## **SIEMENS**

Product data sheet 3UG4615-1CR20



DIGITAL MONITORING RELAY FOR THREE-PHASE LINE VOLTAGE REVERSIBLE PHASE SEQUENCE PHASE FAILURE 3X 160 TO 690V AC 50 TO 60 HZ UNDERVOLT. AND OVERVOLT. 160-690V HYSTERESIS 1-20V 0-20S EACH FOR UMIN AND UMAX 1 W FOR UMIN 1W FOR UMAX SCREW TERMINAL REPLACEMENT PRODUCT F. 3UG3041-1BP50

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				
• 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

• undervoltage recognition

• overvoltage recognition

• phase sequence recognition

**Product function** 

No

Yes

Yes

Yes

Phase disturbance recognition     Assymmetry recognition of 3 phases     Ves			
• overvoltage recognition of 3 phases     • undervoltage recognition of 3 phases     • undervoltage recognition of 3 phases     • lension window recognition of 3 phases     • self-reset     • open-circuit or closed-circuit current principle     Starting time / after the control supply voltage has been applied     Response time / maximum     #80  Voltage type / of control feed voltage  Control supply voltage     • reted value     • at 60 Hz / at AC     • reted value     • at 60 Hz / at AC     • reted value     • at 60 Hz / at AC     • at 60 Hz     • for AC     • at 60 Hz     • for AC  Impulse voltage resistance / rated value  Protection class IP  Electromagnetic compatibility  Resistance against shock / according to IEC 60088-2-6  Resistance against shock / according to IEC 60088-2-6  Resistance against shock / according to IEC 60088-2-7  Resistance against shock / according to IEC 60088-2-7  Conductor-bound parasitic coupling BURST / according to IEC 6008-2-8  Resistance against shock / according to IEC 6008-2-8  Re	phase disturbance recognition		Yes
• undervoltage recognition of 3 phases • lension window recognition of 1 phase	asymmetry recognition		Yes
* Itension window recognition of 3 phases  * self-reset  * open-circuit or closed-circuit current principle  * Starting time / after the control supply voltage has been applied  * reseponse time / maximum  * Voltage type / of control feed voltage  * of 50 Hz / at AC  * rated value  * at 50 Hz / at AC  * rated value  * of AC  * Operating range factor control supply voltage rated value  * at 50 Hz / at AC  * rated value  * of AC  * of AC  * rated value  * of AC  * of AC  * rated value  * of AC  * rated valu	<ul> <li>overvoltage recognition of 3 phases</li> </ul>		Yes
*self-reset	<ul> <li>undervoltage recognition of 3 phases</li> </ul>		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	<ul> <li>tension window recognition of 3 phases</li> </ul>		Yes
Starting time / after the control supply voltage has been applied ms 1,000  Response time / maximum ms 450  Control supply voltage  - at 50 Hz / at AC  - rated value  - at 60 Hz / at AC  - rated value  - at 50 Hz / at AC  - rated value  - ot 60 Hz / at AC  - rated value  - ot 60 Hz / at AC  - rated value  - ot 60 Hz / at AC  - rated value  - ot 60 Hz / at AC  - rated value  - ot 60 Hz / at AC  - rated value  - ot 60 Hz / at AC  - rated value  - ot 60 Hz / at AC  - rated value  - ot 60 Hz / at AC  - rated value  - ot 60 Hz / at AC  - rated value  - ot 60 Hz / at AC  - rated value  - ot 60 Hz / at AC  - rated value  - ot 60 Hz / at AC  - rated value  - ot 60 Hz / at AC  - rated value  - ot 60 Hz / at AC  - rated value  - ot 60 Hz / at AC  - rated value  - ot 60 Hz / at AC  - rated value  - ot 60 Hz / at AC	• self-reset		Yes
Nest   Maximum	open-circuit or closed-circuit current principle		Yes
Voltage type / of control feed voltage  Control supply voltage  • at 50 Hz / at AC  • rated value  • at 60 Hz / at AC  • rated value  • at 50 Hz / at AC  • rated value  • at 50 Hz / at AC  • rated value  • at 50 Hz  • rated value  • at 50 Hz  • for AC  • at 60 Hz  • for AC  • to AC  • at 60 Hz  • for AC  • to AC  •	Starting time / after the control supply voltage has been applied	ms	1,000
Control supply voltage  • at 50 Hz / at AC  • rated value  • at 60 Hz / at AC  • rated value  • at 60 Hz / at AC  • rated value  • at 60 Hz / at AC  • rated value  • at 50 Hz / at AC  • rated value  • at 50 Hz  • for AC  • late 0 Hz  • for AC  • to AC  •	Response time / maximum	ms	450
• at 50 Hz / at AC  • rated value  • at 60 Hz / at AC  • rated value  • at 60 Hz / at AC  • rated value  V 160 690  Operating range factor control supply voltage rated value  • at 50 Hz  • for AC  • at 60 Hz  • for AC  I 1  Impulse voltage resistance / rated value  kV 6  Recorded real power  Protection class IP  Electromagnetic compatibility  Resistance against vibration / according to IEC 60068-2-6  Resistance against vibration / according to IEC 60068-2-6  Resistance against shock / according to IEC 60068-2-6  Resistance against shock / according to IEC 60068-2-6  Installation altitude / at a height over sea level / maximum  Conductor-bound parasitic coupling BURST / according to IEC 60068-2-6  Conductor-bound parasitic coupling conductor-earth SURGE / according to IEC 61000-4-5  Conductor-bound parasitic coupling conductor-conductor SURGE / according to IEC 61000-4-2  Electrostatic discharge / according to IEC 61000-4-2  Insulation voltage / for overvoltage category III according to IEC 60000-4-3  Insulation voltage / for overvoltage category III according to IEC 60000-4-3  Insulation voltage / for overvoltage category III according to IEC 60000-4-3  Insulation voltage / for overvoltage category III according to IEC 60000-4-3  Insulation voltage / for overvoltage category III according to IEC 60000-4-3  Insulation voltage / for overvoltage category III according to IEC 60000-4-3  Insulation voltage / for overvoltage category III according to IEC 60000-4-3  Insulation voltage / for overvoltage category III according to IEC 60000-4-3  Ambient temperature  • during operating  °C -25 +60	Voltage type / of control feed voltage		AC
* rated value     * at 60 Hz / at AC     * rated value  Operating range factor control supply voltage rated value     * at 50 Hz     * for AC     * at 60 Hz     * for AC     *	Control supply voltage		
• at 60 Hz / at AC • rated value  Operating range factor control supply voltage rated value • at 50 Hz • for AC • at 60 Hz • for AC  Impulse voltage resistance / rated value  Recorded real power  Protection class IP  Electromagnetic compatibility  Resistance against vibration / according to IEC 60068-2-6  Resistance against shock / according to IEC 60068-2-7  Installation altitude / at a height over sea level / maximum  Conductor-bound parasitic coupling BURST / according to IEC 61000-6-2  Conductor-bound parasitic coupling conductor-earth SURGE / according to IEC 61000-4-5  Clonductor-bound parasitic coupling conductor-conductor SURGE / according to IEC 61000-4-2  Field-bound parasitic coupling according to IEC 61000-4-3  Insulation voltage / for overvoltage category Ill according to IEC 60064 / with degree of pollution  Ambient temperature • during operating  **C	• at 50 Hz / at AC		
* rated value  Operating range factor control supply voltage rated value  * at 50 Hz  * for AC  * at 60 Hz  * for AC  Impulse voltage resistance / rated value  Recorded real power  Protection class IP  Electromagnetic compatibility  Resistance against vibration / according to IEC 60068-2-6  Resistance against vibration / according to IEC 60068-2-27  Installation altitude / at a height over sea level / maximum  Conductor-bound parasitic coupling BURST / according to IEC 61000-4-2  Field-bound parasitic coupling conductor-conductor SURGE / according to IEC 61000-4-2  Electrostatic discharge / according to IEC 61000-4-2  Field-bound parasitic coupling / according to IEC 61000-4-3  Insulation voltage / for overvoltage category III according to IEC 61000-4-3  Insulation voltage / for overvoltage category III according to IEC 61000-4-3  Insulation voltage / for overvoltage category III according to IEC 61000-4-3  Ambient temperature  * during operating  **V 160 690  1 1  1 6 Hz: 15 mm, 6 500 Hz: 2g  sinusoidal half-wave 15g / 11 ms  1 6 Hz: 15 mm, 6 500 Hz: 2g  sinusoidal half-wave 15g / 11 ms  1 6 Hz: 15 mm, 6 500 Hz: 2g  sinusoidal half-wave 15g / 11 ms  1 6 Hz: 15 mm, 6 500 Hz: 2g  sinusoidal half-wave 15g / 11 ms  1 6 Hz: 15 mm, 6 500 Hz: 2g  sinusoidal half-wave 15g / 11 ms  1 6 Hz: 15 mm, 6 500 Hz: 2g  sinusoidal half-wave 15g / 11 ms  1 6 Hz: 15 mm, 6 500 Hz: 2g  sinusoidal half-wave 15g / 11 ms  1 6 Hz: 15 mm, 6 500 Hz: 2g  sinusoidal half-wave 15g / 11 ms  1 6 Hz: 15 mm, 6 500 Hz: 2g  sinusoidal half-wave 15g / 11 ms  1 6 Hz: 15 mm, 6 500 Hz: 2g  sinusoidal half-wave 15g / 11 ms  1 6 Hz:	• rated value	V	160 690
Operating range factor control supply voltage rated value  • at 50 Hz  • for AC  • at 60 Hz  • for AC  Impulse voltage resistance / rated value  Recorded real power  Protection class IP  Electromagnetic compatibility  Resistance against vibration / according to IEC 60068-2-6  Resistance against vibration / according to IEC 60068-2-6  Resistance against shock / according to IEC 60068-2-6  Resistance against shock / according to IEC 60068-2-7  Installation altitude / at a height over sea level / maximum  m 2,000  Conductor-bound parasitic coupling BURST / according to IEC 61000-4-2  Conductor-bound parasitic coupling conductor-earth SURGE / according to IEC 61000-4-5  Electrostatic discharge / according to IEC 61000-4-2  Field-bound parasitic coupling / according to IEC 61000-4-3  Insulation voltage / for overvoltage category III according to IEC 60664 / with degree of pollution  Ambient temperature  • during operating  *C 'C '25 +60	• at 60 Hz / at AC		
* at 50 Hz     * for AC     * at 60 Hz     * for AC     * for AC     * at 60 Hz     * for AC     *	• rated value	V	160 690
*for AC  *at 60 Hz  *for AC  Impulse voltage resistance / rated value  kV 6  Recorded real power  W 2  Protection class IP  Electromagnetic compatibility  Resistance against vibration / according to IEC 60068-2-6  Resistance against vibration / according to IEC 60068-2-7  Resistance against shock / according to IEC 60068-2-7  Installation altitude / at a height over sea level / maximum  m 2,000  Conductor-bound parasitic coupling BURST / according to IEC 60068-2-7  Conductor-bound parasitic coupling conductor-earth SURGE / according to IEC 61000-4-5  Conductor-bound parasitic coupling conductor-conductor SURGE / according to IEC 61000-4-5  Electrostatic discharge / according to IEC 61000-4-2  Field-bound parasitic coupling / according to IEC 61000-4-3  Insulation voltage / for overvoltage category III according to IEC V 690  Ambient temperature  *during operating  *C -25 +60	Operating range factor control supply voltage rated value		
• at 60 Hz • for AC Impulse voltage resistance / rated value  Recorded real power  Protection class IP Electromagnetic compatibility  Electromagnetic compatibility  Resistance against vibration / according to IEC 60068-2-6  Resistance against shock / according to IEC 60068-2-7  Resistance against shock / according to IEC 60068-2-7  Installation altitude / at a height over sea level / maximum  Conductor-bound parasitic coupling BURST / according to IEC 61000-4-4  Conductor-bound parasitic coupling conductor-earth SURGE / according to IEC 61000-4-5  Conductor-bound parasitic coupling conductor-conductor SURGE / according to IEC 61000-4-5  Electrostatic discharge / according to IEC 61000-4-2  Field-bound parasitic coupling / according to IEC 61000-4-3  Insulation voltage / for overvoltage category III according to IEC 61000-4-3  Insulation voltage / for overvoltage category III according to IEC 60664 / with degree of pollution 3 / rated value  Degree of pollution  Ambient temperature  • during operating  * C -25 +60	• at 50 Hz		
Impulse voltage resistance / rated value  Recorded real power  Protection class IP  Electromagnetic compatibility  Resistance against vibration / according to IEC 60068-2-6  Resistance against vibration / according to IEC 60068-2-7  Installation altitude / at a height over sea level / maximum  Conductor-bound parasitic coupling BURST / according to IEC 61000-4-2  Conductor-bound parasitic coupling conductor-earth SURGE / according to IEC 61000-4-5  Conductor-bound parasitic coupling conductor-conductor SURGE / according to IEC 61000-4-5  Electrostatic discharge / according to IEC 61000-4-2  Field-bound parasitic coupling / according to IEC 61000-4-3  Insulation voltage / for overvoltage category III according to IEC 61000-4-3  Insulation voltage / for overvoltage category III according to IEC 6000-4-3  Insulation voltage / for overvoltage category III according to IEC 6000-4-3  Insulation voltage / for overvoltage category III according to IEC 6000-4-3  Ambient temperature  • during operating  1 1  1 1  1 6 1  2 6 1  1 6 Hz: 15 mm, 6 500 Hz: 2g  sinusoidal half-wave 15g / 11 ms  1 6 Hz: 15 mm, 6 500 Hz: 2g  sinusoidal half-wave 15g / 11 ms  2 6 Hz: 15 mm, 6 500 Hz: 2g  sinusoidal half-wave 15g / 11 ms  2 6 Hz: 15 mm, 6 500 Hz: 2g  sinusoidal half-wave 15g / 11 ms  2 6 Hz: 15 mm, 6 500 Hz: 2g  sinusoidal half-wave 15g / 11 ms  2 6 Hz: 15 mm, 6 500 Hz: 2g  sinusoidal half-wave 15g / 11 ms  2 6 Hz: 15 mm, 6 500 Hz: 2g  sinusoidal half-wave 15g / 11 ms  2 6 Hz: 15 mm, 6 500 Hz: 2g  sinusoidal half-wave 15g / 11 ms  2 6 Hz: 15 mm, 6 500 Hz: 2g  sinusoidal half-wave 15g / 11 ms  2 6 Hz: 15 mm, 6 500 Hz: 2g  sinusoidal half-wave 15g / 11 ms  2 6 Hz: 15 mm, 6 500 Hz: 2g  sinusoidal half-wave 15g / 11 ms  1 6 Hz: 15 mm, 6 500 Hz: 2g  sinusoidal half-wave 15g / 11 ms  1 6 Hz: 15 mm, 6 500 Hz: 2g  sinusoidal half-wave 15g / 11 ms  1 6 Hz: 15 mm, 6 500 Hz: 2g  sinusoidal half-wave 15g / 11	• for AC		1 1
Impulse voltage resistance / rated value  Recorded real power  W 2  Protection class IP  Electromagnetic compatibility  IEC 60947-1 / IEC 61000-6-2 / IEC 61000-6-4  Resistance against vibration / according to IEC 60068-2-6  Resistance against shock / according to IEC 60068-2-7  Installation altitude / at a height over sea level / maximum  Conductor-bound parasitic coupling BURST / according to IEC 61000-4-3  Conductor-bound parasitic coupling conductor-earth SURGE / according to IEC 61000-4-5  Conductor-bound parasitic coupling conductor-conductor SURGE / according to IEC 61000-4-5  Electrostatic discharge / according to IEC 61000-4-3  Insulation voltage / for overvoltage category III according to IEC 61000-4-3  Insulation voltage / for overvoltage category III according to IEC 61000-4-3  Ambient temperature  • during operating  * C -25 +60	• at 60 Hz		
Recorded real power  Protection class IP  Electromagnetic compatibility  Electromagnetic compatibility  Resistance against vibration / according to IEC 60068-2-6  Resistance against shock / according to IEC 60068-2-27  Installation altitude / at a height over sea level / maximum  Conductor-bound parasitic coupling BURST / according to IEC 61000-4-4  Conductor-bound parasitic coupling conductor-earth SURGE / according to IEC 61000-4-5  Conductor-bound parasitic coupling conductor-conductor SURGE / according to IEC 61000-4-5  Electrostatic discharge / according to IEC 61000-4-2  Field-bound parasitic coupling / according to IEC 61000-4-3  Insulation voltage / for overvoltage category III according to IEC 600664 / with degree of pollution 3 / rated value  Degree of pollution  Ambient temperature  • during operating  V 2 Conductor - 1 kV  2 kV  6 kV contact discharge / 8 kV air discharge  6 690  6 90  6	• for AC		1 1
Protection class IP  Electromagnetic compatibility  Resistance against vibration / according to IEC 60068-2-6  Resistance against shock / according to IEC 60068-2-6  Resistance against shock / according to IEC 60068-2-27  Installation altitude / at a height over sea level / maximum  Conductor-bound parasitic coupling BURST / according to IEC 61000-4-4  Conductor-bound parasitic coupling conductor-earth SURGE / according to IEC 61000-4-5  Conductor-bound parasitic coupling conductor-conductor SURGE / according to IEC 61000-4-5  Electrostatic discharge / according to IEC 61000-4-2  Field-bound parasitic coupling / according to IEC 61000-4-3  Insulation voltage / for overvoltage category III according to IEC V 690  Degree of pollution  Ambient temperature  • during operating  IEC 60064 / with degree of pollution 3 / rated value  IEC 60064 / with degree of pollution 3 / rated value  • during operating	Impulse voltage resistance / rated value	kV	6
Electromagnetic compatibility  Resistance against vibration / according to IEC 60068-2-6  Resistance against shock / according to IEC 60068-2-7  Resistance against shock / according to IEC 60068-2-7  Installation altitude / at a height over sea level / maximum  Conductor-bound parasitic coupling BURST / according to IEC 61000-4-4  Conductor-bound parasitic coupling conductor-earth SURGE / according to IEC 61000-4-5  Conductor-bound parasitic coupling conductor-conductor SURGE / according to IEC 61000-4-5  Electrostatic discharge / according to IEC 61000-4-2  Field-bound parasitic coupling / according to IEC 61000-4-3  Insulation voltage / for overvoltage category III according to IEC 60664 / with degree of pollution 3 / rated value  Degree of pollution  Ambient temperature  • during operating  I LEC 60068-2-1 / IEC 61000-6-2 / Sinusoidal half-wave 15g / 11 ms  1 6 Hz: 15 mm, 6 500 Hz: 2g  Sinusoidal half-wave 15g / 11 ms  2 kV  4 kV	Recorded real power	W	2
Resistance against vibration / according to IEC 60068-2-6  Resistance against shock / according to IEC 60068-2-27  Resistance against shock / according to IEC 60068-2-27  Installation altitude / at a height over sea level / maximum  Conductor-bound parasitic coupling BURST / according to IEC 61000-4-4  Conductor-bound parasitic coupling conductor-earth SURGE / according to IEC 61000-4-5  Conductor-bound parasitic coupling conductor-conductor SURGE / according to IEC 61000-4-5  Electrostatic discharge / according to IEC 61000-4-2  Field-bound parasitic coupling / according to IEC 61000-4-3  Insulation voltage / for overvoltage category III according to IEC 60664 / with degree of pollution 3 / rated value  Degree of pollution  Ambient temperature  • during operating  1 6 Hz: 15 mm, 6 500 Hz: 2g  sinusoidal half-wave 15g / 11 ms  1 kV  2 kV  4 kV  6 kV contact discharge / 8 kV air discharge  1 kV  6 kV contact discharge / 8 kV air discharge  1 to V/m  6 90  6	Protection class IP		IP20
Resistance against shock / according to IEC 60068-2-27  Installation altitude / at a height over sea level / maximum  Conductor-bound parasitic coupling BURST / according to IEC 61000-4-4  Conductor-bound parasitic coupling conductor-earth SURGE / according to IEC 61000-4-5  Conductor-bound parasitic coupling conductor-conductor SURGE / according to IEC 61000-4-5  Electrostatic discharge / according to IEC 61000-4-2  Field-bound parasitic coupling / according to IEC 61000-4-3  Insulation voltage / for overvoltage category III according to IEC 60664 / with degree of pollution 3 / rated value  Degree of pollution  Ambient temperature  • during operating  sinusoidal half-wave 15g / 11 ms  ### ### ### ### ### #### ##########	Electromagnetic compatibility		IEC 60947-1 / IEC 61000-6-2 / IEC 61000-6-4
Installation altitude / at a height over sea level / maximum m 2,000  Conductor-bound parasitic coupling BURST / according to IEC 61000-4-4  Conductor-bound parasitic coupling conductor-earth SURGE / according to IEC 61000-4-5  Conductor-bound parasitic coupling conductor-conductor SURGE / according to IEC 61000-4-5  Electrostatic discharge / according to IEC 61000-4-2  Electrostatic discharge / according to IEC 61000-4-3  Insulation voltage / for overvoltage category III according to IEC 60664 / with degree of pollution 3 / rated value  Degree of pollution  Ambient temperature  • during operating  o C -25 +60	Resistance against vibration / according to IEC 60068-2-6		1 6 Hz: 15 mm, 6 500 Hz: 2g
Conductor-bound parasitic coupling BURST / according to IEC 61000-4-4  Conductor-bound parasitic coupling conductor-earth SURGE / according to IEC 61000-4-5  Conductor-bound parasitic coupling conductor-conductor SURGE / according to IEC 61000-4-5  Electrostatic discharge / according to IEC 61000-4-2  Field-bound parasitic coupling / according to IEC 61000-4-3  Insulation voltage / for overvoltage category III according to IEC 60664 / with degree of pollution 3 / rated value  Degree of pollution  Ambient temperature  • during operating  2 kV  6 kV  6 kV  6 kV contact discharge / 8 kV air discharge  7 690  690  690  690  6064 / with degree of pollution 3 / rated value	Resistance against shock / according to IEC 60068-2-27		sinusoidal half-wave 15g / 11 ms
Conductor-bound parasitic coupling conductor-earth SURGE / according to IEC 61000-4-5  Conductor-bound parasitic coupling conductor-conductor SURGE / according to IEC 61000-4-5  Electrostatic discharge / according to IEC 61000-4-2  Field-bound parasitic coupling / according to IEC 61000-4-3  Insulation voltage / for overvoltage category III according to IEC 60664 / with degree of pollution 3 / rated value  Degree of pollution  Ambient temperature  • during operating  • C -25 +60	Installation altitude / at a height over sea level / maximum	m	2,000
according to IEC 61000-4-5  Conductor-bound parasitic coupling conductor-conductor SURGE / according to IEC 61000-4-5  Electrostatic discharge / according to IEC 61000-4-2  Field-bound parasitic coupling / according to IEC 61000-4-3  Insulation voltage / for overvoltage category III according to IEC 60664 / with degree of pollution 3 / rated value  Degree of pollution  Ambient temperature  • during operating  Conductor-bound parasitic coupling conductor-conductor 1 kV  6 kV contact discharge / 8 kV air discharge  6 kV contact discharge / 8 kV air discharge  6 kV contact discharge / 8 kV air discharge  7 690  690  690  -25 +60			2 kV
SURGE / according to IEC 61000-4-5  Electrostatic discharge / according to IEC 61000-4-2  Field-bound parasitic coupling / according to IEC 61000-4-3  Insulation voltage / for overvoltage category III according to IEC 60664 / with degree of pollution 3 / rated value  Degree of pollution  Ambient temperature  • during operating  o C -25 +60			2 kV
Field-bound parasitic coupling / according to IEC 61000-4-3  Insulation voltage / for overvoltage category III according to IEC   60664 / with degree of pollution 3 / rated value  Degree of pollution			1 kV
Insulation voltage / for overvoltage category III according to IEC 60664 / with degree of pollution 3 / rated value  Degree of pollution 3 / Rated value  Ambient temperature  • during operating °C -25 +60	Electrostatic discharge / according to IEC 61000-4-2		6 kV contact discharge / 8 kV air discharge
60664 / with degree of pollution 3 / rated value  Degree of pollution 3  Ambient temperature  • during operating °C -25 +60	Field-bound parasitic coupling / according to IEC 61000-4-3		10 V/m
Ambient temperature  • during operating  °C -25 +60		V	690
• during operating  °C -25 +60	Degree of pollution		3
	Ambient temperature		
• during storage °C -40 +85	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
• sidewards	mm	0
• upwards	mm	0
• downwards	mm	0
Distance, to be maintained, to the ranks assembly		
• forwards	mm	0
• backwards	mm	0
• sidewards	mm	0
• upwards	mm	0
• downwards	mm	0
Distance, to be maintained, conductive elements		
• forwards	mm	0
• backwards	mm	0
• sidewards	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 mm2), 2x (0.5 2.5 mm2)
• finely stranded		
with wire end processing		1x (0.5 2.5 mm2), 2x (0.5 1.5 mm2)
• 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	Α	3
• at 400 V / at 50/60 Hz	Α	3
• at DC-13		
• at 24 V	Α	1
• at 125 V	Α	0.2
• at 250 V	Α	0.1
Thermal current / of the contact-affected switching element / maximum	А	5
Operating current / at 17 V / minimum	mA	5
Continuous current / of the DIAZED fuse link of the output relay	Α	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







Special Test Certificate Type Test
Certificates/Test
Report

## **Shipping Approval**







Declaration of Conformity

other

other

## **Further information:**

Information- and Downloadcenter (Catalogs, Brochures,...)

http://www.siemens.com/industrial-controls/catalogs

Industry Mall (Online ordering system)

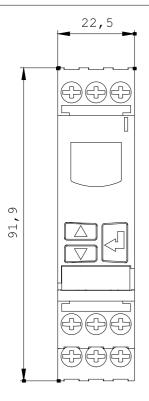
http://www.siemens.com/industrial-controls/mall

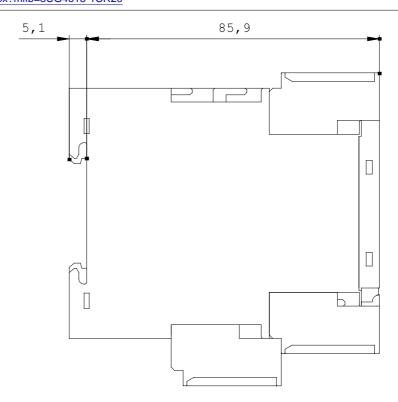
Cax online generator:

http://www.siemens.com/cax

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

http://support.automation.siemens.com/WW/view/en/3UG4615-1CR20/all





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