SIEMENS

Data sheet 3UG4511-2AP20

!!! product phase-out !!! the preferred successor is 3UG5511-2AR20 phase sequence monitoring 3 x 320...500 V, 1 changeover contact; analog monitoring relay phase sequence monitoring 3 x 320...500 V 50...60 Hz AC 1 changeover contact spring-loaded connection system

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
surge voltage resistance rated value	6 kV
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
Weight	0.115 kg
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	
type of voltage of the control supply voltage	AC

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	
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 relay	4 A
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
Electrical Safety	
protection class IP on the front according to IEC 60529	IP20
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	
● solid	2x (0.25 ... 1.5 mm²)
● finely stranded with core end processing	2 x (0.25 ... 1.5 mm²)
● finely stranded without core end processing	2x (0.25 ... 1.5 mm²)
● for AWG cables solid	2x (24 ... 16)
● for AWG cables stranded	2x (24 ... 16)
connectable conductor cross-section	
● solid	0.25 ... 1.5 mm²
● finely stranded with core end processing	0.25 ... 1.5 mm²
● finely stranded without core end processing	0.25 ... 1.5 mm²
AWG number as coded connectable conductor cross section	

● 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
Environmental footprint	
Environmental Product Declaration(EPD)	Yes
global warming potential [CO2 eq] total	16.1 kg
global warming potential [CO2 eq] during manufacturing	3.51 kg
global warming potential [CO2 eq] during operation	13.7 kg
global warming potential [CO2 eq] after end of life	-1.12 kg
Approvals Certificates	

General Product Approval

CCC UKCA CE EG-Konf. UL EAC AR

EMV	Test Certificates		Maritime application	
RCM	KC	Special Test Certific-ate	Type Test Certific-ates/Test Report	DNV LRS

other	Railway	Environment

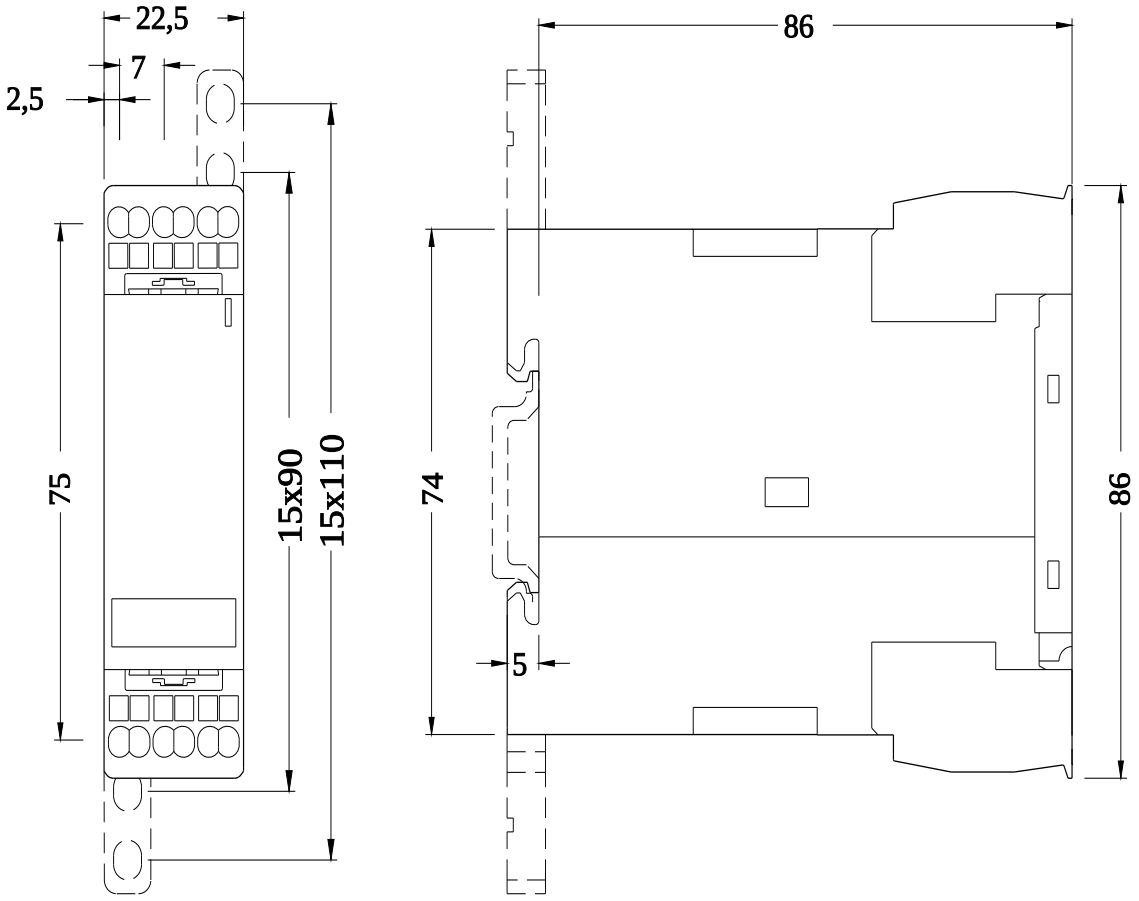
Confirmation

Special Test Certific-ate

Environmental Con-firmations

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=3UG4511-2AP20
Cax online generator
https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UG4511-2AP20
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3UG4511-2AP20
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3UG4511-2AP20&lang=en



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