



DIGITAL MONITORING RELAY UNBALANCE 0-20%
REVERSIBLE PHASE SEQUENCE PHASE FAILURE 3X
160 TO 690V AC 50 TO 60 HZ UNDERVOLTAGE 160-690V
HYSTERESIS 1-20V ON AND OFF DELAY 0-20S 2
CHANGEOVER CONTACTS SCREW TERMINAL
REPLACEMENT PRODUCT FOR 3UG3012-1A...

Product function		Phase monitoring relay
Measuring circuit:		
Type of current / for monitoring		AC
Number of poles / for main current circuit		3
Measurable voltage		
• for AC	V	160 ... 690
Adjustable voltage range	V	160 ... 690
Adjustable response delay time		
• when starting	s	0.1 ... 20
• with lower or upper limit violation	s	0.1 ... 20
Relative adjustment accuracy	%	0.2
Relative metering precision	%	5
Precision of digital display		+/-1 digit
Relative repeat accuracy	%	1
General technical details:		
Design of the display		LCD
Type of display / LED		No
Product function		
• undervoltage recognition		Yes
• overvoltage recognition		No

• phase sequence recognition • phase disturbance recognition • asymmetry recognition • overvoltage recognition of 3 phases • undervoltage recognition of 3 phases • tension window recognition of 3 phases • self-reset • open-circuit or closed-circuit current principle		Yes
		Yes
		Yes
		No
		Yes
		No
		Yes
		Yes
Starting time / after the control supply voltage has been applied	ms	1,000
Response time / maximum	ms	450
Voltage type / of control feed voltage		AC
Control supply voltage		
• at 50 Hz / at AC • rated value • at 60 Hz / at AC • rated value	V	160 ... 690
	V	160 ... 690
Operating range factor control supply voltage rated value		
• at 50 Hz • for AC • at 60 Hz • for AC		1 ... 1
		1 ... 1
Impulse voltage resistance / rated value	kV	6
Recorded real power	W	2
Protection class IP		IP20
Electromagnetic compatibility		IEC 60947-1 / IEC 61000-6-2 / IEC 61000-6-4
Resistance against vibration / according to IEC 60068-2-6		1 ... 6 Hz: 15 mm, 6 ... 500 Hz: 2g
Resistance against shock / according to IEC 60068-2-27		sinusoidal half-wave 15g / 11 ms
Installation altitude / at a height over sea level / maximum	m	2,000
Conductor-bound parasitic coupling BURST / according to IEC 61000-4-4		2 kV
Conductor-bound parasitic coupling conductor-earth SURGE / according to IEC 61000-4-5		2 kV
Conductor-bound parasitic coupling conductor-conductor SURGE / according to IEC 61000-4-5		1 kV
Electrostatic discharge / according to IEC 61000-4-2		6 kV contact discharge / 8 kV air discharge
Field-bound parasitic coupling / according to IEC 61000-4-3		10 V/m
Insulation voltage / for overvoltage category III according to IEC 60664 / with degree of pollution 3 / rated value	V	690
Degree of pollution		3
Ambient temperature		
• during operating	°C	-25 ... +60

• during storage	°C	-40 ... +85
• during transport	°C	-40 ... +85
Galvanic isolation		
• between entrance and outlet		Yes
• between the outputs		Yes
• between the voltage supply and other circuits		Yes

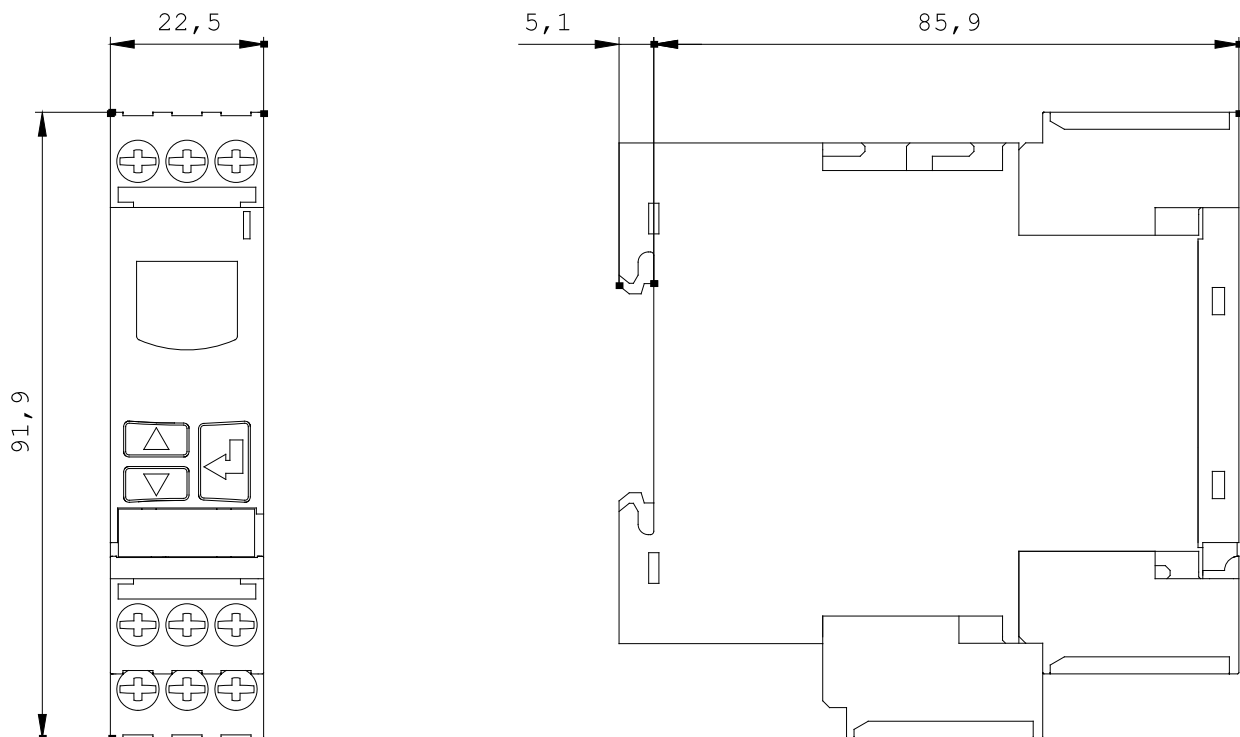
Mechanical design:		
Width	mm	22.5
Height	mm	92
Depth	mm	91
mounting position		any
Distance, to be maintained, to earthed part		
• forwards	mm	0
• backwards	mm	0
• sideways	mm	0
• upwards	mm	0
• downwards	mm	0
Distance, to be maintained, to the racks assembly		
• forwards	mm	0
• backwards	mm	0
• sideways	mm	0
• upwards	mm	0
• downwards	mm	0
Distance, to be maintained, conductive elements		
• forwards	mm	0
• backwards	mm	0
• sideways	mm	0
• upwards	mm	0
• downwards	mm	0
Mounting type		snap-on mounting
Product function / removable terminal for auxiliary and control circuit		Yes
Design of the electrical connection		screw-type terminals
Type of the connectable conductor cross-sections		
• solid		1x (0.5 ... 4 mm ²), 2x (0.5 ... 2.5 mm ²)
• finely stranded		
• with wire end processing		1x (0.5 ... 2.5 mm ²), 2x (0.5 ... 1.5 mm ²)
• for AWG conductors		
• solid		2x (20 ... 14)

• stranded		2x (20 ... 14)
Tightening torque		
• with screw-type terminals	N·m	0.8 ... 1.2

Outputs:		
Number of NO contacts / delayed switching		0
Number of NC contacts / delayed switching		0
Number of change-over switches / delayed switching		2
Current carrying capacity / of output relay		
• at AC-15		
• at 250 V / at 50/60 Hz	A	3
• at 400 V / at 50/60 Hz	A	3
• at DC-13		
• at 24 V	A	1
• at 125 V	A	0.2
• at 250 V	A	0.1
Thermal current / of the contact-affected switching element / maximum	A	5
Operating current / at 17 V / minimum	mA	5
Continuous current / of the DIAZED fuse link of the output relay	A	4
Mechanical operating cycles as operating time / typical		10,000,000
Electrical operating cycles as operating time / at AC-15 / at 230 V / typical		100,000
Operating cycles / with 3RT2 contactor / maximum	1/h	5,000

Certificates/approvals:		
General Product Approval	EMC	Test Certificates
 CCC	 UL	 C-TICK
		Special Test Certificate
		Type Test Certificates/Test Report
Shipping Approval	other	
 DNV	 GL	 LRS
		Declaration of Conformity
		other

Further information:
Information- and Downloadcenter (Catalogs, Brochures,...) http://www.siemens.com/industrial-controls/catalogs
Industry Mall (Online ordering system) http://www.siemens.com/industrial-controls/mall
Cax online generator: http://www.siemens.com/cax



last change:

Mar 17, 2014