



Figure similar

!!! product phase-out !!! the preferred successor is 3UG5618-2CR20 phase failure and sequence monitoring 3x 160-690 V, spring-loaded terminal digital monitoring relay for 3-phase line voltage automatic phase sequence correction phase failure 3 x 160 to 690 V 50 to 60 Hz AC undervoltage and overvoltage 160-690 V hysteresis 1-20 V OFF delay 0-20 s asymmetry 0-20% 1 CO contact for phase correction 1 CO contact for power system faults spring-loaded connection system

product brand name	SIRIUS	
product designation	Network monitoring relay with digital setting	
design of the product	5 functions	
product type designation	3UG4	
General technical data		
product function	Phase monitoring relay	
display version LED	No	
design of the display	LCD	
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	
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	Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol - 119-47-1	
Weight	0.139 kg	
Product Function		
product function		
• undervoltage detection	Yes	
• overvoltage detection	Yes	
• phase sequence recognition	Yes	
• phase failure detection	Yes	
• asymmetry detection	Yes	
• overvoltage detection 3 phase	Yes	
• undervoltage detection 3 phases	Yes	
• voltage window recognition 3 phase	Yes	
• 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
adjustable response delay time	
• with lower or upper limit violation	0.1 ... 20 s
response time maximum	450 ms
accuracy of digital display	+/-1 digit
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
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 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
Environmental footprint	
Environmental Product Declaration(EPD)	Yes
global warming potential [CO ₂ eq] total	17.1 kg
global warming potential [CO ₂ eq] during manufacturing	4.44 kg
global warming potential [CO ₂ eq] during operation	13.7 kg
global warming potential [CO ₂ eq] after end of life	-1.06 kg
Approvals Certificates	
General Product Approval	EMV



EMV	Test Certificates	Marine / Shipping	other
-----	-------------------	-------------------	-------

**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=3UG4617-2CR20>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UG4617-2CR20>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3UG4617-2CR20>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3UG4617-2CR20&lang=en

Characteristic: Derating

<https://support.industry.siemens.com/cs/ww/en/ps/3UG4617-2CR20/manual>