# **SIEMENS**

Data sheet 3UG4815-1AA40



DIGITAL MONITORING RELAY FOR THREE-PHASE MAINS VOLTAGE FOR IO LINK AC 50 TO 60 HZ 3X 160 TO 690V LINE PHASE SEQUENCE, PHASE FAILURE, PHASE ASYMMETRY UNDER- AND OVERVOLTAGE HYSTERESIS 1-20V NETWORK STABILITY TIME TRIGGER DELAY TIME 1 CHANGEOVER, SCREW CONNECTION

Product function		Phase monitoring relay
Measuring circuit:		
Type of voltage for monitoring		AC
Number of poles for main current circuit		3
Measurable voltage at AC	V	160 690
Adjustable voltage range	V	160 690
Adjustable response delay time		
<ul><li>when starting</li></ul>	s	0 999.9
<ul> <li>with lower or upper limit violation</li> </ul>	s	0 999.9
Relative setting accuracy	%	0.2
Relative metering precision	%	5
Accuracy of digital display		+/-1 digit
Relative repeat accuracy	%	1
General technical data:		
Design of the display		LCD
Display version LED		No
Product function		
<ul> <li>undervoltage detection</li> </ul>		Yes

Overvoltage detection  In phase squence recognition  Phase failure detection  Phase unbalance  Overvoltage detection 3 phase  Undervoltage detection 4 phase			
Phase failure detection Phase unbalance Overvoltage detection 3 phase undervoltage window recognition 3 phase External reset Auto-reset Auto-reset Adjustable open/closed-circuit current principle External reset Auto-reset Adjustable open/closed-circuit current principle External reset Auto-reset Adjustable open/closed-circuit current principle External reset Auto-reset Auto-rese	Overvoltage detection		Yes
Phase unbalance Overvoltage detection 3 phase undervoltage detection 3 phase undervoltage detection 3 phase Ves Voltage window recognition 3 phase External reset Auto-reset Auto-reset Auto-reset Auto-reset Auto-reset Adjustable open/closed-circuit current principle Starting time after the control supply voltage has been applied Response time maximum Type of voltage of the control supply voltage Eath C Auto-reset Adjustable open/closed-circuit current principle Starting time after the control supply voltage has been applied Response time maximum Type of voltage of the control supply voltage Eath C Auto-reset Adjustable open/closed-circuit current principle Starting time after the control supply voltage has been applied Response time maximum Type of voltage of the control supply voltage Eath C Auto-reset Adjustable open/closed-circuit current principle Type of voltage of the control supply voltage Eath C Auto-reset Adjustable open/closed-circuit current principle Type of voltage of the control supply voltage Eath C Auto-reset Adjustable open/closed-circuit current principle Type of voltage of the control supply voltage Eath C Auto-reset Au	<ul> <li>phase sequence recognition</li> </ul>		Yes
Overvoltage detection 3 phase	Phase failure detection		Yes
• undervoltage detection 3 phases  • Voltage window recognition 3 phases  • External reset  • Auto-reset  • Auto-	Phase unbalance		Yes
Voltage window recognition 3 phase     External reset     Auto-reset     Adjustable open/closed-circuit current principle Starting time after the control supply voltage has been applied Response time maximum Response time fill time time fill	Overvoltage detection 3 phase		Yes
External reset     Auto-reset     Adjustable open/closed-circuit current principle     Starting time after the control supply voltage has been applied Response time maximum     Ms    450  Control supply voltage     • at AC     — at 50 Hz rated value     — at 60 Hz rated value     — at 60 Hz rated value     • at DC rated value     • at DC Surge voltage resistance rated value     • at DC Surge voltage resistance rated value     8	<ul> <li>undervoltage detection 3 phases</li> </ul>		Yes
Auto-reset Adjustable open/closed-circuit current principle Starting time after the control supply voltage has been applied Response time maximum  Type of voltage of the control supply voltage  at AC  — at 50 Hz rated value — at 60 Hz rated value — at 60 Hz rated value  v 00  Poperating range factor control supply voltage rated value  at DC  Surge voltage resistance rated value  At DC  Surge voltage resistance rated value  Frotection class IP  Electromagnetic compatibility  Vibration resistance acc. to IEC 60068-2-6  Shock resistance acc. to IEC 60068-2-7  Installation altitude at height above sea level maximum  Conducted interference due to conductor-conductor surge acc. to IEC 61000-4-5  Electrostatic discharge acc. to IEC 61000-4-2  Field-bound parasitic coupling acc. to IEC 61000-4-3  Degree of pollution  Ambient temperature  during operation  v C -25 +60  vest Voltage resistance  vest V 2  V 0 0  0 0	<ul> <li>Voltage window recognition 3 phase</li> </ul>		Yes
Adjustable open/closed-circuit current principle Starting time after the control supply voltage has been applied Response time maximum      at 50 Hz rated value     at 50 Hz rated value     at 50 Hz rated value     at DC rated value     at DC rated value     at DC surge voltage rated value     at DC Surge voltage resistance acc. to IEC 60068-2-6 Shock resistance acc. to IEC 60068-2-7 Installation altitude at height above sea level maximum Conducted interference due to burst acc. to IEC 61000-4-2 Conducted interference due to conductor-earth surge acc. to IEC 61000-4-5 Electrostatic discharge acc. to IEC 61000-4-2 Field-bound parasitic coupling acc. to IEC 61000-4-3 Degree of pollution Anbient temperature     during operation     during storage  Yes  ms 1 000  1 00	External reset		Yes
Starting time after the control supply voltage has been applied  Response time maximum  Type of voltage of the control supply voltage  • at AC  — at 50 Hz rated value  • at DC rated value  • at DC rated value  • at DC surge voltage resistance rated value  • at DC  Surge voltage resistance rated value  • at DC  Surge voltage resistance rated value  • at DC  Surge voltage resistance rated value  • at DC  Surge voltage resistance rated value  • at DC  Surge voltage resistance acc. to IEC 60068-2-8  Shock resistance acc. to IEC 60068-2-7  Installation altitude at height above sea level maximum  Conducted interference due to burst acc. to IEC 61000-4-2  Conducted interference due to conductor-conductor surge acc. to IEC 61000-4-5  Electrostatic discharge acc. to IEC 61000-4-2  Field-bound parasitic coupling acc. to IEC 61000-4-3  Pogree of pollution  Ambient temperature  • during operation  • during storage  **C  **A50  **U  **O  **U  **O  **O  **O  **O  **	Auto-reset		Yes
Response time maximum Type of voltage of the control supply voltage  • at AC  — at 50 Hz rated value — at 60 Hz rated value — at 60 Hz rated value  • at DC  Control supply voltage rated value  • at DC rated value  • at DC  Surge voltage resistance rated value  • at DC  1 1  Surge voltage resistance rated value  • at DC  1 1  Surge voltage resistance rated value  • at DC  1 1  Surge voltage resistance rated value  • at DC  1 1  Surge voltage resistance rated value  • at DC  1 1  Surge voltage resistance rated value  • at DC  1 1  Surge voltage resistance rated value  • at DC  1 1  Surge voltage resistance rated value  • at DC  1 1  Surge voltage resistance rated value  • at DC  1 1  Surge voltage resistance rated value  • at DC  1 1  Surge voltage resistance rated value  • at DC  1 1  Surge voltage resistance rated value  • at DC  1 1  Surge voltage resistance rated value  • at DC  1 1  Surge voltage resistance rated value  2 kV  1 4  Surge voltage resistance rated value  2 kV  3 4  Su	Adjustable open/closed-circuit current principle		Yes
Type of voltage of the control supply voltage  • at AC  — at 50 Hz rated value  • at DC surge voltage rated value  • at DC  Surge voltage resistance rated value  • at DC  Consumed active power  Protection class IP  Electromagnetic compatibility  Vibration resistance acc. to IEC 60068-2-6  Shock resistance acc. to IEC 60068-2-7  Installation altitude at height above sea level maximum  Conducted interference due to burst acc. to IEC 61000-4-2  Conducted interference due to conductor-earth surge acc. to IEC 61000-4-5  Conducted interference due to conductor-conductor surge acc. to IEC 61000-4-5  Field-bound parasitic coupling acc. to IEC 61000-4-3  Degree of pollution  Ambient temperature  • during operation  • during storage   V  0 0  1 0  1 1  1 1  1 1  1 1  6 24  6 24  7 6 Hz: 15 mm, 6 500 Hz: 29  8 sinusoidal half-wave 15g / 11 ms  m  2 000  1 kV  2 kV  3 characteristic discharge acc. to IEC 61000-4-2  Field-bound parasitic coupling acc. to IEC 61000-4-3  Degree of pollution  4 during operation  • during storage  DC  O 0  0 0  1 1  1 1  1 1  2 kV  2 kV  3 characteristic discharge / 8 kV air discharge  1 to V/m  2 characteristic discharge / 8 kV air discharge  4 during operation  • during storage		ms	1 000
Control supply voltage	Response time maximum	ms	450
■ at AC     — at 50 Hz rated value     — at 60 Hz rated value     — at 60 Hz rated value     • at DC rated value     • at DC  Operating range factor control supply voltage rated value     • at DC  Surge voltage resistance rated value      • at DC  Surge voltage resistance rated value      • at DC  Surge voltage resistance rated value  kV  Consumed active power  W  2  Protection class IP  Electromagnetic compatibility  IEC 60947-1 / IEC 61000-6-2 / IEC 61000-6-4  Vibration resistance acc. to IEC 60068-2-6  Shock resistance acc. to IEC 60068-2-7  Installation altitude at height above sea level maximum  Conducted interference due to burst acc. to IEC 61000-4-4  Conducted interference due to conductor-earth surge acc. to IEC 61000-4-5  Conducted interference due to conductor-conductor surge acc. to IEC 61000-4-5  Electrostatic discharge acc. to IEC 61000-4-2  Field-bound parasitic coupling acc. to IEC 61000-4-3  Degree of pollution  Ambient temperature  • during operation  • during storage  *C  - 25 +60  - 40 +85	Type of voltage of the control supply voltage	_	DC
- at 50 Hz rated value	Control supply voltage		
— at 60 Hz rated value  ● at DC rated value  V 24 24  Operating range factor control supply voltage rated value  • at DC  Surge voltage resistance rated value  Electromagnetic compatibility  Vibration resistance acc. to IEC 60068-2-6  Shock resistance acc. to IEC 60068-2-7  Installation altitude at height above sea level maximum  Conducted interference due to burst acc. to IEC 61000-4-2  Conducted interference due to conductor-conductor surge acc. to IEC 61000-4-5  Electrostatic discharge acc. to IEC 61000-4-2  Field-bound parasitic coupling acc. to IEC 61000-4-3  Degree of pollution  Ambient temperature  • during operation  • during storage    **V 24 24  1 1  1 1  1 1  1 1  6 20  1 1  2 6 20  1 6 20  1 6 20  1 6 20  1 6 500 21 21  2 6 500 500 12  2 8 .	• at AC		
at DC rated value  Operating range factor control supply voltage rated value  at DC  1 1  Surge voltage resistance rated value  kV 6  Consumed active power  W 2  Protection class IP  Electromagnetic compatibility  IEC 60947-1 / IEC 61000-6-2 / IEC 61000-6-4  Vibration resistance acc. to IEC 60068-2-6  Shock resistance acc. to IEC 60068-2-7  Installation altitude at height above sea level maximum  Conducted interference due to burst acc. to IEC 61000-4-4  Conducted interference due to conductor-earth surge acc. to IEC 61000-4-5  Conducted interference due to conductor-conductor surge acc. to IEC 61000-4-5  Electrostatic discharge acc. to IEC 61000-4-2  Field-bound parasitic coupling acc. to IEC 61000-4-3  Degree of pollution  Ambient temperature  during operation  c 1 1  1 1  1 1  1 1  1 1  1 1  1 1  1 1  2 6 Hz: 15 mm, 6 500 Hz: 2g  sinusoidal half-wave 15g / 11 ms  m 2 000  2 kV  2 kV  1 kV  1 kV  2 kV  3 kV  4 kV  4 in discharge  1 kV  2 kV  4 in discharge  7 c -25 +60  4 during operation  c C -25 +60  4 during storage	— at 50 Hz rated value	V	0 0
Operating range factor control supply voltage rated value  • at DC  Surge voltage resistance rated value  kV 6  Consumed active power  Protection class IP  Electromagnetic compatibility  IEC 60947-1 / IEC 61000-6-2 / IEC 61000-6-4  Vibration resistance acc. to IEC 60068-2-6  Shock resistance acc. to IEC 60068-2-7  Installation altitude at height above sea level maximum  Conducted interference due to burst acc. to IEC 61000-4-5  Conducted interference due to conductor-earth surge acc. to IEC 61000-4-5  Conducted interference due to conductor-conductor surge acc. to IEC 61000-4-5  Electrostatic discharge acc. to IEC 61000-4-2  Field-bound parasitic coupling acc. to IEC 61000-4-3  Degree of pollution  Ambient temperature  • during operation  • during storage	— at 60 Hz rated value	V	0 0
value  ● at DC  Surge voltage resistance rated value  kV 6  Consumed active power  Protection class IP  Electromagnetic compatibility  Vibration resistance acc. to IEC 60068-2-6  Shock resistance acc. to IEC 60068-2-7  Installation altitude at height above sea level maximum  Conducted interference due to burst acc. to IEC 61000-4-2  Conducted interference due to conductor-earth surge acc. to IEC 61000-4-5  Conducted interference due to conductor-conductor surge acc. to IEC 61000-4-2  Electrostatic discharge acc. to IEC 61000-4-2  Field-bound parasitic coupling acc. to IEC 61000-4-3  Degree of pollution  Ambient temperature  ● during operation  ● during storage  1 1  1 1  1 1  1 1  1 1  1 1  1 1  1 1  1 1  1 1  1 1  1 1  1 1  1 1  1 1  1 1  1 1  1 6 Hz: 15 mm, 6 500 Hz: 2g  sinusoidal half-wave 15g / 11 ms  m  2 000  2 kV  2 kV  1 kV  2 kV  3 kV  4 kV  4 kV  4 kV  5 kV  5 kV  6 kV contact discharge / 8 kV air discharge  1 to V/m  2 kV  4 contact discharge / 8 kV air discharge  4 during operation  • during storage  • C -25 +60  • during storage	at DC rated value	V	24 24
Surge voltage resistance rated value  Consumed active power  Protection class IP  Electromagnetic compatibility  Vibration resistance acc. to IEC 60068-2-6  Shock resistance acc. to IEC 60068-2-7  Installation altitude at height above sea level maximum  Conducted interference due to burst acc. to IEC 61000-4-5  Conducted interference due to conductor-earth surge acc. to IEC 61000-4-5  Conducted interference due to conductor-conductor surge acc. to IEC 61000-4-2  Electrostatic discharge acc. to IEC 61000-4-2  Field-bound parasitic coupling acc. to IEC 61000-4-3  Degree of pollution  Ambient temperature  • during operation  • during storage  ViP20  IEC 61000-6-2 / IEC 61000-6-2  ViBC 61000-4-5  IEC 61000-4-5  CONDUCTED (1 / 1 / 1 / 1 / 1 / 1 / 1 / 1 / 1 / 1			
Consumed active power  Protection class IP  Electromagnetic compatibility  IEC 60947-1 / IEC 61000-6-2 / IEC 61000-6-4  Vibration resistance acc. to IEC 60068-2-6  Shock resistance acc. to IEC 60068-2-27  Installation altitude at height above sea level maximum  Conducted interference due to burst acc. to IEC 61000-4-4  Conducted interference due to conductor-earth surge acc. to IEC 61000-4-5  Conducted interference due to conductor-conductor surge acc. to IEC 61000-4-5  Electrostatic discharge acc. to IEC 61000-4-2  Field-bound parasitic coupling acc. to IEC 61000-4-3  Degree of pollution  Published  Conducted interference due to conductor-conductor surge acc. to IEC 61000-4-2  Field-bound parasitic coupling acc. to IEC 61000-4-3  Degree of pollution  Conducted interference due to conductor-conductor surge acc. to IEC 61000-4-2  Field-bound parasitic coupling acc. to IEC 61000-4-3  Degree of pollution  Conducted interference due to conductor-conductor surge acc. to IEC 61000-4-5  Electrostatic discharge acc. to IEC 61000-4-2  Field-bound parasitic coupling acc. to IEC 61000-4-3  Degree of pollution  Conducted interference due to conductor-conductor surge acc. to IEC 61000-4-5  Electrostatic discharge acc. to IEC 61000-4-2  Field-bound parasitic coupling acc. to IEC 61000-4-3  October 3  Conducted interference due to conductor-conductor surge acc. to IEC 61000-4-5  Electrostatic discharge / 8 kV air discharge  10 V/m  2 diving operation  Conducted interference due to conductor-conductor surge acc. to IEC 61000-4-3  Conducted interference due to conductor-conductor surge acc. to IEC 61000-4-5  Electrostatic discharge / 8 kV air discharge  Conducted interference due to conductor-conductor surge acc. to IEC 61000-4-3  Conducted interference due to conductor-conductor surge acc. to IEC 61000-4-5  Electrostatic discharge / 8 kV air discharge  Conducted interference due to conductor-conductor surge acc. to IEC 61000-4-5  Electrostatic discharge / 8 kV air	• at DC		11
Protection class IP  Electromagnetic compatibility  Electromagnetic compatibility  IEC 60947-1 / IEC 61000-6-2 / IEC 61000-6-4  Vibration resistance acc. to IEC 60068-2-6  Shock resistance acc. to IEC 60068-2-27  Installation altitude at height above sea level maximum  Conducted interference due to burst acc. to IEC 61000-4-4  Conducted interference due to conductor-earth surge acc. to IEC 61000-4-5  Conducted interference due to conductor-conductor surge acc. to IEC 61000-4-5  Electrostatic discharge acc. to IEC 61000-4-2  Field-bound parasitic coupling acc. to IEC 61000-4-3  Degree of pollution  Ambient temperature  • during operation  • during storage  IP20  IEC 61000-6-2 / IEC 61000-6-2 / IEC 61000-6-2  I 6 Hz: 15 mm, 6 500 Hz: 2g  Sinusoidal half-wave 15g / 11 ms   ### 2 000  **  2 kV  2 kV  1 kV  **  1 kV  **  1 kV  **  1 kV  **  2 kV  3 kV contact discharge / 8 kV air discharge  4 kV air discharge  5 kV contact discharge / 8 kV air discharge  6 kV contact discharge / 8 kV air discharge  6 kV contact discharge / 8 kV air discharge  6 kV contact discharge / 8 kV air discharge  6 kV contact discharge / 8 kV air discharge  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 kV air discharge  8 kV air discharge  9 during operation  9 cV -25 +60  -40 +85	Surge voltage resistance rated value	kV	6
Electromagnetic compatibility    IEC 60947-1 / IEC 61000-6-2 / IEC 61000-6-4	Consumed active power	W	2
Vibration resistance acc. to IEC 60068-2-6  Shock resistance acc. to IEC 60068-2-27  Installation altitude at height above sea level maximum  Conducted interference due to burst acc. to IEC 61000-4-4  Conducted interference due to conductor-earth surge acc. to IEC 61000-4-5  Conducted interference due to conductor-conductor surge acc. to IEC 61000-4-5  Electrostatic discharge acc. to IEC 61000-4-2  Field-bound parasitic coupling acc. to IEC 61000-4-3  Degree of pollution  Ambient temperature  • during operation  • during storage  1 6 Hz: 15 mm, 6 500 Hz: 2g  sinusoidal half-wave 15g / 11 ms  1 kV  2 kV  6 kV  6 kV  6 kV contact discharge / 8 kV air discharge  1 kV  1 kV  1 kV  1 kV  2 kV  6 kV contact discharge / 8 kV air discharge  6 kV contact discharge / 8 kV air discharge  1 kV25 +60  -40 +85			IP20
Shock resistance acc. to IEC 60068-2-27  Installation altitude at height above sea level maximum  Conducted interference due to burst acc. to IEC 61000-4-4  Conducted interference due to conductor-earth surge acc. to IEC 61000-4-5  Conducted interference due to conductor-conductor surge acc. to IEC 61000-4-5  Electrostatic discharge acc. to IEC 61000-4-2  Field-bound parasitic coupling acc. to IEC 61000-4-3  Degree of pollution  Ambient temperature  • during operation  • during storage  sinusoidal half-wave 15g / 11 ms  2 000  6 kV  6 kV  6 kV  6 kV  6 kV  6 kV contact discharge / 8 kV air discharge  7 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			
Installation altitude at height above sea level maximum  Conducted interference due to burst acc. to IEC 61000-4-4  Conducted interference due to conductor-earth surge acc. to IEC 61000-4-5  Conducted interference due to conductor-conductor surge acc. to IEC 61000-4-5  Electrostatic discharge acc. to IEC 61000-4-2  Field-bound parasitic coupling acc. to IEC 61000-4-3  Degree of pollution  Ambient temperature  • during operation • during storage  m  2 000  kV  chilater  2 kV  1 kV  5 kV  6 kV contact discharge / 8 kV air discharge 10 V/m  2 chilater  - 25 +60  - 40 +85			
Conducted interference due to burst acc. to IEC 61000-4-4  Conducted interference due to conductor-earth surge acc. to IEC 61000-4-5  Conducted interference due to conductor-conductor surge acc. to IEC 61000-4-5  Electrostatic discharge acc. to IEC 61000-4-2  Field-bound parasitic coupling acc. to IEC 61000-4-3  Degree of pollution  Ambient temperature  • during operation  • during storage  Conducted interference due to conductor-conductor 1 kV  1 kV  6 kV contact discharge / 8 kV air discharge  10 V/m  2  Ambient temperature  • during storage  °C  -25 +60  -40 +85			
Conducted interference due to conductor-earth surge acc. to IEC 61000-4-5  Conducted interference due to conductor-conductor surge acc. to IEC 61000-4-5  Electrostatic discharge acc. to IEC 61000-4-2  Field-bound parasitic coupling acc. to IEC 61000-4-3  Degree of pollution  Ambient temperature  • during operation  • during storage  Conducted interference due to conductor-conductor  1 kV  6 kV contact discharge / 8 kV air discharge  10 V/m  2  Ambient temperature  • during storage	•	m	2 000
acc. to IEC 61000-4-5  Conducted interference due to conductor-conductor surge acc. to IEC 61000-4-5  Electrostatic discharge acc. to IEC 61000-4-2  Field-bound parasitic coupling acc. to IEC 61000-4-3  Degree of pollution  4 during operation  during storage  1 kV  6 kV contact discharge / 8 kV air discharge  10 V/m  2  Ambient temperature  during storage  C -25 +60  -40 +85	61000-4-4		2 kV
surge acc. to IEC 61000-4-5  Electrostatic discharge acc. to IEC 61000-4-2  Field-bound parasitic coupling acc. to IEC 61000-4-3  Degree of pollution  2  Ambient temperature  • during operation • during storage  °C  -25 +60  • during storage	•		2 kV
Field-bound parasitic coupling acc. to IEC 61000-4-3  Degree of pollution  2  Ambient temperature  • during operation • during storage  °C  -25 +60  • during storage			1 kV
Degree of pollution 2  Ambient temperature  • during operation • during storage  °C -25 +60  • during storage	Electrostatic discharge acc. to IEC 61000-4-2		6 kV contact discharge / 8 kV air discharge
Ambient temperature  • during operation • during storage  °C -25 +60  • during storage	· · · · · ·		10 V/m
<ul> <li>during operation</li> <li>during storage</li> <li>°C -25 +60</li> <li>°C -40 +85</li> </ul>	<u> </u>		2
• during storage  °C -40 +85	·		
• during transport			
	during transport	°C	-40 +85

### Galvanic isolation

- between entrance and outlet
- between the voltage supply and other circuits

Yes

Yes

Communication/ Protocol:		
Type of voltage supply via input/output link master		Yes
IO-Link transfer rate		COM2 (38,4 kBaud)
Protocol is supported IO-Link protocol		Yes
Amount of data		
<ul> <li>of the address area of the outputs with cyclical transfer total</li> </ul>	byte	2
<ul> <li>of the address area of the inputs with cyclical transfer total</li> </ul>	byte	4
Point-to-point cycle time between master and IO-Link device minimum	ms	10

Mechanical data:		
Width	mm	22.5
Height	mm	102
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		screw-type terminals
Type of connectable conductor cross-sections		

• solid		1x (0.5 4 mm2), 2x (0.5 2.5 mm2)
<ul> <li>finely stranded</li> </ul>		
<ul><li>— with core end processing</li></ul>		1x (0.5 2.5 mm2), 2x (0.5 1.5 mm2)
<ul> <li>at AWG conductors</li> </ul>		
— 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 CO contacts delayed switching		1
Ampacity of the 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 switching element with	Α	5
contacts maximum		
Operating current at 17 V minimum	mA	20
Continuous current of the DIAZED fuse link of the	Α	4
output relay		40,000,000
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**

Declaration of Conformity

Test Certificates



Manufacturer Declaration







Type Test
Certificates/Test
Report

Test Certificates	other	Railway
Special Test Certificate	Confirmation	Vibration and Shock

#### **Further information**

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

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

Industry Mall (Online ordering system)

http://www.siemens.com/industrymall

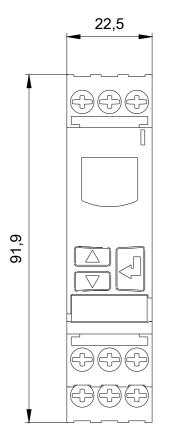
Cax online generator

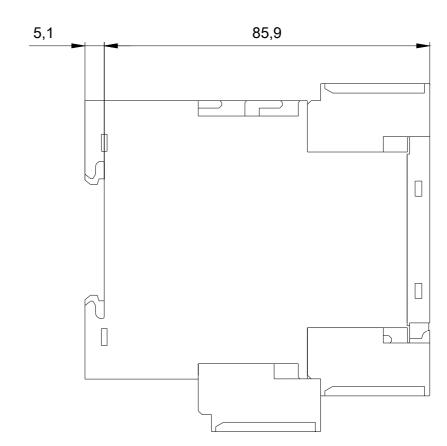
 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3UG4815-1AA40}\\$ 

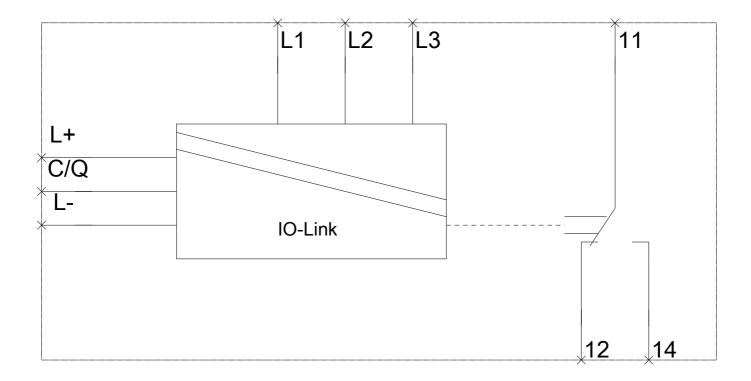
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

https://support.industry.siemens.com/cs/ww/en/ps/3UG4815-1AA40

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3UG4815-1AA40&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3UG4815-1AA40&lang=en</a>







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