

Input coupler Relay coupler, 1 change-over contact 24 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    | Input 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                                   | 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                             |
| 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 |
| Vibration resistance                                    |                                  |
| • acc. to IEC 60068-2-6                                 | 6 ... 150 Hz: 2 g                |
| Operating frequency maximum                             | 72 000 1/h                       |
| Switching behavior                                      | monostable                       |
| Mechanical service life (switching cycles)              |                                  |
| • typical                                               | 10 000 000                       |
| Electrical endurance (switching cycles)                 |                                  |
| • at AC-15 at 230 V typical                             | 100 000                          |
| Thermal current                                         | 6 A                              |
| Reference code acc. to DIN EN 81346-2                   | K                                |

### Control circuit/ Control

|                              |  |
|------------------------------|--|
| Control supply voltage at AC |  |
|------------------------------|--|

|                                                                                                                                                                               |                |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| <ul style="list-style-type: none"> <li>• at 50 Hz rated value</li> <li>• at 60 Hz rated value</li> </ul>                                                                      | 24 V<br>24 V   |
| <b>Control supply voltage frequency</b> <ul style="list-style-type: none"> <li>• 1 rated value</li> <li>• 2 rated value</li> </ul>                                            | 50 Hz<br>60 Hz |
| <b>Control supply voltage at DC</b> <ul style="list-style-type: none"> <li>• rated value</li> </ul>                                                                           | 24 V           |
| <b>Operating range factor control supply voltage rated value at DC</b> <ul style="list-style-type: none"> <li>• initial value</li> <li>• Full-scale value</li> </ul>          | 0.8<br>1.25    |
| <b>Operating range factor control supply voltage rated value at AC at 50 Hz</b> <ul style="list-style-type: none"> <li>• initial value</li> <li>• Full-scale value</li> </ul> | 0.8<br>1.25    |
| <b>Operating range factor control supply voltage rated value at AC at 60 Hz</b> <ul style="list-style-type: none"> <li>• initial value</li> <li>• Full-scale value</li> </ul> | 0.8<br>1.25    |
| <b>Switch-on delay time</b> <ul style="list-style-type: none"> <li>• at AC maximum</li> <li>• at DC maximum</li> </ul>                                                        | 12 ms<br>12 ms |
| <b>Off-delay time</b>                                                                                                                                                         | 14 ms          |
| <b>Closing delay</b> <ul style="list-style-type: none"> <li>• at AC</li> <li>• at DC</li> </ul>                                                                               | 12 ms<br>6 ms  |
| <b>Opening delay</b> <ul style="list-style-type: none"> <li>• at AC</li> <li>• at DC</li> </ul>                                                                               | 14 ms<br>13 ms |
| <b>Design of the relay operating mechanism</b>                                                                                                                                | poled          |
| <b>Product component Plug-in socket</b>                                                                                                                                       | No             |

#### Short-circuit protection

|                                                                                                                                                  |              |
|--------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| <b>Design of the fuse link</b> <ul style="list-style-type: none"> <li>• for short-circuit protection of the auxiliary switch required</li> </ul> | fuse gG: 4 A |
|--------------------------------------------------------------------------------------------------------------------------------------------------|--------------|

#### Auxiliary circuit

|                                                                                                                     |                    |
|---------------------------------------------------------------------------------------------------------------------|--------------------|
| <b>Type of switching contact</b>                                                                                    | Changeover contact |
| <b>Material of switching contacts</b>                                                                               | AgSnO <sub>2</sub> |
| <b>Number of CO contacts</b> <ul style="list-style-type: none"> <li>• for auxiliary contacts</li> </ul>             | 1                  |
| <b>Operating current of auxiliary contacts at AC-15</b> <ul style="list-style-type: none"> <li>• at 24 V</li> </ul> | 3 A                |

|                                                         |                                                                                    |
|---------------------------------------------------------|------------------------------------------------------------------------------------|
| • at 250 V                                              | 3 A                                                                                |
| <b>Operating current of auxiliary contacts at DC-13</b> |                                                                                    |
| • at 24 V                                               | 1 A                                                                                |
| • at 125 V                                              | 0.2 A                                                                              |
| • at 250 V                                              | 0.1 A                                                                              |
| <b>Contact reliability of auxiliary contacts</b>        | one incorrect switching operation of 100 million switching operations (17 V, 5 mA) |

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

|                                                   |    |
|---------------------------------------------------|----|
| <b>Inputs/ Outputs</b>                            |    |
| <b>Property of the output Short-circuit proof</b> | No |

|                                              |       |
|----------------------------------------------|-------|
| <b>Outputs</b>                               |       |
| <b>Ampacity of the output relay at AC-15</b> |       |
| • at 250 V at 50/60 Hz                       | 3 A   |
| <b>Ampacity of the output relay at DC-13</b> |       |
| • at 24 V                                    | 1 A   |
| • at 125 V                                   | 0.2 A |
| • at 250 V                                   | 0.1 A |

|                                                             |                                             |
|-------------------------------------------------------------|---------------------------------------------|
| <b>Electromagnetic compatibility</b>                        |                                             |
| <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 |

|                            |           |
|----------------------------|-----------|
| <b>Display</b>             |           |
| <b>Display version</b>     |           |
| • as status display by LED | LED green |

|                                             |                                   |
|---------------------------------------------|-----------------------------------|
| <b>Connections/ Terminals</b>               |                                   |
| <b>Product function</b>                     |                                   |
| • removable terminal                        | No                                |
| <b>Type of electrical connection</b>        |                                   |
| • for auxiliary and control current circuit | spring-loaded terminals (push-in) |
| <b>Wire length</b>                          |                                   |

|                                                                                                                                                                                                                                               |                                                                                                                                                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• at AC maximum</li> <li>• at DC maximum</li> </ul>                                                                                                                                                    | 500 m<br>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> )<br>1x (0.25 ... 1.5 mm <sup>2</sup> )<br>1x (0.25 ... 2.5 mm <sup>2</sup> )<br>1 x (20 ... 14)<br>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><br>0.25 ... 1.5 mm <sup>2</sup><br>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<br>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> <li>— Backwards</li> <li>— upwards</li> <li>— at the side</li> <li>— downwards</li> </ul> </li> <li>• for live parts <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> </ul> | 0 mm<br>0 mm<br>0 mm<br>0 mm<br>0 mm<br><br>0 mm<br>0 mm<br>0 mm<br>0 mm<br>0 mm<br><br>0 mm<br>0 mm<br>0 mm<br>0 mm<br>0 mm |

## Ambient conditions

|                                                        |                |
|--------------------------------------------------------|----------------|
| <b>Installation altitude at height above sea level</b> |                |
| • maximum                                              | 2 000 m        |
| <b>Ambient temperature</b>                             |                |
| • during operation                                     | -25 ... +60 °C |
| • during storage                                       | -40 ... +85 °C |
| • during transport                                     | -40 ... +85 °C |
| <b>Relative humidity</b>                               |                |
| • during operation                                     | 10 ... 95 %    |

## Certificates/ approvals

| General Product Approval                                                          |                                                                                   |                                                                                   | EMC                                                                               | Declaration of Conformity                                                           |                                                                                     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |  |  |
| CCC                                                                               | CSA                                                                               | UL                                                                                |                                                                                   | RCM                                                                                 | EG-Konf.                                                                            |

| Declaration of Conformity | Marine / Ship-ping | 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=3RQ3038-2AB00>

**Cax online generator**

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RQ3038-2AB00>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RQ3038-2AB00>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RQ3038-2AB00&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RQ3038-2AB00&lang=en)



last modified:

04/11/2020