SIEMENS

Data sheet 3UG4615-1CR20



!!! product phase-out !!! the preferred successor is 3UG5616-1CR20 phase failure and sequence monitoring 3x 160-690 V, screw terminal digital monitoring relay for 3-phase line voltage connectable phase sequence phase failure 3 x 160 to 690 V 50 to 60 Hz AC undervoltage and overvoltage 160-690 V hysteresis 1-20 V 0-20 s each for Umin and Umax 1 CO contact for Umin 1 CO contact for Umax screw terminal

Figure similar

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
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	146 g
Product Function	
product function	
undervoltage detection	Yes
overvoltage detection	Yes
 phase sequence recognition 	Yes
phase failure detection	Yes
asymmetry detection	Yes; not adjustable, indirectly by monitoring the voltage limit values
 overvoltage detection 3 phase 	Yes
 undervoltage detection 3 phases 	Yes
 voltage window recognition 3 phase 	Yes
adjustable open/closed-circuit current principle	Yes
• auto-RESET	Yes

Control circuit Control type of voltage of the control supply voltage operating range factor control supply voltage rated value at AC at 50 Hz initial value full-scale value operating range factor control supply voltage rated value at AC at 60 Hz initial value full-scale value operating range factor control supply voltage rated value at AC at 60 Hz initial value full-scale value full-scale value initial value initial value vinit scale value owin lower or upper limit volation response time maximum 450 ms accuracy of digital display relative metering precision relative metering precision for auxiliary circuit number of NC contacts delayed switching number of NC contacts delayed switching number of NC contacts delayed switching operating frequency with 3RT2 contactor maximum sidelayed switching operating frequency with 3RT2 contactor was in a support of the output relay at AC-15 in at 250 V at 5050 Hz in at 40 V at 5050 Hz in at 250 V operational current of 17 V minimum on the operation of the output relay at DC-13 in at 250 V operational current at 17 V minimum on the operation of the DIAZED fuse link of the output relay field-based interference according to IEC 61000-4-2 electrical Size in the outputs ves between the voltages supply and other circuits ves	
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Electrical Safety protection class IP on the front according to IEC 60529 IP20	
protection class IP on the front according to IEC 60529 IP20	
Connections/ Terminals	
product component removable terminal for auxiliary and Control circuit	
type of electrical connection screw terminal	
type of connectable conductor cross-sections	
• solid 1x (0.5 4.0mm²), 2x (0.5 2.5 mm²)	
• finely stranded with core end processing 1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²)	
• for AWG cables solid 2x (20 14)	
• for AWG cables stranded 2x (20 14)	
connectable conductor cross-section	
● solid 0.5 4 mm²	

finely stranded with core end processing	0.5 2.5 mm²	
AWG number as coded connectable conductor cross section		
• solid	20 14	
• stranded	20 14	
tightening torque with screw-type terminals	0.8 1.2 N·m	
Installation/ mounting/ dimensions		
mounting position	any	
fastening method	snap-on mounting	
height	92 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 [CO2 eq] total	17.1 kg	
global warming potential [CO2 eq] during manufacturing	4.44 kg	
global warming potential [CO2 eq] during operation	13.7 kg	
global warming potential [CO2 eq] after end of life	-1.06 kg	
Approvals Certificates		
One and Decident Assessed		

General Product Approval













EMV Test Certificates Maritime application



<u>KC</u>

Special Test Certificate

Type Test Certificates/Test Report





other Railway Environment





Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

Information for data generation and storage

https://support.industry.siemens.com/cs/ww/en/view/109995012

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=3UG4615-1CR20

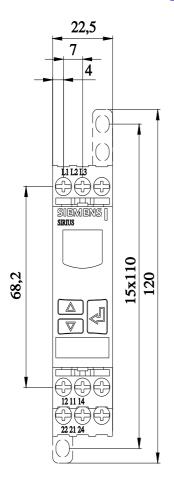
Cax online generator

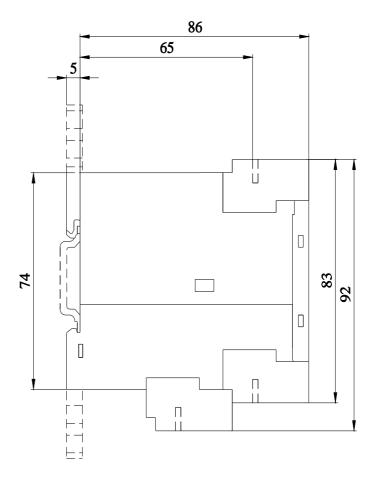
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UG4615-1CR20

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

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3UG4615-1CR20&lang=en





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