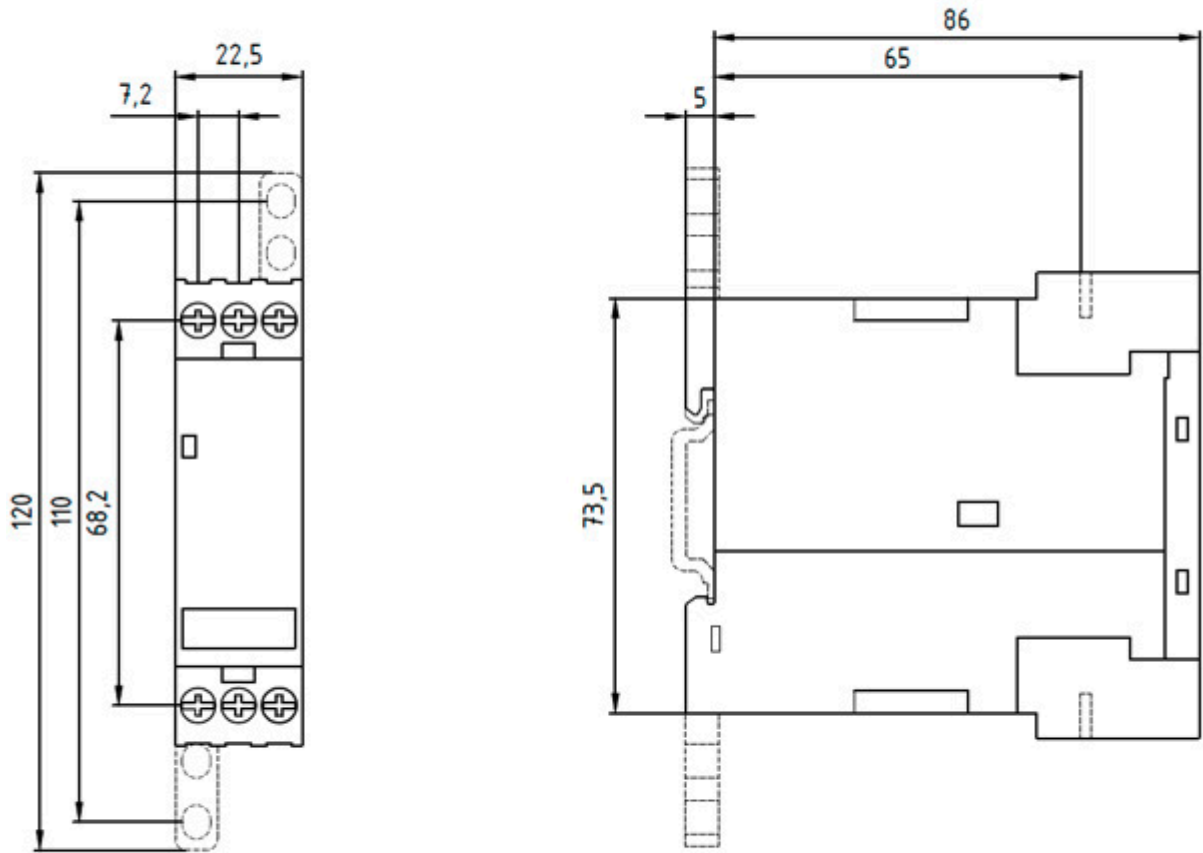
General Product Approval	EMC	Declaration of Conformity	Test Certificates
 CCC	 UL	 RCM	Miscellaneous  EG-Konf.
			Type Test Certificates/Test Report

Test Certificates	Marine / Shipping	other	Railway
Special Test Certificate	 LRS	 DNV-GL	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?mlfb=3UG4511-1AP20>
Cax online generator
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=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?mlfb=3UG4511-1AP20&lang=en
Characteristic: Derating

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



last modified:

12/9/2020