

Output coupler Optocoupler 1 NO transistor, 110-230 V AC/DC  
Output max. 30 V DC, 3 A short circuit-proof Enclosure width 6.2 mm  
screw terminal Thermal current 3A



|                          |                                                         |
|--------------------------|---------------------------------------------------------|
| Product brand name       | SIRIUS                                                  |
| Product category         | SIRIUS 3RQ3 coupling relays in slim design              |
| Product designation      | Coupling relays with semiconductor 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                                        | No                               |
| • semi-conductor output                               | Yes                              |
| Consumed active power                                 | 0.3 W                            |
| Insulation voltage                                    |                                  |
| • for overvoltage category III according to IEC 60664 |                                  |
| — with degree of pollution 3 rated value              | 300 V                            |
| Surge voltage resistance rated value                  | 4 kV                             |
| Protection class IP                                   | IP20                             |
| Shock resistance                                      |                                  |
| • acc. to IEC 60068-2-27                              | sinusoidal half-wave 15g / 11 ms |

|                                              |                   |
|----------------------------------------------|-------------------|
| <b>Vibration resistance</b>                  |                   |
| • acc. to IEC 60068-2-6                      | 6 ... 150 Hz: 2 g |
| <b>Switching frequency</b>                   | 10 Hz             |
| <b>Thermal current</b>                       | 3 A               |
| <b>Reference code acc. to DIN EN 81346-2</b> | K                 |

#### Control circuit/ Control

|                                                                                 |               |
|---------------------------------------------------------------------------------|---------------|
| <b>Control supply voltage at AC</b>                                             |               |
| • at 50 Hz rated value                                                          | 110 ... 230 V |
| • at 60 Hz rated value                                                          | 110 ... 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                                                                   | 110 ... 230 V |
| <b>Operating range factor control supply voltage rated value at DC</b>          |               |
| • initial value                                                                 | 0.7           |
| • Full-scale value                                                              | 1.1           |
| <b>Operating range factor control supply voltage rated value at AC at 50 Hz</b> |               |
| • initial value                                                                 | 0.7           |
| • Full-scale value                                                              | 1.1           |
| <b>Operating range factor control supply voltage rated value at AC at 60 Hz</b> |               |
| • initial value                                                                 | 0.7           |
| • Full-scale value                                                              | 1.1           |
| <b>Switch-on delay time</b>                                                     |               |
| • at AC maximum                                                                 | 3 ms          |
| • at DC maximum                                                                 | 2 ms          |
| <b>Off-delay time</b>                                                           | 10 ms         |
| <b>Product component Plug-in socket</b>                                         | No            |

#### Auxiliary circuit

|                                                     |            |
|-----------------------------------------------------|------------|
| <b>Type of switching contact</b>                    | NO contact |
| <b>Number of NO contacts for auxiliary contacts</b> | 1          |

#### Main circuit

|                        |       |
|------------------------|-------|
| <b>Type of voltage</b> | AC/DC |
|------------------------|-------|

#### Inputs/ Outputs

|                                                   |     |
|---------------------------------------------------|-----|
| <b>Property of the output Short-circuit proof</b> | Yes |
|---------------------------------------------------|-----|

#### Outputs

|                                                   |              |
|---------------------------------------------------|--------------|
| <b>Ampacity of the semiconductor output at DC</b> | 1 mA ... 3 A |
|---------------------------------------------------|--------------|

| Electromagnetic compatibility                                  |                                             |
|----------------------------------------------------------------|---------------------------------------------|
| <b>EMC emitted interference</b>                                |                                             |
| • acc. to IEC 60947-1                                          | ambience A (industrial sector)              |
| <b>EMI immunity</b>                                            |                                             |
| • acc. to IEC 60947-1                                          | corresponds to degree of severity 3         |
| <b>Conducted interference</b>                                  |                                             |
| • due to burst acc. to IEC 61000-4-4                           | 2 kV                                        |
| • due to conductor-earth surge acc. to IEC 61000-4-5           | 2 kV                                        |
| • due to conductor-conductor surge acc. to IEC 61000-4-5       | 1 kV                                        |
| <b>Field-bound parasitic coupling acc. to IEC 61000-4-3</b>    | 10 V/m                                      |
| <b>Electrostatic discharge acc. to IEC 61000-4-2</b>           | 6 kV contact discharge / 8 kV air discharge |
| Display                                                        |                                             |
| <b>Display version</b>                                         |                                             |
| • as status display by LED                                     | LED green                                   |
| Connections/ Terminals                                         |                                             |
| <b>Product function</b>                                        |                                             |
| • removable terminal                                           | No                                          |
| <b>Type of electrical connection</b>                           |                                             |
| • for auxiliary and control current circuit                    | screw-type terminals                        |
| <b>Wire length</b>                                             |                                             |
| • at AC maximum                                                | 500 m                                       |
| • at DC maximum                                                | 1 000 m                                     |
| <b>Type of connectable conductor cross-sections</b>            |                                             |
| • solid                                                        | 1x (0.25 ... 2.5 mm <sup>2</sup> )          |
| • finely stranded with core end processing                     | 1x (0.25 ... 1.5 mm <sup>2</sup> )          |
| • at AWG conductors solid                                      | 1 x (20 ... 14)                             |
| <b>Connectable conductor cross-section</b>                     |                                             |
| • solid                                                        | 0.25 ... 2.5 mm <sup>2</sup>                |
| • finely stranded with core end processing                     | 0.25 ... 1.5 mm <sup>2</sup>                |
| <b>AWG number as coded connectable conductor cross section</b> |                                             |
| • solid                                                        | 20 ... 14                                   |
| <b>Tightening torque</b>                                       |                                             |
| • with screw-type terminals                                    | 0.5 ... 0.6 N·m                             |
| 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 0 mm</li> <li>— Backwards 0 mm</li> <li>— upwards 0 mm</li> <li>— downwards 0 mm</li> <li>— at the side 0 mm</li> </ul> </li> <li>• for grounded parts <ul style="list-style-type: none"> <li>— forwards 0 mm</li> <li>— Backwards 0 mm</li> <li>— upwards 0 mm</li> <li>— at the side 0 mm</li> <li>— downwards 0 mm</li> </ul> </li> <li>• for live parts <ul style="list-style-type: none"> <li>— forwards 0 mm</li> <li>— Backwards 0 mm</li> <li>— upwards 0 mm</li> <li>— downwards 0 mm</li> <li>— at the side 0 mm</li> </ul> </li> </ul> |         |
| <b>Ambient conditions</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |         |
| <b>Installation altitude at height above sea level</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |         |
| <ul style="list-style-type: none"> <li>• maximum 2 000 m</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |         |
| <b>Ambient temperature</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |         |
| <ul style="list-style-type: none"> <li>• during operation -25 ... +60 °C</li> <li>• during storage -40 ... +85 °C</li> <li>• during transport -40 ... +85 °C</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |         |
| <b>Relative humidity</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |         |
| <ul style="list-style-type: none"> <li>• during operation 10 ... 95 %</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |
| <b>Certificates/ approvals</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |         |

| General Product Approval | EMC | Declaration of Conformity |
|--------------------------|-----|---------------------------|
|--------------------------|-----|---------------------------|



CCC



CSA



UL



RCM



EG-Konf.

| Declaration of Conformity | Marine / Shipping | other |
|---------------------------|-------------------|-------|
|---------------------------|-------------------|-------|

[Miscellaneous](#)



[Confirmation](#)

## Further information

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

<https://www.siemens.com/ic10>

### Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RQ3053-1SG30>

### Cax online generator

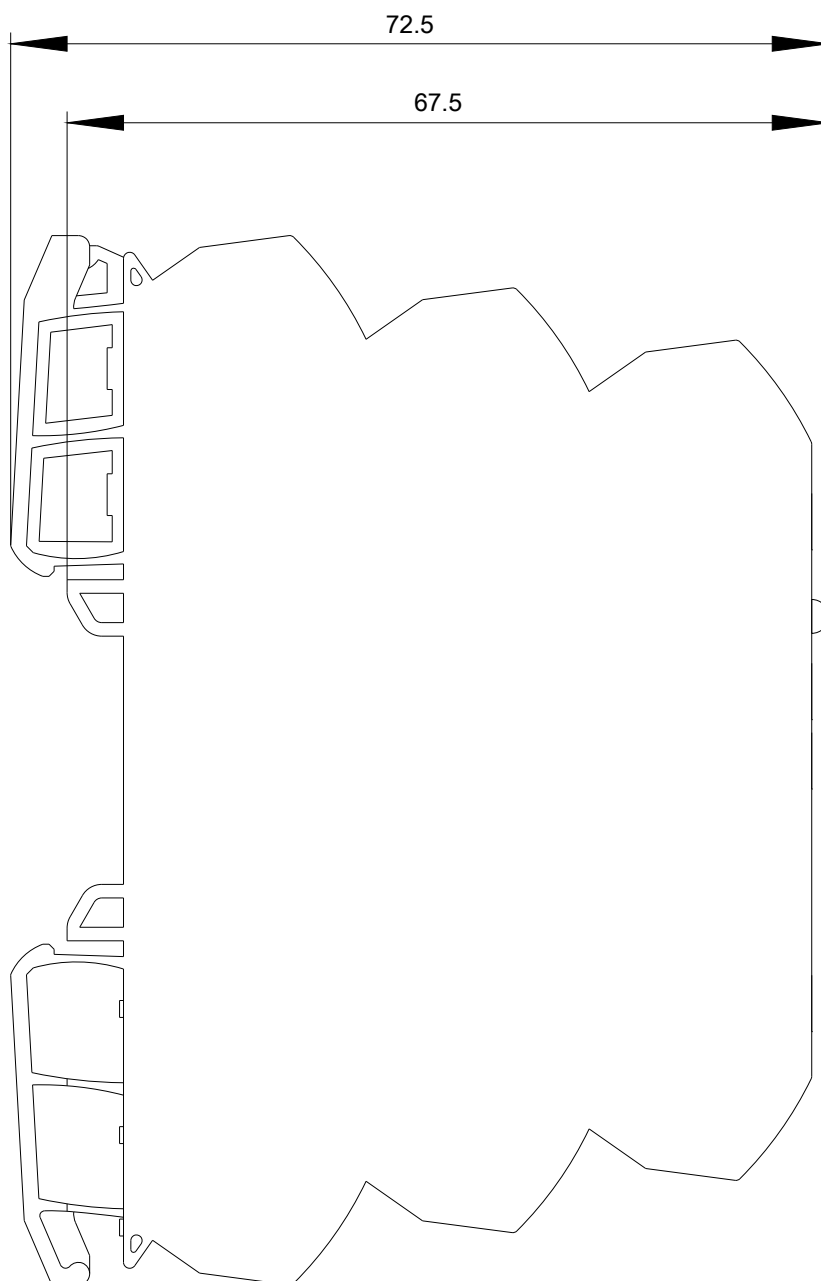
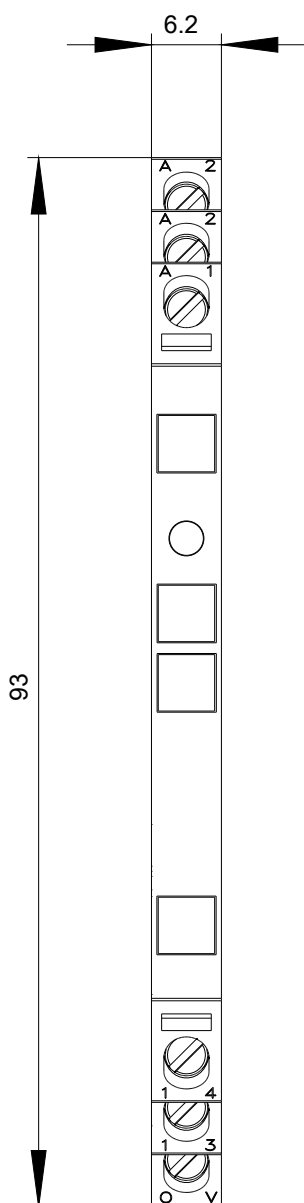
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RQ3053-1SG30>

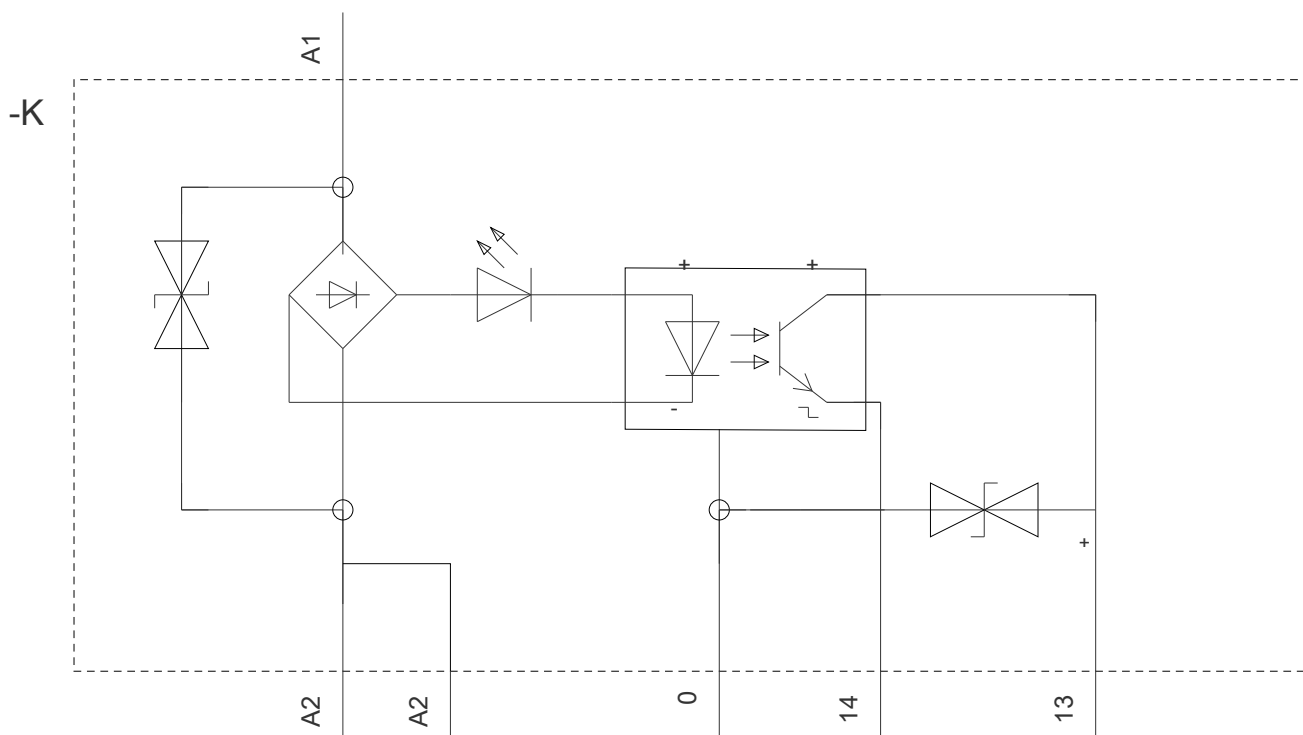
### Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RQ3053-1SG30>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RQ3053-1SG30&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RQ3053-1SG30&lang=en)





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