







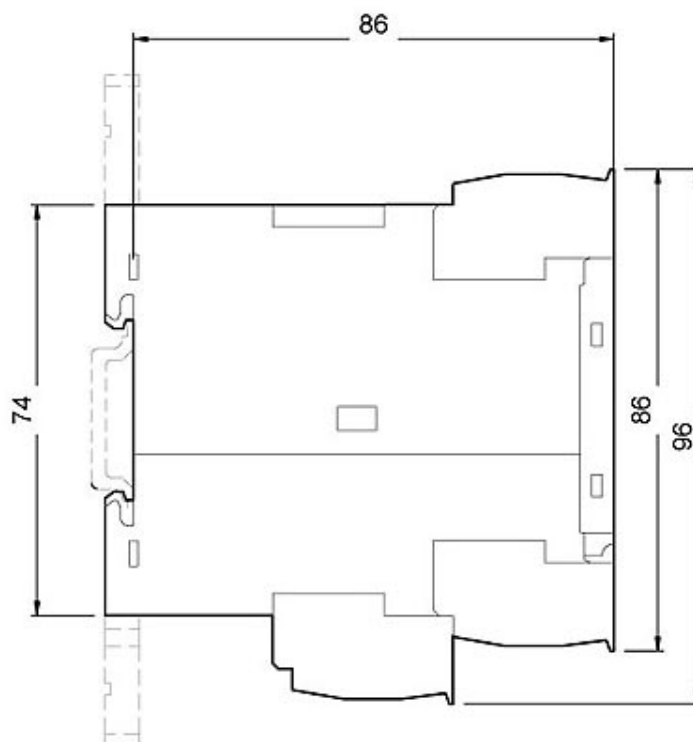
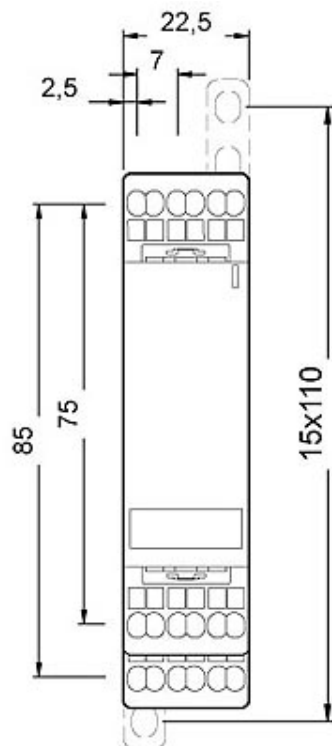


Analog monitoring relay Phase failure and sequence 3 x 160...690 V
50...60 Hz AC 2 change-over contacts spring-type connection system

product brand name	SIRIUS
product designation	Network monitoring relay with analog setting
design of the product	2 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 acc. to IEC 60068-2-27	sinusoidal half-wave 15g / 11 ms
vibration resistance acc. to IEC 60068-2-6	1 ... 6 Hz: 15 mm, 6 ... 500 Hz: 2g
mechanical service life (switching cycles) typical	10 000 000
electrical endurance (switching cycles) at AC-15 at 230 V typical	100 000
thermal current of the switching element with contacts maximum	5 A
reference code acc. to IEC 81346-2	K
relative repeat accuracy	1 %
Substance Prohibitance (Date)	28.05.2009 00:00:00
Product Function	
product function	
• undervoltage detection	No
• overvoltage detection	No
• phase sequence recognition	Yes
• phase failure detection	Yes
• 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 ... 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
Auxiliary circuit	
number of NC contacts delayed switching	0
number of NO contacts delayed switching	0
number of CO contacts delayed switching	2
operating frequency with 3RT2 contactor maximum	5 000 1/h
Main circuit	
number of poles for main current circuit	3
Outputs	
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 acc. to IEC 61000-4-4	2 kV
• due to conductor-earth surge acc. to IEC 61000-4-5	2 kV
• due to conductor-conductor surge acc. to IEC 61000-4-5	1 kV
field-based interference acc. to IEC 61000-4-3	10 V/m
electrostatic discharge acc. 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)
• at AWG cables solid	2x (24 ... 16)
• at 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	

<ul style="list-style-type: none">• solid• stranded	24 ... 16 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					
<ul style="list-style-type: none">• with side-by-side mounting<ul style="list-style-type: none">— forwards— backwards— upwards— downwards— at the side• for grounded parts<ul style="list-style-type: none">— forwards— backwards— upwards— at the side— downwards• for live parts<ul style="list-style-type: none">— forwards— backwards— upwards— downwards— at the side	0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm				
Ambient conditions					
installation altitude at height above sea level maximum	2 000 m				
ambient temperature					
<ul style="list-style-type: none">• during operation• during storage• during transport	-25 ... +60 °C -40 ... +85 °C -40 ... +85 °C				
Certificates/ approvals					
General Product Approval	EMC	Declaration of Conformity	Test Certificates		
 CCC	 UL	 EAC	 RCM	 EG-Konf.	Type Test Certificates/Test Report
Test Certificates	Marine / Shipping	other	Railway		
Special Test Certificate	 LRS	 DNV GL	Confirmation	Vibration and Shock	
Further information					
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=3UG4512-2BR20					
Cax online generator http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UG4512-2BR20					
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3UG4512-2BR20					



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