



contactor AC-1, 40 A, 400 V / 40 °C, 4-pole, 220 V AC, 50 Hz / 240 V, 60 Hz, auxiliary contacts: 1 NO + 1 NC, screw terminal, size: S0

|                                                                               |                            |
|-------------------------------------------------------------------------------|----------------------------|
| product brand name                                                            | SIRIUS                     |
| product designation                                                           | Contactor                  |
| product type designation                                                      | 3RT23                      |
| <b>General technical data</b>                                                 |                            |
| size of contactor                                                             | S0                         |
| product extension                                                             |                            |
| • function module for communication                                           | No                         |
| • auxiliary switch                                                            | Yes                        |
| power loss [W] for rated value of the current                                 |                            |
| • at AC in hot operating state                                                | 9.6 W                      |
| • at AC in hot operating state per pole                                       | 2.4 W                      |
| type of calculation of power loss depending on pole                           | quadratic                  |
| insulation voltage                                                            |                            |
| • of main circuit with degree of pollution 3 rated value                      | 690 V                      |
| • of the auxiliary and control circuit with degree of pollution 3 rated value | 690 V                      |
| surge voltage resistance                                                      |                            |
| • of main circuit rated value                                                 | 6 kV                       |
| • of auxiliary circuit rated value                                            | 6 kV                       |
| shock resistance at rectangular impulse                                       |                            |
| • at AC                                                                       | 8,3g / 5 ms, 5,3g / 10 ms  |
| shock resistance with sine pulse                                              |                            |
| • at AC                                                                       | 13,5g / 5 ms, 8,3g / 10 ms |
| mechanical service life (operating cycles)                                    |                            |
| • of contactor typical                                                        | 10 000 000                 |
| • of the contactor with added auxiliary switch block typical                  | 10 000 000                 |
| reference code according to IEC 81346-2                                       | Q                          |
| Substance Prohibitation (Date)                                                | 10/01/2009                 |
| Weight                                                                        | 0.48 kg                    |
| <b>Ambient conditions</b>                                                     |                            |
| installation altitude at height above sea level maximum                       | 2 000 m                    |
| ambient temperature                                                           |                            |
| • during operation                                                            | -25 ... +60 °C             |
| • during storage                                                              | -55 ... +80 °C             |
| relative humidity minimum                                                     | 10 %                       |
| relative humidity at 55 °C according to IEC 60068-2-30 maximum                | 95 %                       |
| <b>Environmental footprint</b>                                                |                            |
| Environmental Product Declaration (EPD)                                       | Yes                        |
| Global Warming Potential [CO <sub>2</sub> eq] total                           | 166 kg                     |
| Global Warming Potential [CO <sub>2</sub> eq] during manufacturing            | 2.26 kg                    |

|                                                                                                                                                                                                                                 |                            |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|
| Global Warming Potential [CO2 eq] during operation                                                                                                                                                                              | 164 kg                     |
| Global Warming Potential [CO2 eq] after end of life                                                                                                                                                                             | -0.152 kg                  |
| <b>Main circuit</b>                                                                                                                                                                                                             |                            |
| <b>number of poles for main current circuit</b>                                                                                                                                                                                 | 4                          |
| <b>number of NO contacts for main contacts</b>                                                                                                                                                                                  | 4                          |
| <b>operational current</b>                                                                                                                                                                                                      |                            |
| <ul style="list-style-type: none"> <li>at AC-1 at 400 V at ambient temperature 40 °C rated value</li> </ul>                                                                                                                     | 40 A                       |
| <ul style="list-style-type: none"> <li>at AC-1 <ul style="list-style-type: none"> <li>up to 690 V at ambient temperature 40 °C rated value</li> <li>up to 690 V at ambient temperature 60 °C rated value</li> </ul> </li> </ul> | 40 A<br>35 A               |
| <ul style="list-style-type: none"> <li>at AC-3 <ul style="list-style-type: none"> <li>at 400 V rated value</li> </ul> </li> </ul>                                                                                               | 15.5 A                     |
| <ul style="list-style-type: none"> <li>at AC-4 at 400 V rated value</li> </ul>                                                                                                                                                  | 15.5 A                     |
| minimum cross-section in main circuit at maximum AC-1 rated value                                                                                                                                                               | 10 mm <sup>2</sup>         |
| <b>operating power</b>                                                                                                                                                                                                          |                            |
| <ul style="list-style-type: none"> <li>at AC-3 at 400 V rated value</li> <li>at AC-4 at 400 V rated value</li> </ul>                                                                                                            | 7.5 kW<br>7.5 kW           |
| <b>no-load switching frequency</b>                                                                                                                                                                                              |                            |
| <ul style="list-style-type: none"> <li>at AC</li> </ul>                                                                                                                                                                         | 5 000 1/h                  |
| operating frequency at AC-1 maximum                                                                                                                                                                                             | 1 000 1/h                  |
| <b>Control circuit/ Control</b>                                                                                                                                                                                                 |                            |
| <b>type of voltage</b>                                                                                                                                                                                                          | AC                         |
| <b>type of voltage of the control supply voltage</b>                                                                                                                                                                            | AC                         |
| <b>control supply voltage at AC</b>                                                                                                                                                                                             |                            |
| <ul style="list-style-type: none"> <li>at 50 Hz rated value</li> <li>at 60 Hz rated value</li> </ul>                                                                                                                            | 220 V<br>240 V             |
| <b>operating range factor control supply voltage rated value of magnet coil at AC</b>                                                                                                                                           |                            |
| <ul style="list-style-type: none"> <li>at 50 Hz</li> <li>at 60 Hz</li> </ul>                                                                                                                                                    | 0.8 ... 1.1<br>0.8 ... 1.1 |
| <b>apparent pick-up power of magnet coil at AC</b>                                                                                                                                                                              |                            |
| <ul style="list-style-type: none"> <li>at 50 Hz</li> <li>at 60 Hz</li> </ul>                                                                                                                                                    | 81 VA<br>79 VA             |
| <b>inductive power factor with closing power of the coil</b>                                                                                                                                                                    |                            |
| <ul style="list-style-type: none"> <li>at 50 Hz</li> <li>at 60 Hz</li> </ul>                                                                                                                                                    | 0.72<br>0.74               |
| <b>apparent holding power of magnet coil at AC</b>                                                                                                                                                                              |                            |
| <ul style="list-style-type: none"> <li>at 50 Hz</li> <li>at 60 Hz</li> </ul>                                                                                                                                                    | 10.5 VA<br>8.5 VA          |
| <b>inductive power factor with the holding power of the coil</b>                                                                                                                                                                |                            |
| <ul style="list-style-type: none"> <li>at 50 Hz</li> <li>at 60 Hz</li> </ul>                                                                                                                                                    | 0.25<br>0.28               |
| <b>closing delay</b>                                                                                                                                                                                                            |                            |
| <ul style="list-style-type: none"> <li>at AC</li> </ul>                                                                                                                                                                         | 8 ... 40 ms                |
| <b>opening delay</b>                                                                                                                                                                                                            |                            |
| <ul style="list-style-type: none"> <li>at AC</li> </ul>                                                                                                                                                                         | 4 ... 16 ms                |
| <b>arcing time</b>                                                                                                                                                                                                              | 10 ... 10 ms               |
| <b>control version of the switch operating mechanism</b>                                                                                                                                                                        | Standard A1 - A2           |
| <b>Auxiliary circuit</b>                                                                                                                                                                                                        |                            |
| <b>number of NC contacts for auxiliary contacts</b>                                                                                                                                                                             | 1                          |
| <ul style="list-style-type: none"> <li>attachable</li> <li>instantaneous contact</li> </ul>                                                                                                                                     | 2<br>1                     |
| <b>number of NO contacts for auxiliary contacts</b>                                                                                                                                                                             | 1                          |
| <ul style="list-style-type: none"> <li>attachable</li> <li>instantaneous contact</li> </ul>                                                                                                                                     | 2<br>1                     |
| operational current at AC-12 maximum                                                                                                                                                                                            | 10 A                       |
| <b>operational current at AC-15</b>                                                                                                                                                                                             |                            |
| <ul style="list-style-type: none"> <li>at 230 V rated value</li> </ul>                                                                                                                                                          | 10 A                       |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                      |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• at 400 V rated value</li> <li>• at 500 V rated value</li> <li>• at 690 V rated value</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                      | 3 A<br>2 A<br>1 A                                                                                                                    |
| <b>operational current at DC-12</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                      |
| <ul style="list-style-type: none"> <li>• at 24 V rated value</li> <li>• at 48 V rated value</li> <li>• at 60 V rated value</li> <li>• at 110 V rated value</li> <li>• at 125 V rated value</li> <li>• at 220 V rated value</li> <li>• at 600 V rated value</li> </ul>                                                                                                                                                                                                                                                         | 10 A<br>6 A<br>6 A<br>3 A<br>2 A<br>1 A<br>0.15 A                                                                                    |
| <b>operational current at DC-13</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                      |
| <ul style="list-style-type: none"> <li>• at 24 V rated value</li> <li>• at 48 V rated value</li> <li>• at 110 V rated value</li> <li>• at 125 V rated value</li> <li>• at 220 V rated value</li> <li>• at 600 V rated value</li> </ul>                                                                                                                                                                                                                                                                                        | 10 A<br>2 A<br>1 A<br>0.9 A<br>0.3 A<br>0.1 A                                                                                        |
| design of the miniature circuit breaker for short-circuit protection of the auxiliary switch required                                                                                                                                                                                                                                                                                                                                                                                                                         | gG: 10 A (230 V, 400 A)                                                                                                              |
| <b>contact reliability of auxiliary contacts</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 1 faulty switching per 100 million (17 V, 1 mA)                                                                                      |
| <b>UL/CSA ratings</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                      |
| <b>contact rating of auxiliary contacts according to UL</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | A600 / Q600                                                                                                                          |
| <b>Short-circuit protection</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                      |
| <b>product function short circuit protection</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | No                                                                                                                                   |
| <b>design of the fuse link</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                      |
| <ul style="list-style-type: none"> <li>• for short-circuit protection of the main circuit <ul style="list-style-type: none"> <li>— with type of coordination 1 required</li> <li>— with type of assignment 2 required</li> </ul> </li> <li>• for short-circuit protection of the auxiliary switch required</li> </ul>                                                                                                                                                                                                         | gG: 63 A (690 V, 100 kA)<br>gG: 20 A (690 V, 100 kA)<br>gG: 10 A (690 V, 1 kA)                                                       |
| <b>Installation/ mounting/ dimensions</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                      |
| <b>mounting position</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface |
| fastening method side-by-side mounting                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Yes                                                                                                                                  |
| <b>fastening method</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715                                                             |
| <b>height</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 85 mm                                                                                                                                |
| <b>width</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 60 mm                                                                                                                                |
| <b>depth</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 97 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>— 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>— 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>— upwards</li> <li>— downwards</li> <li>— at the side</li> </ul> </li> </ul> | 10 mm<br>10 mm<br>10 mm<br>0 mm<br><br>10 mm<br>10 mm<br>6 mm<br>10 mm<br><br>10 mm<br>10 mm<br>10 mm<br>6 mm                        |
| <b>Connections/ Terminals</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                      |
| <b>type of electrical connection</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                      |
| <ul style="list-style-type: none"> <li>• for main current circuit</li> <li>• for auxiliary and control circuit</li> <li>• at contactor for auxiliary contacts</li> <li>• of magnet coil</li> </ul>                                                                                                                                                                                                                                                                                                                            | screw-type terminals<br>screw-type terminals<br>Screw-type terminals<br>Screw-type terminals                                         |
| type of connectable conductor cross-sections for main contacts                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                      |

|                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                           |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• solid</li> <li>• solid or stranded</li> <li>• finely stranded with core end processing</li> </ul>                                                                                                                              | 2x (1 ... 2.5 mm <sup>2</sup> ), 2x (2.5 ... 10 mm <sup>2</sup> )<br>2x (1 ... 2.5 mm <sup>2</sup> ), 2x (2.5 ... 10 mm <sup>2</sup> )<br>2x (1 ... 2.5 mm <sup>2</sup> ), 2x (2.5 ... 6 mm <sup>2</sup> ), 1x 10 mm <sup>2</sup>                         |
| <b>connectable conductor cross-section for main contacts</b>                                                                                                                                                                                                            |                                                                                                                                                                                                                                                           |
| <ul style="list-style-type: none"> <li>• solid</li> <li>• solid or stranded</li> <li>• stranded</li> <li>• finely stranded with core end processing</li> </ul>                                                                                                          | 1 ... 10 mm <sup>2</sup><br>1 ... 10 mm <sup>2</sup><br>1 ... 10 mm <sup>2</sup><br>1 ... 10 mm <sup>2</sup>                                                                                                                                              |
| <b>connectable conductor cross-section for auxiliary contacts</b>                                                                                                                                                                                                       |                                                                                                                                                                                                                                                           |
| <ul style="list-style-type: none"> <li>• solid or stranded</li> <li>• finely stranded with core end processing</li> </ul>                                                                                                                                               | 0.5 ... 2.5 mm <sup>2</sup><br>0.5 ... 2.5 mm <sup>2</sup>                                                                                                                                                                                                |
| <b>type of connectable conductor cross-sections</b>                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                           |
| <ul style="list-style-type: none"> <li>• for auxiliary contacts <ul style="list-style-type: none"> <li>— solid</li> <li>— solid or stranded</li> <li>— finely stranded with core end processing</li> </ul> </li> <li>• for AWG cables for auxiliary contacts</li> </ul> | 2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> )<br>2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> )<br>2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> )<br>2x (20 ... 16), 2x (18 ... 14) |
| <b>AWG number as coded connectable conductor cross section</b>                                                                                                                                                                                                          |                                                                                                                                                                                                                                                           |
| <ul style="list-style-type: none"> <li>• for main contacts</li> <li>• for auxiliary contacts</li> </ul>                                                                                                                                                                 | 16 ... 8<br>20 ... 14                                                                                                                                                                                                                                     |

#### Safety related data

|                                                                                                                                                                 |           |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| <b>product function</b>                                                                                                                                         |           |
| <ul style="list-style-type: none"> <li>• mirror contact according to IEC 60947-4-1</li> <li>• positively driven operation according to IEC 60947-5-1</li> </ul> | Yes<br>No |

#### Electrical Safety

|                                                                |                                                  |
|----------------------------------------------------------------|--------------------------------------------------|
| <b>protection class IP on the front according to IEC 60529</b> | IP20                                             |
| <b>touch protection on the front according to IEC 60529</b>    | finger-safe, for vertical contact from the front |

#### Communication/ Protocol

|                                           |    |
|-------------------------------------------|----|
| <b>product function bus communication</b> | No |
|-------------------------------------------|----|

#### Approvals Certificates

#### General Product Approval



[Confirmation](#)



#### EMV Test Certificates Marine / Shipping



[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



#### Marine / Shipping other Railway



[Miscellaneous](#)

[Confirmation](#)

[Special Test Certificate](#)

#### Environment



[Environmental Confirmations](#)

#### Further information

**Information on the packaging**

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

**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=3RT2326-1AP60>

**Cax online generator**

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2326-1AP60>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RT2326-1AP60>

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

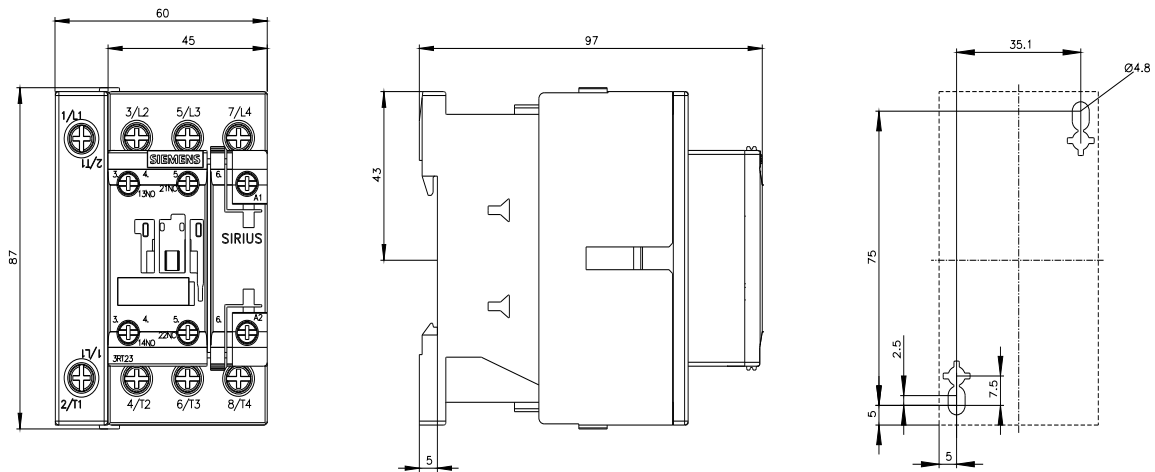
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RT2326-1AP60&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2326-1AP60&lang=en)

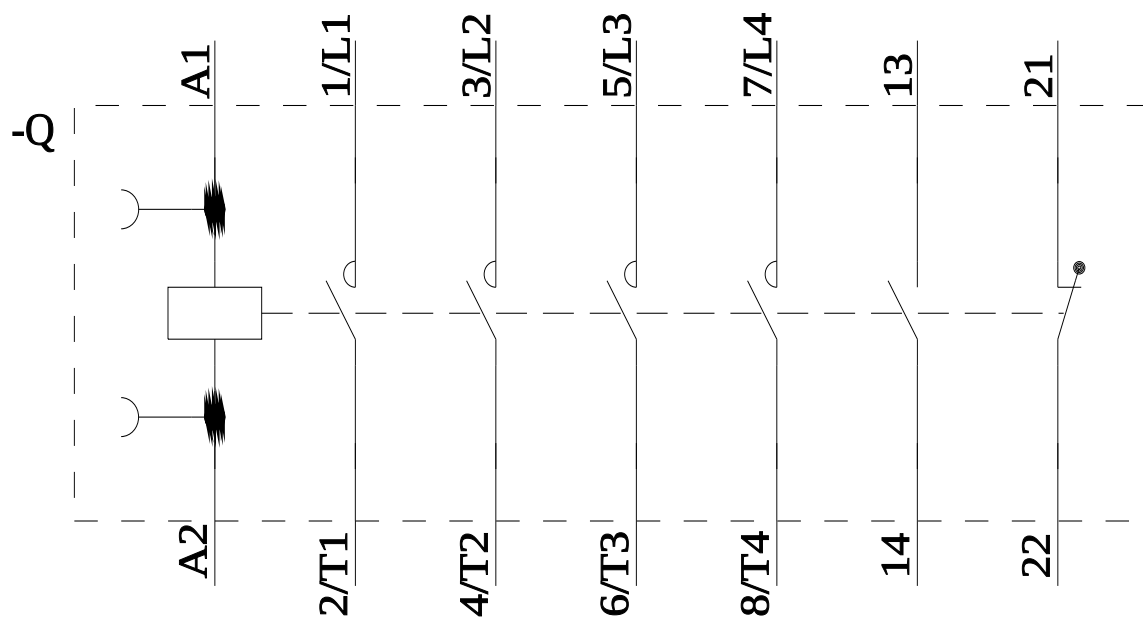
**Characteristic: Tripping characteristics, I<sup>2</sup>t, Let-through current**

<https://support.industry.siemens.com/cs/ww/en/ps/3RT2326-1AP60/char>

**Further characteristics (e.g. electrical endurance, switching frequency)**

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2326-1AP60&objecttype=14&gridview=view1>





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