SIEMENS

Data sheet 3UG4511-2BP20



!!! product phase-out !!! The preferred successor type is 3UG5511-2BR20 phase sequence monitoring 3x320-500 V 2 CO analog monitoring relay phase sequence monitoring 3 x 320...500 V 50...60 Hz AC 2 changeover contacts 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	3007		
product function	Phase manitoring relay		
·	Phase monitoring relay Yes		
display version LED	1 es		
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	Blei - 7439-92-1 Bleimonoxid (Bleioxid) - 1317-36-8 2,2',6,6'-Tetrabrom-4,4'-isopropylidendi - 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	320 500 V		
at 60 Hz rated value	320 500 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	•		
	320 500 V		
measurable voltage at AC	320 300 V		
Auxiliary circuit			
number of NC contacts delayed switching	0		
number of NO contacts delayed switching	0		
number of CO contacts			
for auxiliary contacts	2		
delayed switching	2		
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			
Electromagnetic compatibility			
-			
Electromagnetic compatibility conducted interference	2 kV		
Electromagnetic compatibility conducted interference • due to burst according to IEC 61000-4-4			
Electromagnetic compatibility conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5	2 kV 2 kV 1 kV		
Electromagnetic compatibility conducted interference • due to burst according to IEC 61000-4-4	2 kV		
Electromagnetic compatibility conducted interference • 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	2 kV		
Electromagnetic compatibility conducted interference • 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 1 kV		
Electromagnetic compatibility conducted interference • 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 field-based interference according to IEC 61000-4-3	2 kV 1 kV		
Electromagnetic compatibility conducted interference • 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 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2	2 kV 1 kV		
Electromagnetic compatibility conducted interference • 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 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Galvanic isolation	2 kV 1 kV		
Electromagnetic compatibility conducted interference • 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 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Galvanic isolation galvanic isolation	2 kV 1 kV 10 V/m 6 kV contact discharge / 8 kV air discharge		
Electromagnetic compatibility conducted interference • 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 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Galvanic isolation galvanic isolation • between input and output	2 kV 1 kV 10 V/m 6 kV contact discharge / 8 kV air discharge Yes		
Electromagnetic compatibility conducted interference • 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 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Galvanic isolation galvanic isolation • between input and output • between the outputs	2 kV 1 kV 10 V/m 6 kV contact discharge / 8 kV air discharge Yes Yes		
Electromagnetic compatibility conducted interference • 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 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Galvanic isolation galvanic isolation • between input and output • between the outputs • between the voltage supply and other circuits	2 kV 1 kV 10 V/m 6 kV contact discharge / 8 kV air discharge Yes Yes		
Electromagnetic compatibility conducted interference • 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 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Galvanic isolation galvanic isolation • between input and output • between the outputs • between the voltage supply and other circuits Connections/ Terminals product component removable terminal for auxiliary and control circuit	2 kV 1 kV 10 V/m 6 kV contact discharge / 8 kV air discharge Yes Yes Yes Yes		
Electromagnetic compatibility conducted interference • 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 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Galvanic isolation • between input and output • between the outputs • between the voltage supply and other circuits Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection	2 kV 1 kV 10 V/m 6 kV contact discharge / 8 kV air discharge Yes Yes Yes		
Electromagnetic compatibility conducted interference • 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 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Galvanic isolation galvanic isolation • between input and output • between the outputs • between the voltage supply and other circuits Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection type of connectable conductor cross-sections	2 kV 1 kV 10 V/m 6 kV contact discharge / 8 kV air discharge Yes Yes Yes Yes Spring-loaded terminals		
Electromagnetic compatibility conducted interference • 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 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Galvanic isolation galvanic isolation • between input and output • between the outputs • between the voltage supply and other circuits Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection type of connectable conductor cross-sections • solid	2 kV 1 kV 10 V/m 6 kV contact discharge / 8 kV air discharge Yes Yes Yes Yes Spring-loaded terminals 2x (0.25 1.5 mm²)		
Electromagnetic compatibility conducted interference • 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 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Galvanic isolation galvanic isolation • between input and output • between the outputs • between the voltage supply and other circuits Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection type of connectable conductor cross-sections • solid • finely stranded with core end processing	2 kV 1 kV 10 V/m 6 kV contact discharge / 8 kV air discharge Yes Yes Yes Yes Yes 2x (0.25 1.5 mm²) 2 x (0.25 1.5 mm²)		
Electromagnetic compatibility conducted interference • 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 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Galvanic isolation galvanic isolation • between input and output • between the outputs • between the voltage supply and other circuits Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection type of connectable conductor cross-sections • solid • finely stranded with core end processing • finely stranded without core end processing	2 kV 1 kV 10 V/m 6 kV contact discharge / 8 kV air discharge Yes Yes Yes Yes yes 2 x (0.25 1.5 mm²) 2 x (0.25 1.5 mm²)		
Electromagnetic compatibility conducted interference • 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 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Galvanic isolation • between input and output • between the outputs • between the voltage supply and other circuits Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection type of connectable conductor cross-sections • solid • finely stranded with core end processing • finely stranded without core end processing • for AWG cables solid	2 kV 1 kV 10 V/m 6 kV contact discharge / 8 kV air discharge Yes Yes Yes Yes Yes 2 x (0.25 1.5 mm²) 2 x (0.25 1.5 mm²) 2 x (0.25 1.5 mm²) 2 x (0.24 16)		
Electromagnetic compatibility conducted interference • 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 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Galvanic isolation galvanic isolation • between input and output • between the outputs • between the voltage supply and other circuits Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection type of connectable conductor cross-sections • solid • finely stranded with core end processing • finely stranded without core end processing • for AWG cables solid • for AWG cables stranded	2 kV 1 kV 10 V/m 6 kV contact discharge / 8 kV air discharge Yes Yes Yes Yes Yes spring-loaded terminals 2x (0.25 1.5 mm²) 2 x (0.25 1.5 mm²)		
Electromagnetic compatibility conducted interference • 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 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Galvanic isolation galvanic isolation • between input and output • between the outputs • between the voltage supply and other circuits Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection type of connectable conductor cross-sections • solid • 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 kV 1 kV 10 V/m 6 kV contact discharge / 8 kV air discharge Yes Yes Yes Yes Yes \$\text{yes}\$ \$\text{24} \tau 16} 2 k (0.25 \tau 1.5 \text{ mm}^2) 2 k (0.25 \tau 1.5 \text{ mm}^2) 2 k (0.25 \tau 1.5 \text{ mm}^2) 2 k (24 \tau 16) 2 k (24 \tau 16)		
Electromagnetic compatibility conducted interference • 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 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Galvanic isolation galvanic isolation • between input and output • between the outputs • between the voltage supply and other circuits Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection type of connectable conductor cross-sections • solid • 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 kV 1 kV 10 V/m 6 kV contact discharge / 8 kV air discharge Yes Yes Yes Yes Yes spring-loaded terminals 2x (0.25 1.5 mm²) 2 x (0.25 1.5 mm²) 2x (0.25 1.5 mm²) 2x (24 16) 2x (24 16) 0.25 1.5 mm²		
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Electromagnetic compatibility conducted interference • 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 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Galvanic isolation galvanic isolation • between input and output • between the outputs • between the voltage supply and other circuits Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection type of connectable conductor cross-sections • solid • 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 kV 1 kV 10 V/m 6 kV contact discharge / 8 kV air discharge Yes Yes Yes Yes Yes spring-loaded terminals 2x (0.25 1.5 mm²) 2 x (0.25 1.5 mm²) 2x (0.25 1.5 mm²) 2x (24 16) 2x (24 16) 0.25 1.5 mm²		
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• stranded	24 16				
Installation/ mounting/ dimensions					
mounting position	any				
fastening method	snap-on mounting				
height	94 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				
Certificates/ approvals					
General Product Approval		EMC	Declaration of Conformity		

Confirmation











Declaration of Conformity

Test Certificates

Marine / Shipping

other

UK CA Type Test Certificates/Test Report

Special Test Certificate





Confirmation

Railway

Vibration and Shock

Further information

Siemens has decided to exit the Russian market (see here).

 $\underline{\text{https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business}}$

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=3UG4511-2BP20

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UG4511-2BP20

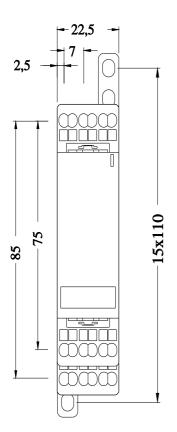
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

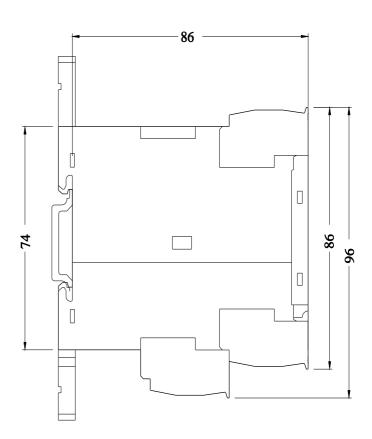
https://support.industry.siemens.com/cs/ww/en/ps/3UG4511-2BP20

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3UG4511-2BP20&lang=en

Characteristic: Derating

https://support.industry.siemens.com/cs/ww/en/ps/3UG4511-2BP20/manual





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