

Output coupler Relay coupler, 1 change-over contact 230 V AC/DC  
 Overall width 6.2 mm Spring-type terminal (push-in) Thermal current 6A



Product brand name	SIRIUS
Product category	SIRIUS 3RQ3 coupling relays in slim design
Product designation	Coupling relays with relay output (not plug-in)
Design of the product	Output coupling link
Product type designation	3RQ3

General technical data	
Display version LED	Yes
Product component	
• Relay output	Yes
• semi-conductor output	No
Consumed active power	1 W
Surge voltage resistance rated value	4 kV
maximum permissible voltage for safe isolation	
• between control and auxiliary circuit	300 V
Percental drop-out voltage related to the input voltage	10 %
Protection class IP	IP20
Shock resistance	
• acc. to IEC 60068-2-27	sinusoidal half-wave 15g / 11 ms

<b>Operating frequency maximum</b>	72 000 1/h
<b>Switching behavior</b>	monostable
<b>Mechanical service life (switching cycles)</b>	
• typical	10 000 000
<b>Electrical endurance (switching cycles)</b>	
• at AC-15 at 230 V typical	100 000
<b>Thermal current</b>	6 A
<b>Reference code acc. to DIN EN 81346-2</b>	K
<b>Reference code acc. to DIN EN 61346-2</b>	K

#### Control circuit/ Control

<b>Control supply voltage at AC</b>	
• at 50 Hz rated value	230 V
• at 60 Hz rated value	230 V
<b>Control supply voltage frequency</b>	
• 1 rated value	50 Hz
• 2 rated value	60 Hz
<b>Control supply voltage at DC</b>	
• rated value	230 V
<b>Operating range factor control supply voltage rated value at DC</b>	
• initial value	0.8
• Full-scale value	1.1
<b>Operating range factor control supply voltage rated value at AC at 50 Hz</b>	
• initial value	0.8
• Full-scale value	1.1
<b>Operating range factor control supply voltage rated value at AC at 60 Hz</b>	
• initial value	0.8
• Full-scale value	1.1
<b>Switch-on delay time</b>	
• at AC maximum	9 ms
• at DC maximum	8 ms
<b>Off-delay time</b>	19 ms
<b>Closing delay</b>	
• at AC	12 ms
• at DC	8 ms
<b>Opening delay</b>	
• at AC	20 ms
• at DC	18 ms
<b>Design of the relay operating mechanism</b>	poled
<b>Product component Plug-in socket</b>	No

## Short-circuit protection

### Design of the fuse link

- for short-circuit protection of the auxiliary switch required
- fuse gG: 4 A

## Auxiliary circuit

### Type of switching contact

Changeover contact

### Material of switching contacts

AgSnO<sub>2</sub>

### Number of CO contacts

- for auxiliary contacts

1

### Operating current of auxiliary contacts at AC-15

- at 24 V
- at 250 V

3 A

3 A

### Operating current of auxiliary contacts at DC-13

- at 24 V
- at 125 V
- at 250 V

1 A

0.2 A

0.1 A

### Contact reliability of auxiliary contacts

one incorrect switching operation of 100 million switching operations (17 V, 5 mA)

## Main circuit

### Type of voltage

AC/DC

## Inputs/ Outputs

### Property of the output Short-circuit proof

No

## Outputs

### Ampacity of the output relay at AC-15

- at 250 V at 50/60 Hz

3 A

### Ampacity of the output relay at DC-13

- at 24 V
- at 125 V
- at 250 V

1 A

0.2 A

0.1 A

## Electromagnetic compatibility

### EMC emitted interference

- acc. to IEC 60947-1

ambience A (industrial sector)

### EMI immunity

- acc. to IEC 60947-1

corresponds to degree of severity 3

### Conducted interference

- due to burst acc. to IEC 61000-4-4
- due to conductor-earth surge acc. to IEC 61000-4-5
- due to conductor-conductor surge acc. to IEC 61000-4-5

2 kV

2 kV

1 kV

### Field-bound parasitic coupling acc. to IEC 61000-4-3

10 V/m

Electrostatic discharge acc. to IEC 61000-4-2	6 kV contact discharge / 8 kV air discharge
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### Display

<b>Display version</b>	
<ul style="list-style-type: none"> <li>as status display by LED</li> </ul>	LED green

### Connections/ Terminals

<b>Product function</b>	
<ul style="list-style-type: none"> <li>removable terminal</li> </ul>	No
<b>Type of electrical connection</b>	
<ul style="list-style-type: none"> <li>for auxiliary and control current circuit</li> </ul>	PUSH-IN connection (spring-loaded connection)
<b>Wire length</b>	
<ul style="list-style-type: none"> <li>at AC maximum</li> <li>at DC maximum</li> </ul>	500 m 1 000 m
<b>Type of connectable conductor cross-sections</b>	
<ul style="list-style-type: none"> <li>solid</li> <li>finely stranded with core end processing</li> <li>finely stranded without core end processing</li> <li>at AWG conductors solid</li> <li>at AWG conductors stranded</li> </ul>	1x (0.25 ... 2.5 mm <sup>2</sup> ) 1x (0.25 ... 1.5 mm <sup>2</sup> ) 1x (0.25 ... 2.5 mm <sup>2</sup> ) 1 x (20 ... 14) 1x (20 ... 14)
<b>Connectable conductor cross-section</b>	
<ul style="list-style-type: none"> <li>solid</li> <li>finely stranded with core end processing</li> <li>finely stranded without core end processing</li> </ul>	0.25 ... 2.5 mm <sup>2</sup> 0.25 ... 1.5 mm <sup>2</sup> 0.25 ... 2.5 mm <sup>2</sup>
<b>AWG number as coded connectable conductor cross section</b>	
<ul style="list-style-type: none"> <li>solid</li> <li>stranded</li> </ul>	20 ... 14 20 ... 14

### Installation/ mounting/ dimensions

<b>Mounting position</b>	any
<b>Mounting type</b>	snap-on mounting
<b>Height</b>	93 mm
<b>Width</b>	6.2 mm
<b>Depth</b>	72.5 mm
<b>Required spacing</b>	
<ul style="list-style-type: none"> <li>with side-by-side mounting <ul style="list-style-type: none"> <li>forwards</li> <li>Backwards</li> <li>upwards</li> <li>downwards</li> <li>at the side</li> </ul> </li> <li>for grounded parts <ul style="list-style-type: none"> <li>forwards</li> </ul> </li> </ul>	0 mm 0 mm 0 mm 0 mm 0 mm 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

0 mm
0 mm
0 mm
0 mm
0 mm
0 mm
0 mm
0 mm
0 mm
0 mm
0 mm

### Ambient conditions

<b>Installation altitude at height above sea level</b>	
• maximum	2 000 m
<b>Relative humidity</b>	
• during operation	10 ... 95 %

### Certificates/ approvals

<b>General Product Approval</b>	<b>EMC</b>	<b>Declaration of Conformity</b>
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<b>Declaration of Conformity</b>	<b>Marine / Shipping</b>	<b>other</b>
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[Miscellaneous](#)



[Confirmation](#)

### Further information

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

[www.siemens.com/sirius/catalogs](http://www.siemens.com/sirius/catalogs)

**Industry Mall (Online ordering system)**

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RQ3018-2AF00>

**Cax online generator**

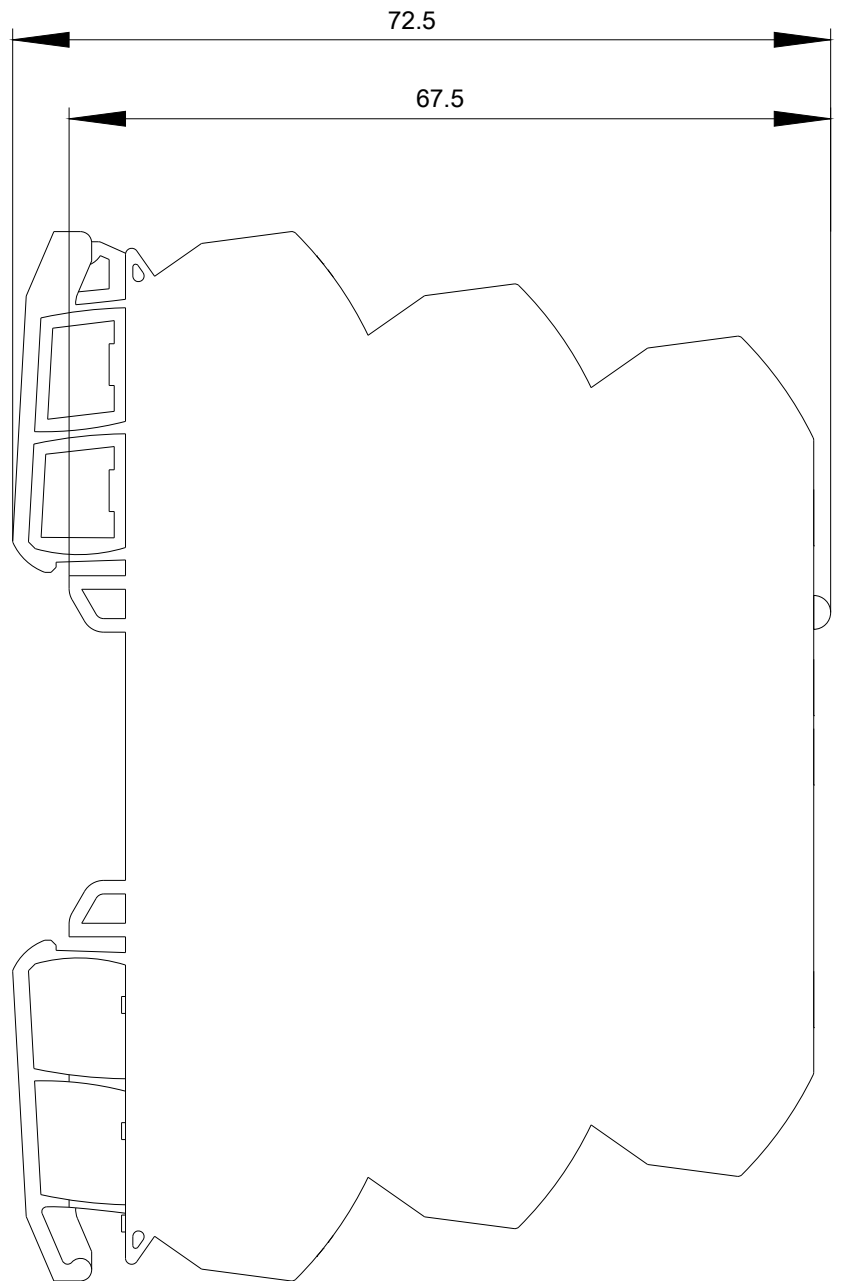
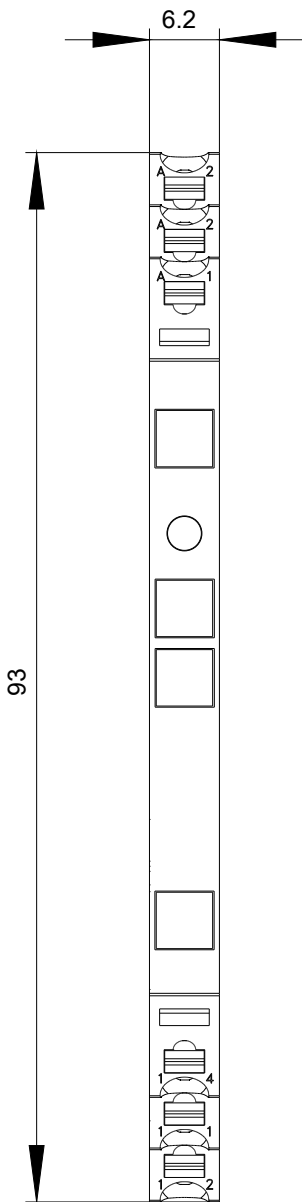
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RQ3018-2AF00>

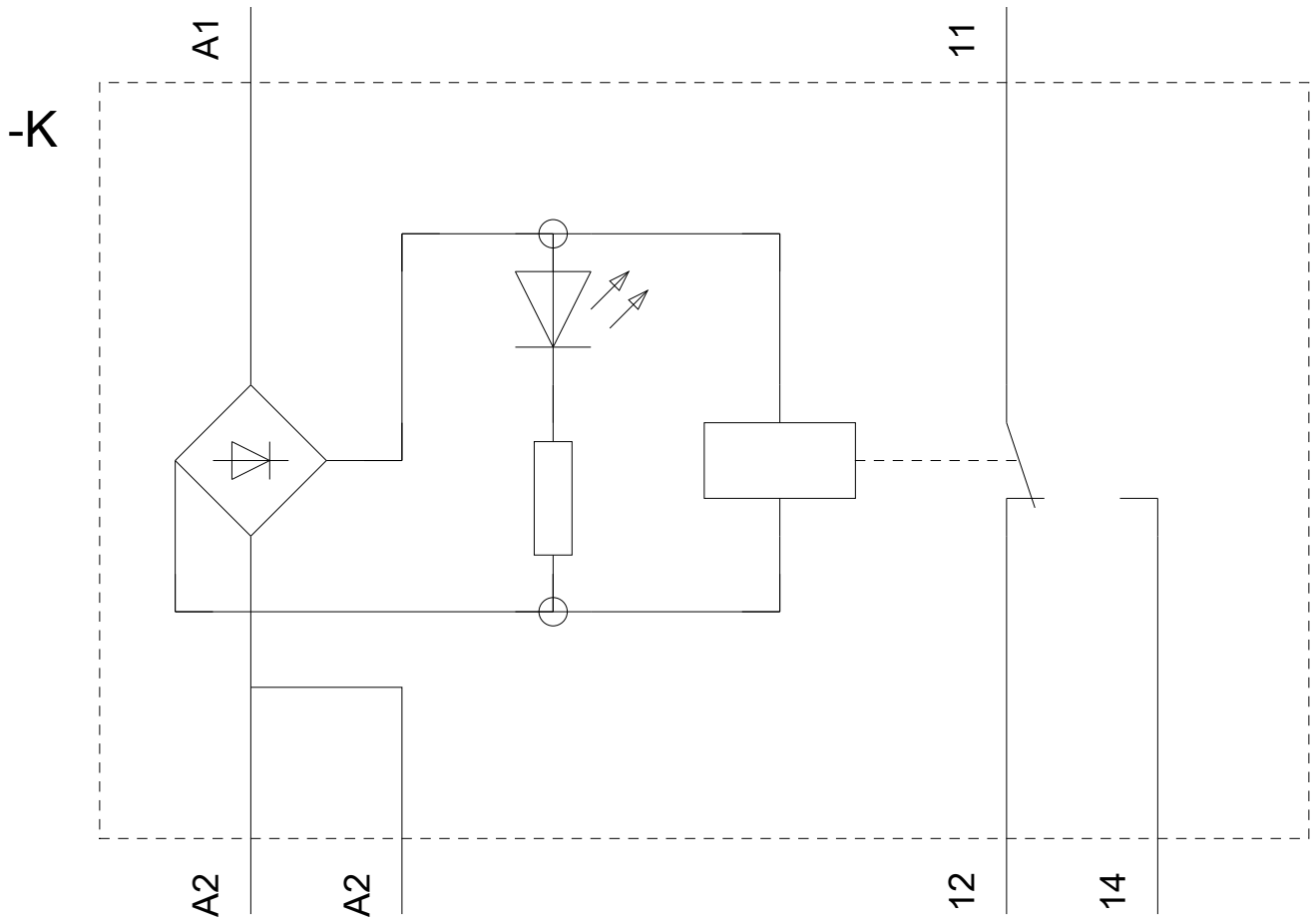
**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**

<https://support.industry.siemens.com/cs/ww/en/ps/3RQ3018-2AF00>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RQ3018-2AF00&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RQ3018-2AF00&lang=en)





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