

Siemens  
EcoTech



output optocoupler, 110-230 V AC/DC, 1 NO contact, spring-loaded terminal (push-in), width 6.2 mm, thermal current 5 A



|                                                                                                               |                                                                                                                          |
|---------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| product brand name                                                                                            | SIRIUS                                                                                                                   |
| product category                                                                                              | SIRIUS 3RQ4 coupling relay, narrow design                                                                                |
| product designation                                                                                           | Coupling relay with integrated semiconductor output                                                                      |
| design of the product                                                                                         | output coupling link                                                                                                     |
| product type designation                                                                                      | 3RQ4                                                                                                                     |
| General technical data                                                                                        |                                                                                                                          |
| display version LED                                                                                           | Yes                                                                                                                      |
| product feature protective coating on printed-circuit board                                                   | No                                                                                                                       |
| product component                                                                                             |                                                                                                                          |
| • relay output                                                                                                | No                                                                                                                       |
| • semi-conductor output                                                                                       | Yes                                                                                                                      |
| power loss [W] maximum                                                                                        | 1.9 W                                                                                                                    |
| consumed active power                                                                                         | 0.5 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                                                                                                                     |
| maximum permissible voltage for protective separation                                                         |                                                                                                                          |
| • between control and auxiliary circuit                                                                       | 300 V                                                                                                                    |
| • between control and auxiliary circuit according to IEC 60947-1                                              | 300 V                                                                                                                    |
| protection class IP                                                                                           | IP20                                                                                                                     |
| flammability class of enclosure material                                                                      | UL94 V-0                                                                                                                 |
| shock resistance                                                                                              |                                                                                                                          |
| • according to IEC 60068-2-27                                                                                 | sinusoidal half-wave 15g / 11 ms                                                                                         |
| vibration resistance                                                                                          |                                                                                                                          |
| • according to IEC 60068-2-6                                                                                  | 6 ... 150 Hz: 2 g                                                                                                        |
| switching behavior                                                                                            | monostable                                                                                                               |
| switching frequency                                                                                           | 25 Hz                                                                                                                    |
| thermal current                                                                                               | 6 A                                                                                                                      |
| short-time withstand current (I <sub>cw</sub> ) limited to 10 ms                                              | 8 A                                                                                                                      |
| reference code according to IEC 81346-2                                                                       | K                                                                                                                        |
| Substance Prohibitance (Date)                                                                                 | 09/26/2024                                                                                                               |
| SVHC substance name                                                                                           | Lead - 7439-92-1<br>Lead monoxide (lead oxide) - 1317-36-8<br>2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol - 79-94-7 |
| Net Weight                                                                                                    | 0.03 kg                                                                                                                  |
| 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 rated value</b>                                              | 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>design of the surge suppressor at input</b>                                               | Varistor                               |
| <b>design of the surge suppressor at output</b>                                              | Suppressor diode                       |
| <b>inrush current maximum</b>                                                                | 5 A                                    |
| <b>minimum switching voltage when switching on</b>                                           | 74 V                                   |
| <b>maximum switching voltage when switching off</b>                                          | 10 V                                   |
| <b>ON-delay time</b>                                                                         |                                        |
| • at AC maximum                                                                              | 5 ms                                   |
| • at DC maximum                                                                              | 2 ms                                   |
| <b>OFF-delay time maximum</b>                                                                | 5 ms                                   |
| <b>leakage current of the electronics for control with signal &lt;0&gt;</b>                  | 0.02 mA                                |
| <b>Switching Function</b>                                                                    |                                        |
| <b>design of the switching function positively driven</b>                                    | No                                     |
| <b>Digital Outputs</b>                                                                       |                                        |
| <b>property of the output short-circuit proof</b>                                            | Yes                                    |
| <b>Mechanical data</b>                                                                       |                                        |
| <b>product component plug-in socket</b>                                                      | No                                     |
| <b>design of the relay operating mechanism</b>                                               | Non-polarized                          |
| <b>Short-circuit protection</b>                                                              |                                        |
| <b>design of the fuse link for short-circuit protection of the auxiliary switch required</b> | fuse gG: 4 A                           |
| <b>Auxiliary circuit</b>                                                                     |                                        |
| <b>type of switching contact</b>                                                             | double contact                         |
| <b>material of contact coating</b>                                                           | other                                  |
| <b>material of switching contacts</b>                                                        | Silver tin oxide (AgSnO <sub>2</sub> ) |
| <b>material of the contact insert</b>                                                        | Thermoplastic                          |
| <b>number of NC contacts for auxiliary contacts</b>                                          | 0                                      |
| <b>number of NO contacts for auxiliary contacts</b>                                          | 1                                      |
| <b>number of CO contacts for auxiliary contacts</b>                                          | 0                                      |
| <b>Main circuit</b>                                                                          |                                        |
| <b>type of voltage</b>                                                                       | AC/DC                                  |
| <b>Inputs/ Outputs</b>                                                                       |                                        |
| <b>switching current of semiconductor outputs</b>                                            | 6 A                                    |
| <b>type of voltage of the output voltage</b>                                                 | DC                                     |
| <b>voltage drop when switched-through maximum</b>                                            | 80 mV                                  |
| <b>switching voltage of the semiconductor output at DC</b>                                   | 10 ... 30 V                            |
| <b>ampacity of the semiconductor output at DC</b>                                            | 1 mA ... 6 A                           |
| <b>Electromagnetic compatibility</b>                                                         |                                        |
| <b>electromagnetic compatibility</b>                                                         | acc. to EN 60947-5-1                   |
| <b>EMC emitted interference according to IEC 60947-1</b>                                     | ambience A (industrial sector)         |
| <b>EMC immunity according to IEC 60947-1</b>                                                 | corresponds to degree of severity 3    |

|                                                                |                                             |
|----------------------------------------------------------------|---------------------------------------------|
| <b>conducted interference</b>                                  |                                             |
| • due to burst according to IEC 61000-4-4                      | 2 kV                                        |
| • due to conductor-earth surge according to IEC 61000-4-5      | 2 kV                                        |
| • due to conductor-conductor surge according to IEC 61000-4-5  | 1 kV                                        |
| <b>field-based interference according to IEC 61000-4-3</b>     | 10 V/m                                      |
| <b>electrostatic discharge according to IEC 61000-4-2</b>      | 6 kV contact discharge / 8 kV air discharge |
| <b>Display</b>                                                 |                                             |
| display version as status display by LED                       | LED green                                   |
| <b>Connections/ Terminals</b>                                  |                                             |
| <b>product function removable terminal</b>                     | No                                          |
| <b>type of electrical connection</b>                           | spring-loaded terminals                     |
| • for auxiliary and control circuit                            | spring-loaded terminals                     |
| <b>type of connection technology</b>                           | 3-wire technology                           |
| <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> )          |
| • finely stranded without core end processing                  | 1x (0.25 ... 2.5 mm <sup>2</sup> )          |
| • for AWG cables solid                                         | 1x (20 ... 14)                              |
| • for AWG cables stranded                                      | 1x (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>                |
| • finely stranded without core end processing                  | 0.25 ... 2.5 mm <sup>2</sup>                |
| <b>AWG number as coded connectable conductor cross section</b> |                                             |
| • solid                                                        | 20 ... 14                                   |
| • stranded                                                     | 20 ... 14                                   |
| <b>size of the screwdriver tip</b>                             | PZ1                                         |
| <b>stripped length</b>                                         | 10 mm                                       |
| <b>Installation/ mounting/ dimensions</b>                      |                                             |
| <b>mounting position</b>                                       | any                                         |
| <b>fastening method</b>                                        | snap-on mounting                            |
| <b>height</b>                                                  | 93 mm                                       |
| <b>width</b>                                                   | 6.2 mm                                      |
| <b>depth</b>                                                   | 84.5 mm                                     |
| <b>required spacing</b>                                        |                                             |
| • with side-by-side mounting                                   |                                             |
| — forwards                                                     | 0 mm                                        |
| — backwards                                                    | 0 mm                                        |
| — upwards                                                      | 0 mm                                        |
| — downwards                                                    | 0 mm                                        |
| — at the side                                                  | 0 mm                                        |
| • for grounded parts                                           |                                             |
| — forwards                                                     | 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                                        |
| <b>Ambient conditions</b>                                      |                                             |
| installation altitude at height above sea level maximum        | 2 000 m                                     |
| <b>ambient temperature</b>                                     |                                             |
| • during operation                                             | -25 ... +60 °C                              |

- during storage
- during transport

-40 ... +85 °C

-40 ... +85 °C

relative humidity during operation

10 ... 95 %

## Approvals Certificates

General Product Approval

other



[Confirmation](#)

## Environment



## Further information

Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

Information for data generation and storage

<https://support.industry.siemens.com/cs/ww/en/view/109995012>

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=3RQ4053-2SG30>

Cax online generator

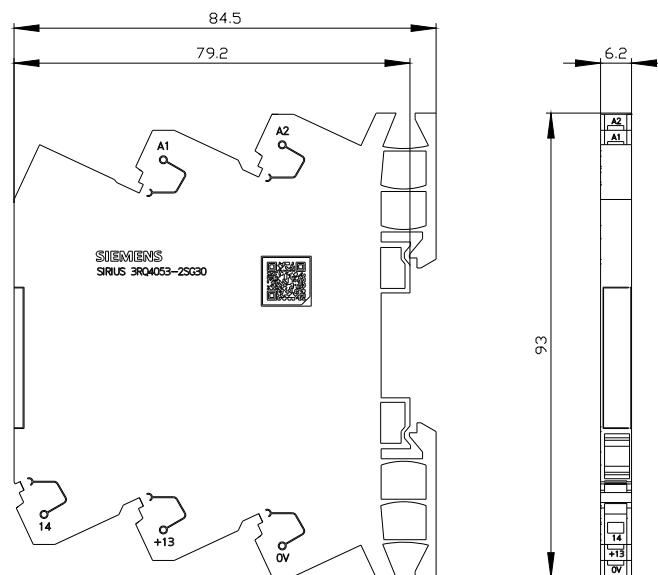
<https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RQ4053-2SG30>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RQ4053-2SG30>

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

[https://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RQ4053-2SG30&lang=en](https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RQ4053-2SG30&lang=en)



last modified:

12/7/2025