



ANALOG MONITORING RELAY PHASE SEQUENCE
MONITORING 3X 420 TO 690V AC 50 TO 60 HZ 1
CHANGEOVER CONTACT SPRING LOADED
CONNECTION

Figure similar

Product function		Phase monitoring relay
Measuring circuit:		
Type of voltage for monitoring		AC
Number of poles for main current circuit		3
Measurable voltage with AC	V	420 ... 690
General technical data:		
Display version LED		Yes
Product function		
• undervoltage detection		No
• Overvoltage detection		No
• phase sequence recognition		Yes
• Phase failure detection		No
• Asymmetry recognition		No
• Overvoltage detection 3 phase		No
• undervoltage detection 3 phases		No
• Voltage window recognition 3 phase		No
• Auto-reset		Yes
• Adjustable open/closed-circuit current principle		No
Startup time after the control supply voltage has been applied	ms	200
Response time maximum	ms	450
Type of voltage of the control supply voltage		AC
Control supply voltage		
• with AC		

— at 50 Hz Rated value	V	420 ... 690
— at 60 Hz Rated value	V	420 ... 690
Operating range factor control supply voltage rated value		
• with AC		
— at 50 Hz		1 ... 1
— at 60 Hz		1 ... 1
Surge voltage resistance Rated value	kV	6
Active power consumption	W	2
Protection class IP		IP20
Electromagnetic compatibility		IEC 60947-1 / IEC 61000-6-2 / IEC 61000-6-4
Vibration resistance acc. to IEC 60068-2-6		1 ... 6 Hz: 15 mm, 6 ... 500 Hz: 2g
Shock resistance acc. to IEC 60068-2-27		sinusoidal half-wave 15g / 11 ms
Installation altitude at height above sea level maximum	m	2 000
Conducted interference due to burst acc. to IEC 61000-4-4		2 kV
Conducted interference due to conductor-earth surge acc. to IEC 61000-4-5		2 kV
Conducted interference due to conductor-conductor surge acc. to IEC 61000-4-5		1 kV
Electrostatic discharge acc. to IEC 61000-4-2		6 kV contact discharge / 8 kV air discharge
Field-bound parasitic coupling acc. 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 operation	°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 data:

Width	mm	22.5
Height	mm	84
Depth	mm	91
mounting position		any
Required spacing for grounded parts		
• forwards	mm	0
• Backwards	mm	0

• at the side	mm	0
• upwards	mm	0
• downwards	mm	0
Required spacing with side-by-side mounting		
• forwards	mm	0
• Backwards	mm	0
• at the side	mm	0
• upwards	mm	0
• downwards	mm	0
Required spacing for live parts		
• forwards	mm	0
• Backwards	mm	0
• at the side	mm	0
• upwards	mm	0
• downwards	mm	0
Mounting type		snap-on mounting
Product function removable terminal for auxiliary and control circuit		Yes
Type of electrical connection		spring-loaded terminals
Type of connectable conductor cross-section		
• solid		2x (0.25 ... 1.5 mm ²)
• finely stranded		
— with core end processing		2 x (0.25 ... 1.5 mm ²)
— without core end processing		2x (0.25 ... 1.5 mm ²)
• for AWG conductors		
— solid		2x (24 ... 16)
— stranded		2x (24 ... 16)
Outputs:		
Number of NO contacts delayed switching		0
Number of NC contacts delayed switching		0
Number of CO contacts delayed switching		1
Ampacity of the 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 switching element with contacts 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 service life (switching cycles) typical		10 000 000
Electrical endurance (switching cycles) at AC-15 at 230 V typical		100 000
Operating frequency 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/industrymall>

Cax online generator

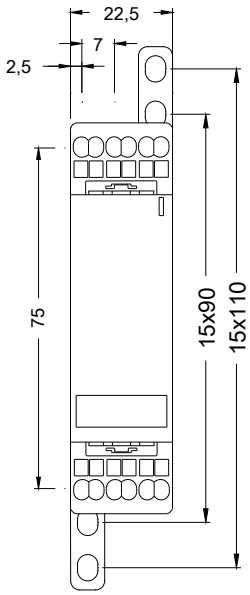
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UG45112AQ20>

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

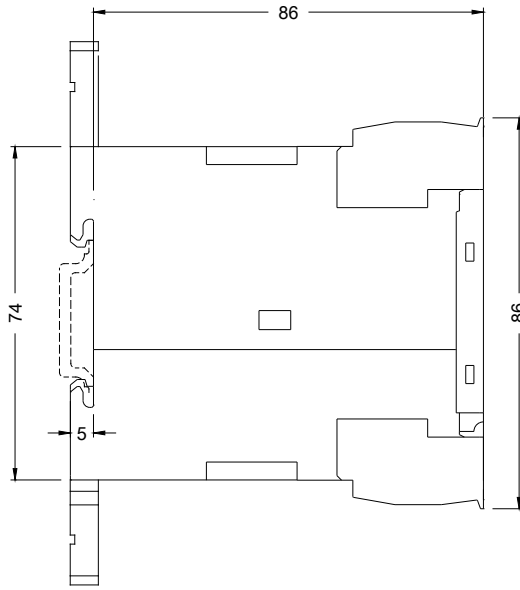
<https://support.industry.siemens.com/cs/ww/en/ps/3UG45112AQ20>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3UG45112AQ20&lang=en



last modified:



15.01.2015