SIEMENS

Data sheet

3UG4511-2BN20



III product phase-out III The preferred successor type is 3UG5511-2BR20 phase sequence monitoring 3x160-260 V 2 CO analog monitoring relay phase sequence monitoring 3 x 160...260 V 50...60 Hz AC 2 changeover contacts spring-loaded connection system

			ila	

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	К			
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 	160 260 V			
• at 60 Hz rated value	160 260 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	160 260 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 	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				
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	Yes			
control circuit				
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 mm ²			
 finely stranded with core end processing 	0.25 1.5 mm ²			
 finely stranded without core end processing 	0.25 1.5 mm²			
AWG number as coded connectable conductor cross section				

exacuted 2 16 brailing position any fascening method sape on mouting fascening method sape on mouting width 22.5 mm optn 91 mm requering 0 mm explored spacing 0 mm explored spacing <th>• solid</th> <th></th> <th></th> <th>24</th> <th>16</th> <th></th> <th></th>	• solid			24	16			
mounting position any fastering method snap-on mounting height 94 mm width 22.5 mm dopth 22.5 mm required spacing 91 mm - backwards 0 mm - backwards 0 mm - downwards 0 mm - downwards 0 mm - downwards 0 mm - downwards 0 mm - at the side 0 mm - backwards 0 mm - downwards 0 mm - at the side 0 mm - backwards 0 mm - downwards 0 mm - downards 0 mm - downards 0 mm - downards 0 mm - downards 0 mm </th <th> stranded </th> <th></th> <th></th> <th colspan="5"></th>	 stranded 							
fastering method srap-or mounting height 94 mm regulate Appening 94 mm required spacing 91 mm • with side-by-side mounting 91 mm • ubit side-by-side mounting 0 mm • downwards 0 mm • downwards 0 mm • downwards 0 mm • downwards 0 mm • ubit side-bit 0 mm • ubit side-bit side 0 mm • ubit side-bit side 0 mm • ubit side-bit side-bit side	Installation/ mounting/	dimensions						
neight 94 mm width 225 mm depth 91 mm required spacing 91 mm - dowards 0 mm - backwards 0 mm - downwards 0 mm - backwards 0 mm - downwards 0 mm - downw	mounting position			any				
width 22.5 mm depth 91 mm required spacing 91 mm • with side-by-side mounting 0 mm - backwards 0 mm - downwards 0 mm	fastening method		snap-	on mounting				
depth 91 mm required spacing omm - forwards 0 mm - backwards 0 mm - downwards 0 mm -	height		94 mr	n				
required spacing	width			22.5 r	nm			
 with side by side mounting forwards forwards in mi in with side by side mounting in with side by side mounting in with side in mi in the side in mi in wards in mi in wards in mi in the side in mi in wards in	depth			91 mr	n			
- forwards 0 mm - backwards 0 mm - downwards 0 mm - ownwards 0 mm -	required spacing							
- bekwards 0 mm - upwards 0 mm - upwards 0 mm - at the side 0 mm - at the side 0 mm - bekwards 0 mm - at the side 0 mm - bekwards 0 mm - downads	 with side-by-side 	e mounting						
- upwards 0 mm - downwards 0 mm - for younded parts 0 mm - for wards 0 mm - upwards 0 mm - orwards 0 mm - for live parts 0 mm - upwards 0 mm	— forwards			0 mm				
- ownards 0 mm - at the side 0 mm - ownards 0 mm - ownards 0 mm - backwards 0 mm - upwards 0 mm - upwards 0 mm - downwards 0 mm - upwards 0 mm - downwards 200 m Batalation attlude at helpt above sea level maximum 200 m feece 0 m </td <td>- backwards</td> <td>3</td> <td></td> <td>0 mm</td> <td></td> <td></td> <td></td>	- backwards	3		0 mm				
	— upwards			0 mm				
• for grounded parts 0 mm - forwards 0 mm - upwards 0 mm - at the side 0 mm - downwards 0 mm - backwards 0 mm - upwards 0 mm - downwards -25 460 °C - during transport -25 460 °C - during transport -25 460 °C	- downward	S		0 mm				
- orwards 0 mm - backwards 0 mm - a backwards 0 mm - a the side 0 mm - downwards 0 mm - downwards 0 mm - downwards 0 mm - backwards 0 mm - backwards 0 mm - backwards 0 mm - backwards 0 mm - upwards 0 mm - upwards 0 mm - a the side 0 mm - upwards 0 mm - a the side 0 mm - during operation -25 +60 °C - during storage -20 +85 °C - during storage -40 +85 °C - during storage -20 +85 °C - Deproval Certificates Exc Exc Special Test Certificates Exc Special Test Certificate Special Test Certificate Inter / Shipping List Special Test Certificate Special Test Certificate Inter / Shipping Uter	— at the side			0 mm				
- backwards 0 mm - uywards 0 mm - odwnwards 0 mm - for live parts 0 mm - for live parts 0 mm - odwnwards 0 mm - backwards 0 mm - uywards 0 mm - downwards 0 mm - uywards 0 mm - downwards 0 mm - downwards 0 mm - downwards 2000 m mathem -25 + 60 °C - douring storage -25 + 60 °C - douring storage -25 + 60 °C - fischer -25 + 60 °C - fis	 for grounded pa 	rts						
- upwards 0 mm - at the side 0 mm - downwards 0 mm - for live parts 0 mm - backwards 0 mm - at the side 0 mm - downwards - at the side - downwards - 25 m + 60 °C - during transport - 25 m + 60 °C - during transport - 25 m + 60 °C - during transport - 25 m + 60 °C - forwards - 0 m + 85 °C	— forwards			0 mm				
- at the side 0 mm - downwards 0 mm - bowards 0 mm - bowards 0 mm - bowwards 0 mm - downwards - down - dting torage - 25 m + 60 ° C - during torage - 25 m + 60 ° C - during torage - 25 m + 60 ° C - downer - 25 m + 85 ° C Approxize Confirmation Etwice Confirmation Etwice Special Test Certific <b< td=""><td>- backwards</td><td>3</td><td></td><td>0 mm</td><td></td><td></td><td></td></b<>	- backwards	3		0 mm				
- downwards 0 mm - for live parts 0 mm - for live parts 0 mm - backwards 0 mm - upwards 0 mm - downwards 2 000 m mitteit einstelleton ellitude at height above sea level maximum 2 25 + 60 °C - during transport - 25 + 60 °C - during transport - 40 + 85 °C - during transport - 26 + 60 °C - feereal Product Approval Confirmation Evereal Confirmation KC Special Test Certific- ates Test Feel Test Itest Feel Certific- ates <td>— upwards</td> <td></td> <td></td> <td>0 mm</td> <td></td> <td></td> <td></td>	— upwards			0 mm				
• for live parts 0 mm - backwards 0 mm - backwards 0 mm - backwards 0 mm - downwards 0 mm - at the side 0 mm - during operation 2000 m - during operation - 25 … +60 °C - during storage - 40 … +85 °C - during transport - 40 … +85 °C - Approvals Certificates - 40 … +85 °C - Approvals Certificates - 40 … +85 °C - forwards - 50 memation Confirmation Special Test Certificates Marine / Shipping - 50 mematic Etwice Special Test Certificates Atternet	— at the side			0 mm				
- forwards 0 mm - backwards 0 mm - upwards 0 mm - ownwards 0 mm - a the side 0 mm - a the side 0 mm Anbient conditions 0 mm anbient memporature 2 000 m auting operation -25 + 60 °C - during storage -25 + 60 °C - during transport -40 + 85 °C Approvals Confifmates -40 + 85 °C Approvals Confirmation -25 + 60 °C - during transport -40 + 85 °C Approvals Confirmation -25 + 60 °C - during transport -25 + 60 °C - Browner	- downward	S		0 mm				
- backwards 0 mm - upwards 0 mm - downwards 0 mm - a the side 2 000 m a thing operation - 25 + 60 °C - during transport - 25 + 60 °C - fee fee - 60 + 85 °C <tr< th=""><th> for live parts </th><th></th><th></th><th></th><th></th><th></th><th></th></tr<>	 for live parts 							
- upwards - a the side0 mm 0 mm- a the side0 mmAmbient conditions2 000 mInstallation altitude at height above sea level maximum aution goeration 4 during operation 4 during storage 4 during storage 	— forwards			0 mm				
	- backwards	3		0 mm				
	— upwards			0 mm				
Ambient conditions 2 000 m ambient temperature -25 +60 °C - during storage -40 +85 °C - during storage -40 +85 °C - during transport -0 +85 °C Approvals Certificates	- downward	S		0 mm				
Installation altitude at height above sea level maximum 2 000 m ambient temperature -25 +60 °C • during operation -25 +60 °C • during storage -40 +85 °C • during transport -40 +85 °C Approvals Certificates -40 +85 °C General Product Approval Confirmation EEWV Test Certificates Marine / Shipping KC Special Test Certificates Type Test Certificates other Railway Environmental Con- Confirmation Special Test Certific Itrionmental Con-	— at the side			0 mm				
ambient temperature -25 +60 °C 4uring operation -40 +85 °C -40 +85 °C -40 +85 °C Approvals Certificates -40 +85 °C General Product Approval Confirmation EKV Test Certificates Marine / Shipping KC Special Test Certific: ate Type Test Certific: ates/Test Report other Railway Environmental Con-	Ambient conditions							
$\begin{array}{c c c c c c } & -25 & + 60 & ^{\circ}C \\ & -40 & + 85 & ^{\circ}C \\ & -40 & + 85 & ^{\circ}C \\ \hline $	installation altitude at h	neight above sea level max	imum	2 000	m			
• during storage • during transport -40 +85 °C -40 +85 °C Approvals Certificates General Product Approval GE Confirmation Confirmation Confirmation EMV Test Certificates Marine / Shipping KC Special Test Certific- ate Type Test Certific- ates/Test Report other Railway Environmental Con- Confirmation Special Test Certific- ates/Test Report Environmental Con-	ambient temperature							
- d0 +85 °C Approvals Certificates General Product Approval EE. EG. Konf. Confirmation EE. Konf. Confirmation KC Special Test Certificates Marine / Shipping KC Special Test Certificates Marine / Shipping Other Railway Environmental Con- Confirmation Special Test Certification		1						
Approvals Certificates General Product Approval Confirmation Image: Confirmation Image: Confirmation Image: Confirmation EMV Test Certificates Marine / Shipping EMV KC Special Test Certificates Marine / Shipping other Railway Environmental Con- Confirmation Special Test Certificates Image: Confirmation		during storage		-40 +85 °C				
General Product Approval Cenfirmation Confirmation Open tension				-40	+85 °C			
ConfirmationConfirmationImage: ConfirmationImage: ConfirmationImage: ConfirmationImage: ConfirmationEMVTest CertificatesTest CertificatesMarine / ShippingImage: ConfirmationKCSpecial Test CertificatesType Test CertificatesImage: CertificatesKCSpecial Test CertificatesType Test CertificatesImage: CertificatesImage: CertificatesotherRailwayEnvironmental ConfirmationSpecial Test CertificatesImage: CertificatesConfirmationSpecial Test CertificatesEnvironmental Confirmation	Approvals Certificates							
EMV Test Certificates Marine / Shipping	General Product App	proval						
EMV Test Certificates Marine / Shipping								
EMV Test Certificates Marine / Shipping	"	UK	Confirmatic	<u>n</u>	(m)	ŝ	гпг	
EMV Test Certificates Marine / Shipping		ZÔ			<u>m</u>	W	FHI	
KC Special Test Certific- ate Type Test Certific- ates/Test Report IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	EG-Konf.	LH			ccc	UL	E11E	
KC Special Test Certific- ate Type Test Certific- ates/Test Report IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII								
KC Special Test Certific- ate Type Test Certific- ates/Test Report IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII								
ate ates/Test Report Mail other Railway Environmental Con-	EMV		Test Certificat	es		Marine / Shipping		
ate ates/Test Report Mail other Railway Environmental Con-	•	KC	Special Test C	artific	Type Test Cortific	0.0		
other Railway Environment Confirmation Special Test Certific- Environmental Con-		<u>NO</u>			ates/Test Report	ĴΔ.	Lloyds	
other Railway Environment Confirmation Special Test Certific- Environmental Con-	<u>s</u>					DNV	Register	
Confirmation Special Test Certific- Environmental Con-	RCM					DNV	LRS	
Confirmation Special Test Certific- Environmental Con-								
Confirmation Special Test Certific- Environmental Con-	other	Railway	Environment					
ate <u>firmations</u>	Confirmation							
		ate	firmations					

 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=3UG4511-2BN20 Cax online generator

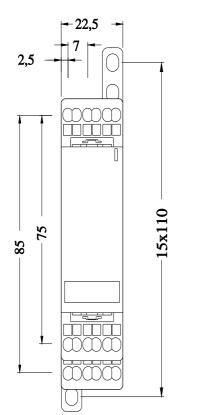
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UG4511-2BN20

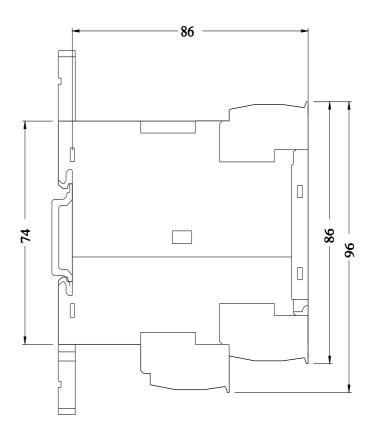
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3UG4511-2BN20

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3UG4511-2BN20&lang=en

Characteristic: Derating

https://support.industry.siemens.com/cs/ww/en/ps/3UG4511-2BN20/manual





last modified:

3/11/2024 🖸