SIEMENS

Data sheet 3UG4511-2AQ20



!!! product phase-out !!! The preferred successor type is 3UG5511-2AR20 phase sequence monitoring 3x420-690 V 1 CO analog monitoring relay phase sequence monitoring 3 x 420...690 V 50...60 Hz AC 1 changeover contact spring-loaded connection system

Figure similar

product brand name	SIRIUS
product designation	Line monitoring relay
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 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 (operating cycles) typical	10 000 000
electrical endurance (operating 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
SVHC substance name	Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol - 79-94-7
Product Function	
product function	
 undervoltage detection 	No
 overvoltage detection 	No
 phase sequence recognition 	Yes
 phase failure detection 	No
 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	
at 50 Hz rated value	420 690 V
at 60 Hz rated value	420 690 V
operating range factor control supply voltage rated value at AC at 50 Hz	
initial value	1
full-scale value	1
operating range factor control supply voltage rated value at AC at 60 Hz	
initial value	1
full-scale value	1
Measuring circuit	
measurable voltage at AC	420 690 V
response time maximum	450 ms
Auxiliary circuit	
number of NC contacts delayed switching	0
number of NO contacts delayed switching	0
number of CO contacts	
for auxiliary contacts	1
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	
• at 250 V at 50/60 Hz	3 A
• at 400 V at 50/60 Hz	3 A
ampacity of the output relay at DC-13	
• at 24 V	1 A
• at 125 V	0.2 A
• at 250 V	0.1 A
operational current at 17 V minimum	5 mA
continuous current of the DIAZED fuse link of the output	4 A
relay	771
Electromagnetic compatibility	
conducted interference	
 due to burst according to IEC 61000-4-4 	2 kV
• due to conductor-earth surge according to IEC 61000-4-5	2 kV
 due to conductor-conductor surge according to IEC 61000-4-5 	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	
between input and output	Yes
between the outputs	Yes
between the voltage supply and other circuits	Yes
Connections/ Terminals	
product component removable terminal for auxiliary and control circuit	Yes
type of electrical connection	spring-loaded terminals
type of connectable conductor cross-sections	opg .oudou tommulo
• solid	2x (0.25 1.5 mm²)
	\ · /
• finely stranded with core end processing	2 x (0.25 1.5 mm²)
finely stranded with core end processingfinely stranded without core end processing	2 x (0.25 1.5 mm²) 2x (0.25 1.5 mm²)
 finely stranded with core end processing finely stranded without core end processing for AWG cables solid 	2 x (0.25 1.5 mm²) 2x (0.25 1.5 mm²) 2x (24 16)
 finely stranded with core end processing finely stranded without core end processing for AWG cables solid for AWG cables stranded 	2 x (0.25 1.5 mm²) 2x (0.25 1.5 mm²)
finely stranded with core end processing finely stranded without core end processing for AWG cables solid for AWG cables stranded connectable conductor cross-section	2 x (0.25 1.5 mm²) 2x (0.25 1.5 mm²) 2x (24 16) 2x (24 16)
finely stranded with core end processing finely stranded without core end processing for AWG cables solid for AWG cables stranded connectable conductor cross-section solid	2 x (0.25 1.5 mm²) 2x (0.25 1.5 mm²) 2x (24 16) 2x (24 16) 0.25 1.5 mm²
finely stranded with core end processing finely stranded without core end processing for AWG cables solid for AWG cables stranded connectable conductor cross-section solid finely stranded with core end processing	2 x (0.25 1.5 mm²) 2x (0.25 1.5 mm²) 2x (24 16) 2x (24 16) 0.25 1.5 mm² 0.25 1.5 mm²
finely stranded with core end processing finely stranded without core end processing for AWG cables solid for AWG cables stranded connectable conductor cross-section solid	2 x (0.25 1.5 mm²) 2x (0.25 1.5 mm²) 2x (24 16) 2x (24 16) 0.25 1.5 mm²

• solid	24 16	
• stranded	24 16	
Installation/ mounting/ dimensions		
mounting position	any	
fastening method	snap-on mounting	
height	84 mm	
width	22.5 mm	
depth	91 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		
installation altitude at height above sea level maximum	2 000 m	
ambient temperature		
 during operation 	-25 +60 °C	
during storage	-40 +85 °C	
during transport	-40 +85 °C	
Approvals Certificates		

General Product Approval







Confirmation





EMV Test Certificates Marine / Shipping



<u>KC</u>

Special Test Certificate

Type Test Certificates/Test Report





other Railway Environment

 Confirmation
 Special Test Certificate
 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=3UG4511-2AQ20

Cax online generator

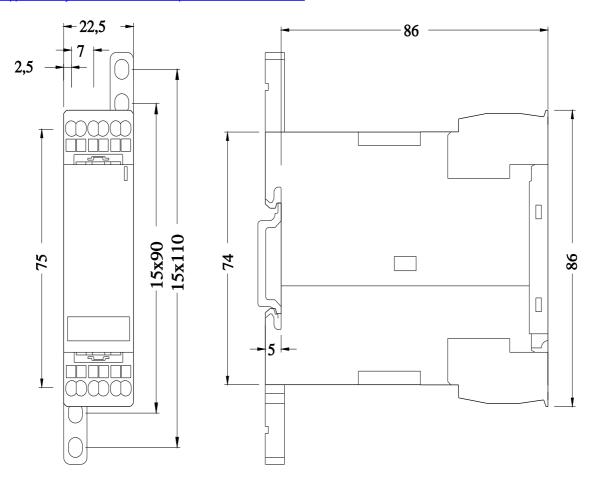
 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3UG4511-2AQ20}$

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3UG4511-2AQ20

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3UG4511-2AQ20&lang=en

Characteristic: Derating

https://support.industry.siemens.com/cs/ww/en/ps/3UG4511-2AQ20/manual



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