











!!! product phase-out !!! The preferred successor type is 3UG5514-2BR20 phase failure and sequence adjustment undervoltage analog monitoring relay phase failure and sequence adjustable undervoltage asymmetry 20% fixed 3 x 160 to 690 V 50 to 60 Hz AC hysteresis 5% fixed delay time 0-20 s 2 changeover contacts spring-loaded connection system

product brand name	SIRIUS
product designation	Network monitoring relay with analog setting
design of the product	4 functions
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
relative repeat accuracy	1 %
Substance Prohibitance (Date)	05/01/2012
SVHC substance name	Blei - 7439-92-1 Bleimonoxid (Bleioxid) - 1317-36-8
Product Function	
product function	
• undervoltage detection	Yes
• overvoltage detection	No
• phase sequence recognition	Yes
• phase failure detection	Yes
• asymmetry detection	Yes
• overvoltage detection 3 phase	No
• undervoltage detection 3 phases	Yes
• 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 ... 690 V
• at 60 Hz rated value	160 ... 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	160 ... 690 V
Precision	
relative metering precision	5 %
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 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
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 mm ²)
• finely stranded with core end processing	2 x (0.25 ... 1.5 mm ²)
• finely stranded without core end processing	2x (0.25 ... 1.5 mm ²)
• 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 mm ²
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	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
		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).			
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=3UG4513-2BR20>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UG4513-2BR20>

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

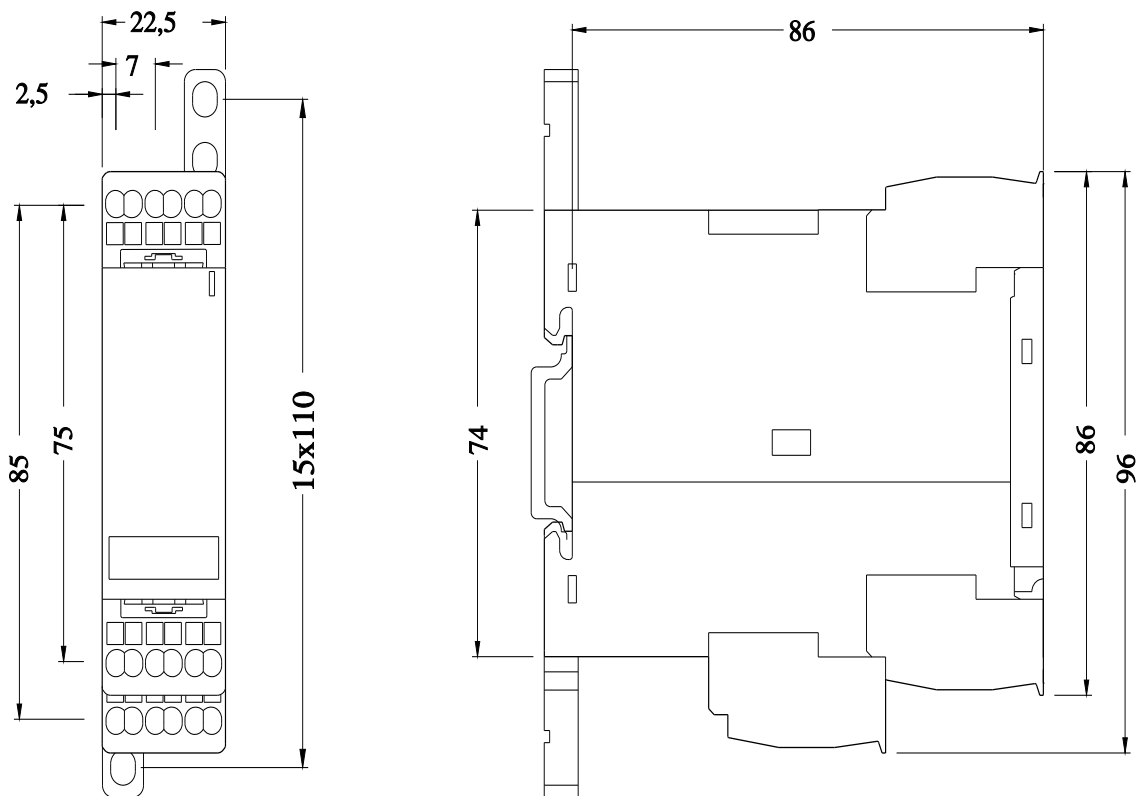
<https://support.industry.siemens.com/cs/ww/en/ps/3UG4513-2BR20>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3UG4513-2BR20&lang=en

Characteristic: Derating

<https://support.industry.siemens.com/cs/ww/en/ps/3UG4513-2BR20/manual>



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