



Contactor, AC-1, 22 A/400 V/40 °C, S00, 4-pole, 220 V AC/50 Hz, 240 V/60 Hz, Spring-type terminal

|                                                              |                            |
|--------------------------------------------------------------|----------------------------|
| 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                        |
| 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 (switching cycles)                   |                            |
| • of contactor typical                                       | 30 000 000                 |
| • of the contactor with added auxiliary switch block typical | 30 000 000                 |
| reference code acc. to IEC 81346-2                           | Q                          |
| Substance Prohibitation (Date)                               | 01.10.2009 00:00:00        |
| <b>Ambient conditions</b>                                    |                            |
| installation altitude at height above sea level maximum      | 2 000 m                    |
| • ambient temperature during operation                       | -25 ... +60 °C             |
| • ambient temperature during storage                         | -55 ... +80 °C             |
| relative humidity during operation                           | 95 %                       |
| <b>Main circuit</b>                                          |                            |
| number of poles for main current circuit                     | 4                          |
| number of NO contacts for main contacts                      | 4                          |
| • operating voltage at AC                                    |                            |
| — at 50 Hz rated value                                       | 690 V                      |
| — at 60 Hz rated value                                       | 690 V                      |
| operational current                                          |                            |
| • at AC-1 at 400 V at ambient temperature 40 °C rated value  | 22 A                       |
| • at AC-1                                                    |                            |
| — up to 690 V at ambient temperature 40 °C rated value       | 22 A                       |

|                                                                                       |                                                    |
|---------------------------------------------------------------------------------------|----------------------------------------------------|
| — up to 690 V at ambient temperature 60 °C rated value                                | 20 A                                               |
| • at AC-3 at 400 V rated value                                                        | 12 A                                               |
| • at AC-4 at 400 V rated value                                                        | 8.5 A                                              |
| minimum cross-section in main circuit at maximum AC-1 rated value                     | 4 mm²                                              |
| <b>operating power</b>                                                                |                                                    |
| • at AC-3 at 400 V rated value                                                        | 5.5 kW                                             |
| • at AC-4 at 400 V rated value                                                        | 4 kW                                               |
| <b>short-time withstand current in cold operating state up to 40 °C</b>               |                                                    |
| • limited to 1 s switching at zero current maximum                                    | Use minimum cross-section acc. to AC-1 rated value |
| • limited to 5 s switching at zero current maximum                                    | Use minimum cross-section acc. to AC-1 rated value |
| • limited to 10 s switching at zero current maximum                                   | Use minimum cross-section acc. to AC-1 rated value |
| • limited to 30 s switching at zero current maximum                                   | Use minimum cross-section acc. to AC-1 rated value |
| • limited to 60 s switching at zero current maximum                                   | Use minimum cross-section acc. to AC-1 rated value |
| <b>no-load switching frequency</b>                                                    |                                                    |
| • at AC                                                                               | 10 000 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                                                 |
| • control supply voltage at AC at 50 Hz rated value                                   | 220 V                                              |
| • control supply voltage at AC at 60 Hz rated value                                   | 240 V                                              |
| <b>operating range factor control supply voltage rated value of magnet coil at AC</b> |                                                    |
| • at 50 Hz                                                                            | 0.8 ... 1.1                                        |
| • at 60 Hz                                                                            | 0.8 ... 1.1                                        |
| <b>apparent pick-up power of magnet coil at AC</b>                                    |                                                    |
| • at 50 Hz                                                                            | 36 V·A                                             |
| • at 60 Hz                                                                            | 36 V·A                                             |
| <b>inductive power factor with closing power of the coil</b>                          |                                                    |
| • at 50 Hz                                                                            | 0.8                                                |
| • at 60 Hz                                                                            | 0.8                                                |
| <b>apparent holding power of magnet coil at AC</b>                                    |                                                    |
| • at 50 Hz                                                                            | 5.9 V·A                                            |
| • at 60 Hz                                                                            | 5.9 V·A                                            |
| <b>inductive power factor with the holding power of the coil</b>                      |                                                    |
| • at 50 Hz                                                                            | 0.24                                               |
| • at 60 Hz                                                                            | 0.24                                               |
| <b>closing delay</b>                                                                  |                                                    |
| • at AC                                                                               | 8 ... 33 ms                                        |
| <b>opening delay</b>                                                                  |                                                    |
| • at AC                                                                               | 4 ... 15 ms                                        |
| <b>arcing time</b>                                                                    | 10 ... 15 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>                                   |                                                    |
| • attachable                                                                          | 2                                                  |
| <b>number of NO contacts for auxiliary contacts</b>                                   |                                                    |
| • attachable                                                                          | 2                                                  |
| <b>Short-circuit protection</b>                                                       |                                                    |
| <b>product function short circuit protection</b>                                      | No                                                 |
| <b>design of the fuse link</b>                                                        |                                                    |
| • for short-circuit protection of the main circuit                                    |                                                    |
| — with type of coordination 1 required                                                | 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                                | gG: 10 A (690 V, 1 kA)                             |

|                                                                             |                                                                                                                                      |
|-----------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| required                                                                    |                                                                                                                                      |
| <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 |
| <b>fastening method</b>                                                     | screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715                                               |
| • side-by-side mounting                                                     | Yes                                                                                                                                  |
| <b>height</b>                                                               | 70 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                                                  | spring-loaded terminals                                                                                                              |
| • for auxiliary and control circuit                                         | spring-loaded terminals                                                                                                              |
| <b>type of connectable conductor cross-sections</b>                         |                                                                                                                                      |
| • for main contacts                                                         |                                                                                                                                      |
| — solid                                                                     | 2x (0.5 ... 4 mm²)                                                                                                                   |
| — solid or stranded                                                         | 2x (0,5 ... 4 mm²)                                                                                                                   |
| — finely stranded with core end processing                                  | 2x (0.5 ... 2.5 mm²)                                                                                                                 |
| — finely stranded without core end processing                               | 2x (0.5 ... 2.5 mm²)                                                                                                                 |
| • at AWG cables for main contacts                                           | 2x (20 ... 12)                                                                                                                       |
| <b>connectable conductor cross-section for main contacts</b>                |                                                                                                                                      |
| • solid                                                                     | 0.5 ... 4 mm²                                                                                                                        |
| • solid or stranded                                                         | 0.5 ... 4 mm²                                                                                                                        |
| • stranded                                                                  | 0.5 ... 4 mm²                                                                                                                        |
| • finely stranded with core end processing                                  | 0.5 ... 2.5 mm²                                                                                                                      |
| • finely stranded without core end processing                               | 0.5 ... 2.5 mm²                                                                                                                      |
| <b>connectable conductor cross-section for auxiliary contacts</b>           |                                                                                                                                      |
| • solid or stranded                                                         | 0.5 ... 4 mm²                                                                                                                        |
| • finely stranded with core end processing                                  | 0.5 ... 2.5 mm²                                                                                                                      |
| • finely stranded without core end processing                               | 0.5 ... 2.5 mm²                                                                                                                      |
| <b>type of connectable conductor cross-sections</b>                         |                                                                                                                                      |
| • for auxiliary contacts                                                    |                                                                                                                                      |
| — solid                                                                     | 2x (0.5 ... 2.5 mm²)                                                                                                                 |
| — solid or stranded                                                         | 2x (0,5 ... 4 mm²)                                                                                                                   |
| — finely stranded with core end processing                                  | 2x (0.5 ... 2.5 mm²)                                                                                                                 |
| — finely stranded without core end processing                               | 2x (0.5 ... 2.5 mm²)                                                                                                                 |
| • at AWG cables for auxiliary contacts                                      | 2x (20 ... 12)                                                                                                                       |
| • AWG number as coded connectable conductor cross section for main contacts | 20 ... 12                                                                                                                            |
| • AWG number as coded connectable conductor                                 | 20 ... 12                                                                                                                            |

cross section for auxiliary contacts

| Safety related data                                                |                                                  |                           |
|--------------------------------------------------------------------|--------------------------------------------------|---------------------------|
| product function                                                   |                                                  |                           |
| • mirror contact acc. to IEC 60947-4-1                             | Yes; with 3RH29                                  |                           |
| T1 value for proof test interval or service life acc. to IEC 61508 | 20 y                                             |                           |
| protection class IP on the front acc. to IEC 60529                 | IP20                                             |                           |
| touch protection on the front acc. to IEC 60529                    | finger-safe, for vertical contact from the front |                           |
| Communication/ Protocol                                            |                                                  |                           |
| product function bus communication                                 | No                                               |                           |
| Certificates/ approvals                                            |                                                  |                           |
| General Product Approval                                           | EMC                                              | Declaration of Conformity |



| Declaration of Conformity | Test Certificates | Marine / Shipping |
|---------------------------|-------------------|-------------------|
|---------------------------|-------------------|-------------------|

[Miscellaneous](#)

[Type Test  
Certificates/Test  
Report](#)

[Special Test  
Certificate](#)



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



[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=3RT2317-2AP60>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2317-2AP60>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RT2317-2AP60>

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

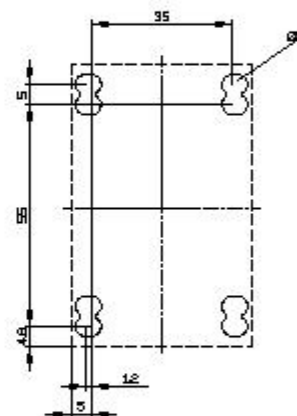
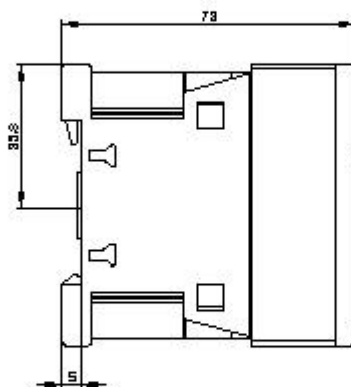
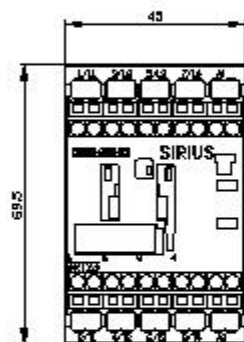
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RT2317-2AP60&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2317-2AP60&lang=en)

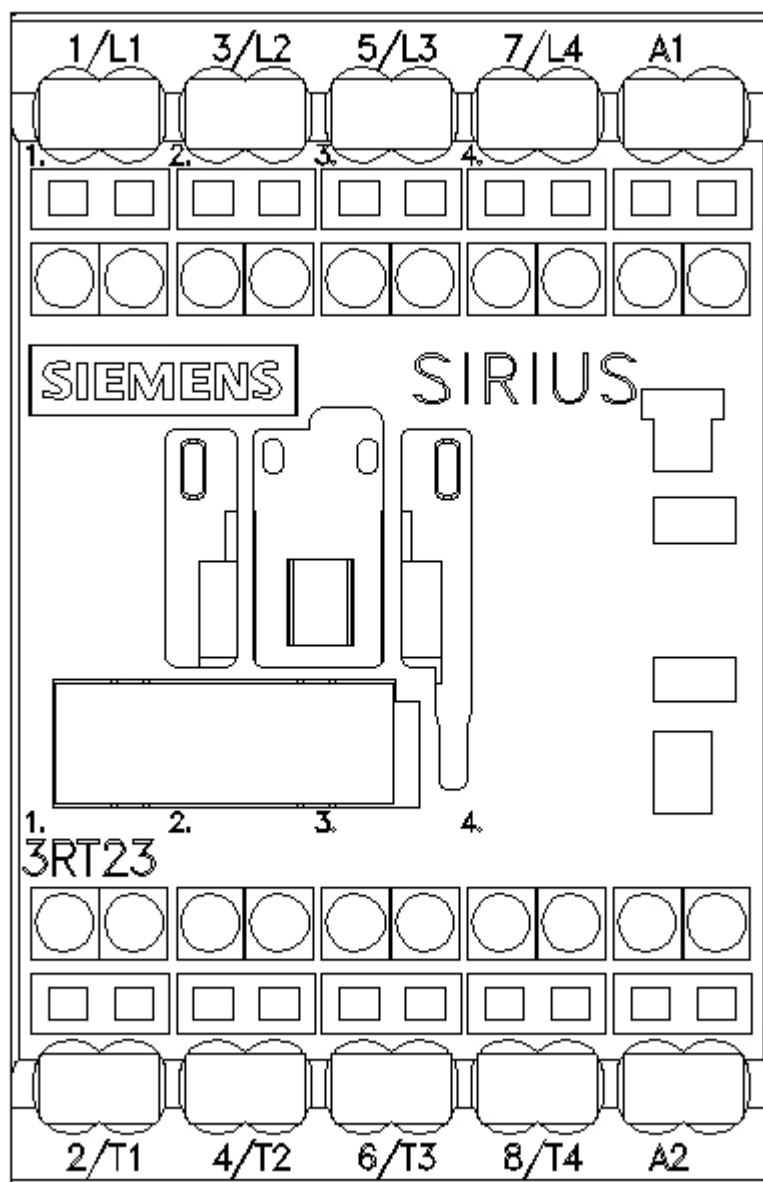
Characteristic: Tripping characteristics, I<sub>t</sub>, Let-through current

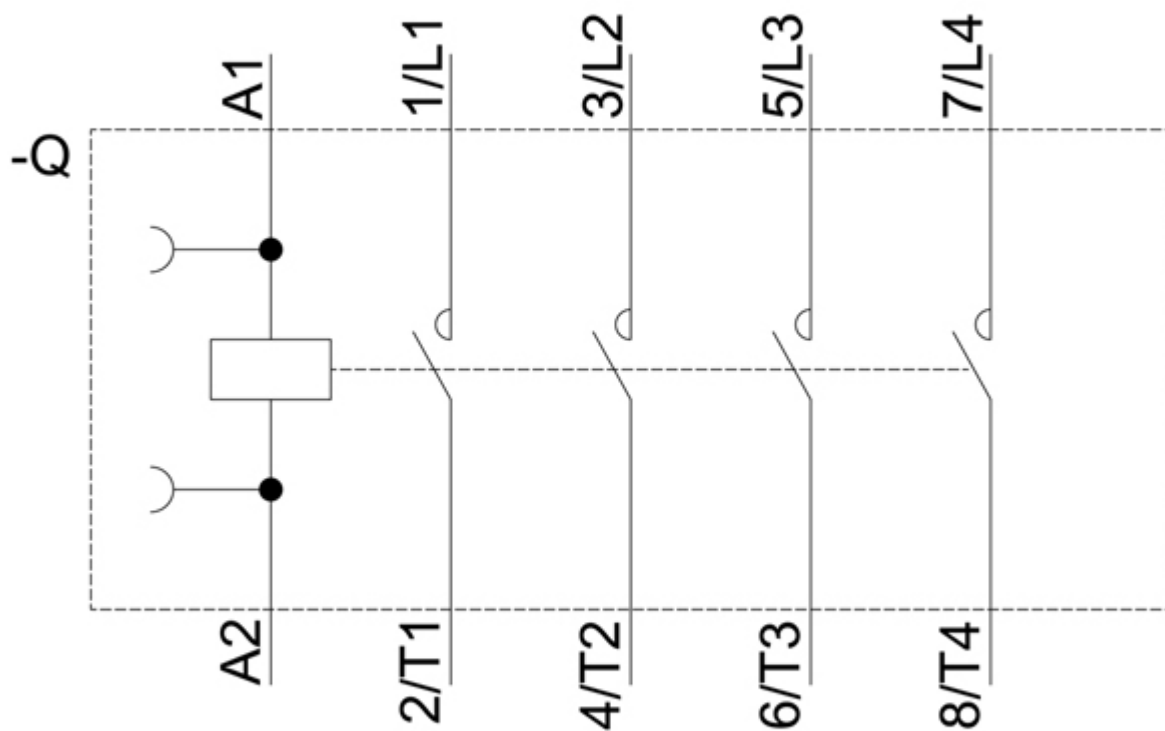
<https://support.industry.siemens.com/cs/ww/en/ps/3RT2317-2AP60/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2317-2AP60&objecttype=14&gridview=view1>







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