



contactor AC-1, 22 A, 400 V / 40 °C, 4-pole, 220 V AC, 50 Hz / 240 V, 60 Hz, screw terminal, size: S00

|                                                                               |                            |
|-------------------------------------------------------------------------------|----------------------------|
| product brand name                                                            | SIRIUS                     |
| product designation                                                           | Contactor                  |
| product type designation                                                      | 3RT23                      |
| <b>General technical data</b>                                                 |                            |
| size of contactor                                                             | S00                        |
| 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                                                | 6.4 W                      |
| • at AC in hot operating state per pole                                       | 1.6 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                                                                       | 7,3g / 5 ms, 4,7g / 10 ms  |
| shock resistance with sine pulse                                              |                            |
| • at AC                                                                       | 11,4g / 5 ms, 7,3g / 10 ms |
| mechanical service life (operating cycles)                                    |                            |
| • of contactor typical                                                        | 30 000 000                 |
| • of the contactor with added auxiliary switch block typical                  | 10 000 000                 |
| reference code according to IEC 81346-2                                       | Q                          |
| Substance Prohibitance (Date)                                                 | 10/01/2009                 |
| Weight                                                                        | 0.24 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 [CO2 eq] total                                       | 94.8 kg                    |
| global warming potential [CO2 eq] during manufacturing                        | 1.15 kg                    |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                               |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|
| global warming potential [CO2 eq] during operation                                                                                                                                                                                                                                                                                                                                                                                                    | 93.8 kg                                       |
| global warming potential [CO2 eq] after end of life                                                                                                                                                                                                                                                                                                                                                                                                   | -0.178 kg                                     |
| <b>Main circuit</b>                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                               |
| number of poles for main current circuit                                                                                                                                                                                                                                                                                                                                                                                                              | 4                                             |
| number of NO contacts for main contacts                                                                                                                                                                                                                                                                                                                                                                                                               | 4                                             |
| operational current <ul style="list-style-type: none"> <li>at AC-1 at 400 V at ambient temperature 40 °C rated value</li> <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> <li>at AC-3 <ul style="list-style-type: none"> <li>at 400 V rated value</li> </ul> </li> <li>at AC-4 at 400 V rated value</li> </ul> | 22 A<br><br>22 A<br>20 A<br><br>12 A<br>8.5 A |
| minimum cross-section in main circuit at maximum AC-1 rated value                                                                                                                                                                                                                                                                                                                                                                                     | 4 mm <sup>2</sup>                             |
| operating power <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>                                                                                                                                                                                                                                                                                                                  | 5.5 kW<br>4 kW                                |
| no-load switching frequency <ul style="list-style-type: none"> <li>at AC</li> </ul>                                                                                                                                                                                                                                                                                                                                                                   | 10 000 1/h                                    |
| operating frequency at AC-1 maximum                                                                                                                                                                                                                                                                                                                                                                                                                   | 1 000 1/h                                     |
| <b>Control circuit/ Control</b>                                                                                                                                                                                                                                                                                                                                                                                                                       |                                               |
| type of voltage                                                                                                                                                                                                                                                                                                                                                                                                                                       | AC                                            |
| type of voltage of the control supply voltage                                                                                                                                                                                                                                                                                                                                                                                                         | AC                                            |
| 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>                                                                                                                                                                                                                                                                                                                     | 220 V<br>240 V                                |
| operating range factor control supply voltage rated value of magnet coil at AC <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                    |
| apparent pick-up power of magnet coil at AC <ul style="list-style-type: none"> <li>at 50 Hz</li> <li>at 60 Hz</li> </ul>                                                                                                                                                                                                                                                                                                                              | 36 VA<br>36 VA                                |
| inductive power factor with closing power of the coil <ul style="list-style-type: none"> <li>at 50 Hz</li> <li>at 60 Hz</li> </ul>                                                                                                                                                                                                                                                                                                                    | 0.8<br>0.8                                    |
| apparent holding power of magnet coil at AC <ul style="list-style-type: none"> <li>at 50 Hz</li> <li>at 60 Hz</li> </ul>                                                                                                                                                                                                                                                                                                                              | 5.9 VA<br>5.9 VA                              |
| inductive power factor with the holding power of the coil <ul style="list-style-type: none"> <li>at 50 Hz</li> <li>at 60 Hz</li> </ul>                                                                                                                                                                                                                                                                                                                | 0.24<br>0.24                                  |
| closing delay <ul style="list-style-type: none"> <li>at AC</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                 | 9 ... 35 ms                                   |
| opening delay <ul style="list-style-type: none"> <li>at AC</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                 | 7 ... 13 ms                                   |
| arcing time                                                                                                                                                                                                                                                                                                                                                                                                                                           | 10 ... 15 ms                                  |
| control version of the switch operating mechanism                                                                                                                                                                                                                                                                                                                                                                                                     | Standard A1 - A2                              |
| <b>Auxiliary circuit</b>                                                                                                                                                                                                                                                                                                                                                                                                                              |                                               |
| number of NC contacts for auxiliary contacts <ul style="list-style-type: none"> <li>attachable</li> </ul>                                                                                                                                                                                                                                                                                                                                             | 2                                             |
| number of NO contacts for auxiliary contacts <ul style="list-style-type: none"> <li>attachable</li> </ul>                                                                                                                                                                                                                                                                                                                                             | 2                                             |
| <b>Short-circuit protection</b>                                                                                                                                                                                                                                                                                                                                                                                                                       |                                               |
| product function short circuit protection                                                                                                                                                                                                                                                                                                                                                                                                             | No                                            |
| design of the fuse link <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> </ul> </li> </ul>                                                                                                                                                                                                                                    | gG: 35 A (690 V, 100 kA)                      |

|                                                                   |                                                                                                                                      |
|-------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| — with type of assignment 2 required                              | gG: 20 A (690 V, 100 kA)                                                                                                             |
| • for short-circuit protection of the auxiliary switch required   | 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>                                                     | 58 mm                                                                                                                                |
| <b>width</b>                                                      | 45 mm                                                                                                                                |
| <b>depth</b>                                                      | 73 mm                                                                                                                                |
| <b>required spacing</b>                                           |                                                                                                                                      |
| • with side-by-side mounting                                      |                                                                                                                                      |
| — forwards                                                        | 10 mm                                                                                                                                |
| — upwards                                                         | 10 mm                                                                                                                                |
| — downwards                                                       | 10 mm                                                                                                                                |
| — at the side                                                     | 0 mm                                                                                                                                 |
| • for grounded parts                                              |                                                                                                                                      |
| — forwards                                                        | 10 mm                                                                                                                                |
| — upwards                                                         | 10 mm                                                                                                                                |
| — at the side                                                     | 6 mm                                                                                                                                 |
| — downwards                                                       | 10 mm                                                                                                                                |
| • for live parts                                                  |                                                                                                                                      |
| — forwards                                                        | 10 mm                                                                                                                                |
| — upwards                                                         | 10 mm                                                                                                                                |
| — downwards                                                       | 10 mm                                                                                                                                |
| — at the side                                                     | 6 mm                                                                                                                                 |
| <b>Connections/ Terminals</b>                                     |                                                                                                                                      |
| <b>type of electrical connection</b>                              |                                                                                                                                      |
| • for main current circuit                                        | screw-type terminals                                                                                                                 |
| • for auxiliary and control circuit                               | screw-type terminals                                                                                                                 |
| • at contactor for auxiliary contacts                             | Screw-type terminals                                                                                                                 |
| • of magnet coil                                                  | Screw-type terminals                                                                                                                 |
| type of connectable conductor cross-sections for main contacts    |                                                                                                                                      |
| • solid                                                           | 2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> ), 2x 4 mm <sup>2</sup>                                          |
| • solid or stranded                                               | 2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> ), 2x 4 mm <sup>2</sup>                                          |
| • finely stranded with core end processing                        | 2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> )                                                                |
| <b>connectable conductor cross-section for main contacts</b>      |                                                                                                                                      |
| • solid                                                           | 0.5 ... 4 mm <sup>2</sup>                                                                                                            |
| • solid or stranded                                               | 0.5 ... 4 mm <sup>2</sup>                                                                                                            |
| • stranded                                                        | 0.5 ... 4 mm <sup>2</sup>                                                                                                            |
| • finely stranded with core end processing                        | 0.5 ... 2.5 mm <sup>2</sup>                                                                                                          |
| <b>connectable conductor cross-section for auxiliary contacts</b> |                                                                                                                                      |
| • solid or stranded                                               | 0.5 ... 4 mm <sup>2</sup>                                                                                                            |
| • finely stranded with core end processing                        | 0.5 ... 2.5 mm <sup>2</sup>                                                                                                          |
| <b>type of connectable conductor cross-sections</b>               |                                                                                                                                      |
| • for auxiliary contacts                                          |                                                                                                                                      |
| — solid                                                           | 2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> )                                                                |
| — solid or stranded                                               | 2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> ), 2x 4 mm <sup>2</sup>                                          |
| — finely stranded with core end processing                        | 2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> )                                                                |
| • for AWG cables for auxiliary contacts                           | 2x (20 ... 16), 2x (18 ... 14), 2x 12                                                                                                |
| <b>AWG number as coded connectable conductor cross section</b>    |                                                                                                                                      |
| • for main contacts                                               | 20 ... 12                                                                                                                            |
| • for auxiliary contacts                                          | 20 ... 12                                                                                                                            |
| <b>Safety related data</b>                                        |                                                                                                                                      |
| <b>product function</b>                                           |                                                                                                                                      |
| • mirror contact according to IEC 60947-4-1                       | Yes; with 3RH29                                                                                                                      |
| • positively driven operation according to IEC 60947-5-1          | No                                                                                                                                   |
| <b>Electrical Safety</b>                                          |                                                                                                                                      |
| <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            |    |
|------------------------------------|----|
| product function bus communication | No |
| Approvals Certificates             |    |
| General Product Approval           |    |



[Confirmation](#)



| EMV | Test Certificates | Marine / Shipping |
|-----|-------------------|-------------------|
|-----|-------------------|-------------------|



[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



| Marine / Shipping | other |
|-------------------|-------|
|-------------------|-------|



[Miscellaneous](#)

[Confirmation](#)

| Railway | Environment |
|---------|-------------|
|---------|-------------|

[Special Test Certificate](#)



[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=3RT2317-1AP60>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2317-1AP60>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RT2317-1AP60>

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

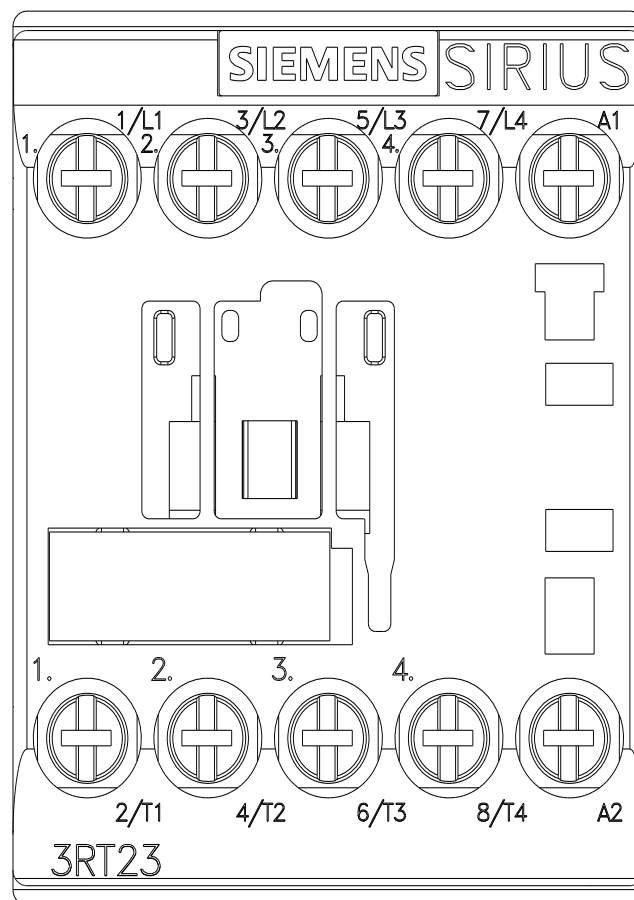
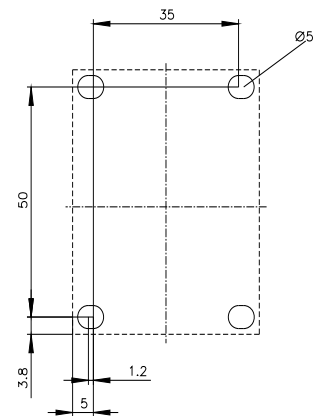
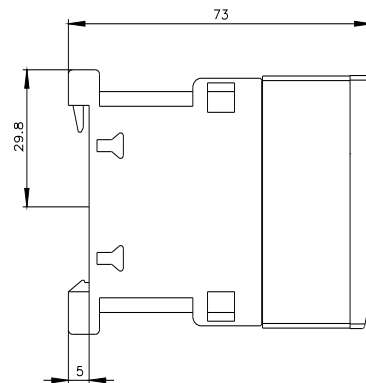
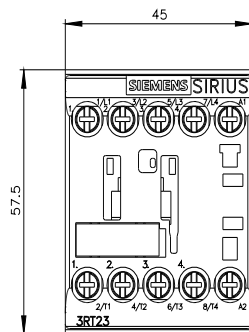
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RT2317-1AP60&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2317-1AP60&lang=en)

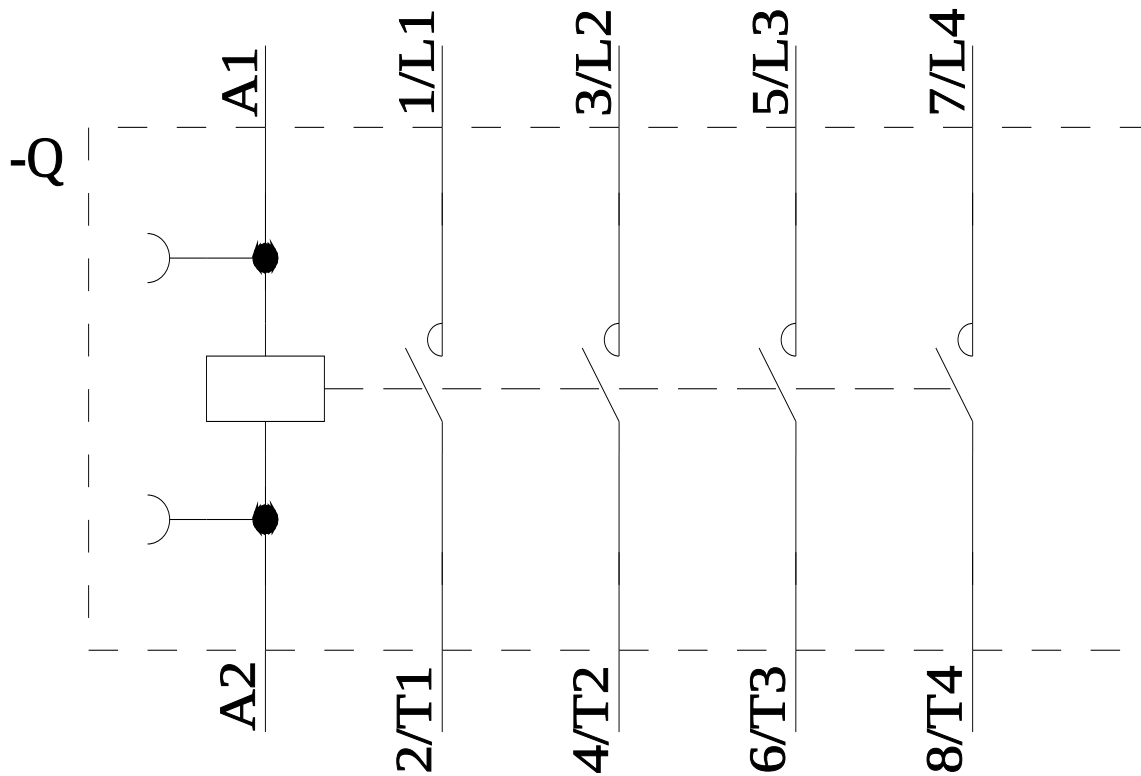
Characteristic: Tripping characteristics, I<sup>2</sup>t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RT2317-1AP60/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2317-1AP60&objecttype=14&gridview=view1>





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