SIEMENS

## Data sheet 3RT2317-1BF40




contactor AC-1, 22 A, 400 V / 40 °C, 4-pole, 110 V DC, screw terminal, size: S00

| | |
|---|---|
| **product brand name** | SIRIUS |
| **product designation** | Contactor |
| **product type designation** | 3RT23 |
| **General technical data** | |
| **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 |
| ● without load current share typical | 4 W |
| **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 DC | 7.3g / 5 ms, 4.7g / 10 ms |
| **shock resistance with sine pulse** | |
| ● at DC | 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 |
| **Ambient conditions** | |
| 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 % |
| **Environmental footprint** | |
| Environmental Product Declaration(EPD) | Yes |
| Global Warming Potential [CO2 eq] total | 184 kg |
| Global Warming Potential [CO2 eq] during manufacturing | 1.55 kg |
| Global Warming Potential [CO2 eq] during operation | 183 kg |


Subject to change without notice
© Copyright Siemens

| | |
|---|---|
| global warming potential [CO2 eq] after end of life | -0.249 kg |
| **Main circuit** | |
| **number of poles for main current circuit** | 4 |
| **number of NO contacts for main contacts** | 4 |
| **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 |
| **operating power** | |
| ● at AC-3 at 400 V rated value | 5.5 kW |
| ● at AC-4 at 400 V rated value | 4 kW |
| **short-time withstand current in cold operating state up to 40 °C** | |
| ● 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 |
| **no-load switching frequency** | |
| ● at DC | 10 000 1/h |
| operating frequency at AC-1 maximum | 1 000 1/h |
| **Control circuit/ Control** | |
| **type of voltage** | DC |
| **type of voltage of the control supply voltage** | DC |
| **control supply voltage at DC** | |
| ● rated value | 110 V |
| **operating range factor control supply voltage rated value of magnet coil at DC** | |
| ● initial value | 0.8 |
| ● full-scale value | 1.1 |
| **closing power of magnet coil at DC** | 4 W |
| **holding power of magnet coil at DC** | 4 W |
| **closing delay** | |
| ● at DC | 30 ... 100 ms |
| **opening delay** | |
| ● at DC | 7 ... 13 ms |
| **arcing time** | 10 ... 15 ms |
| **control version of the switch operating mechanism** | Standard A1 - A2 |
| **Auxiliary circuit** | |
| **number of NC contacts for auxiliary contacts** | |
| ● attachable | 2 |
| **number of NO contacts for auxiliary contacts** | |
| ● attachable | 2 |
| **Short-circuit protection** | |
| **product function short circuit protection** | No |
| **design of the fuse link** | |
| ● 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 required | gG: 10 A (690 V, 1 kA) |
| **Installation/ mounting/ dimensions** | |
| **mounting position** | +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface |


Subject to change without notice
© Copyright Siemens

| | |
|---|---|
| **fastening method** | screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 |
| ● side-by-side mounting | Yes |
| **height** | 58 mm |
| **width** | 45 mm |
| **depth** | 73 mm |
| **required spacing** | |
| ● 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 |
| **Connections/ Terminals** | |
| **type of electrical connection** | |
| ● 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 mm²), 2x (0.75 ... 2.5 mm²), 2x 4 mm² |
| ● solid or stranded | 2x (0,5 ... 1,5 mm²), 2x (0,75 ... 2,5 mm²), 2x 4 mm² |
| ● finely stranded with core end processing | 2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²) |
| **connectable conductor cross-section for main contacts** | |
| ● 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 |
| **connectable conductor cross-section for auxiliary contacts** | |
| ● solid or stranded | 0.5 ... 4 mm² |
| ● finely stranded with core end processing | 0.5 ... 2.5 mm² |
| **type of connectable conductor cross-sections** | |
| ● for auxiliary contacts | |
| — solid | 2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²) |
| — solid or stranded | 2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²), 2x 4 mm² |
| — finely stranded with core end processing | 2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²) |
| ● for AWG cables for auxiliary contacts | 2x (20 ... 16), 2x (18 ... 14), 2x 12 |
| **AWG number as coded connectable conductor cross section** | |
| ● for main contacts | 20 ... 12 |
| ● for auxiliary contacts | 20 ... 12 |
| **Safety related data** | |
| **product function** | |
| ● mirror contact according to IEC 60947-4-1 | Yes; with 3RH29 |
| T1 value for proof test interval or service life according to IEC 61508 | 20 a |
| **protection class IP on the front according to IEC 60529** | IP20 |
| **touch protection on the front according to IEC 60529** | finger-safe, for vertical contact from the front |
| **Communication/ Protocol** | |
| **product function bus communication** | No |
| **Certificates/ approvals** | |
| **General Product Approval** | **EMC** |


Subject to change without notice
© Copyright Siemens

Confirmation

| Functional Safety/Safety of Machinery | Declaration of Conformity | | Test Certificates | | Marine / Shipping |
|---|---|---|---|---|---|
| Type Examination Certificate | EG-Konf. | | Special Test Certificate | Type Test Certificates/Test Report | ABS |

| Marine / Shipping | | | | | |
|---|---|---|---|---|---|
| BUREAU VERITAS | DNV | LRS | PRS | RINA | RMRS |

| other | | Railway | Dangerous Good | Environment |
|---|---|---|---|---|
| Household and similar appliances | Confirmation | Vibration and Shock | Transport Information | Environmental Confirmations |

## Further information

**Siemens has decided to exit the Russian market (see here).**
https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business

**Siemens is working on the renewal of the current EAC certificates.**
Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

**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=3RT2317-1BF40

**Cax online generator**
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2317-1BF40

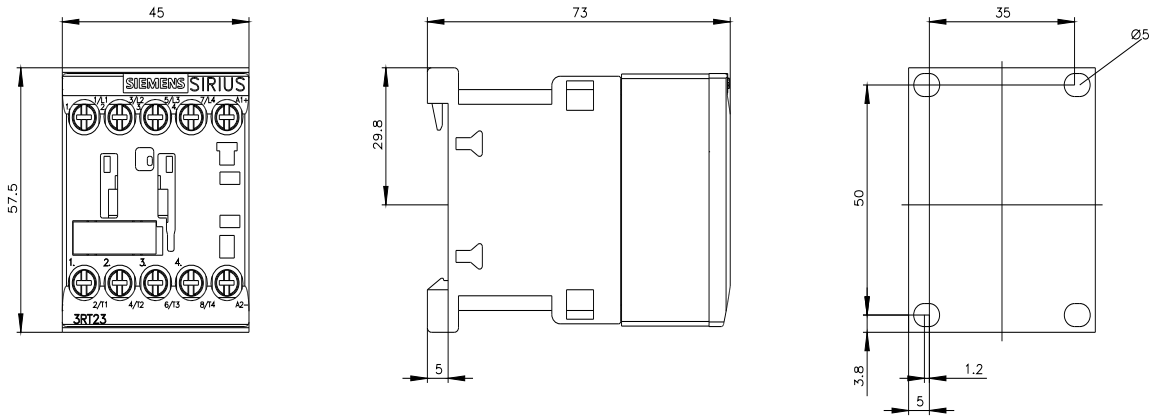
**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**
https://support.industry.siemens.com/cs/ww/en/ps/3RT2317-1BF40

**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)**
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2317-1BF40&lang=en

**Characteristic: Tripping characteristics, I²t, Let-through current**
https://support.industry.siemens.com/cs/ww/en/ps/3RT2317-1BF40/char

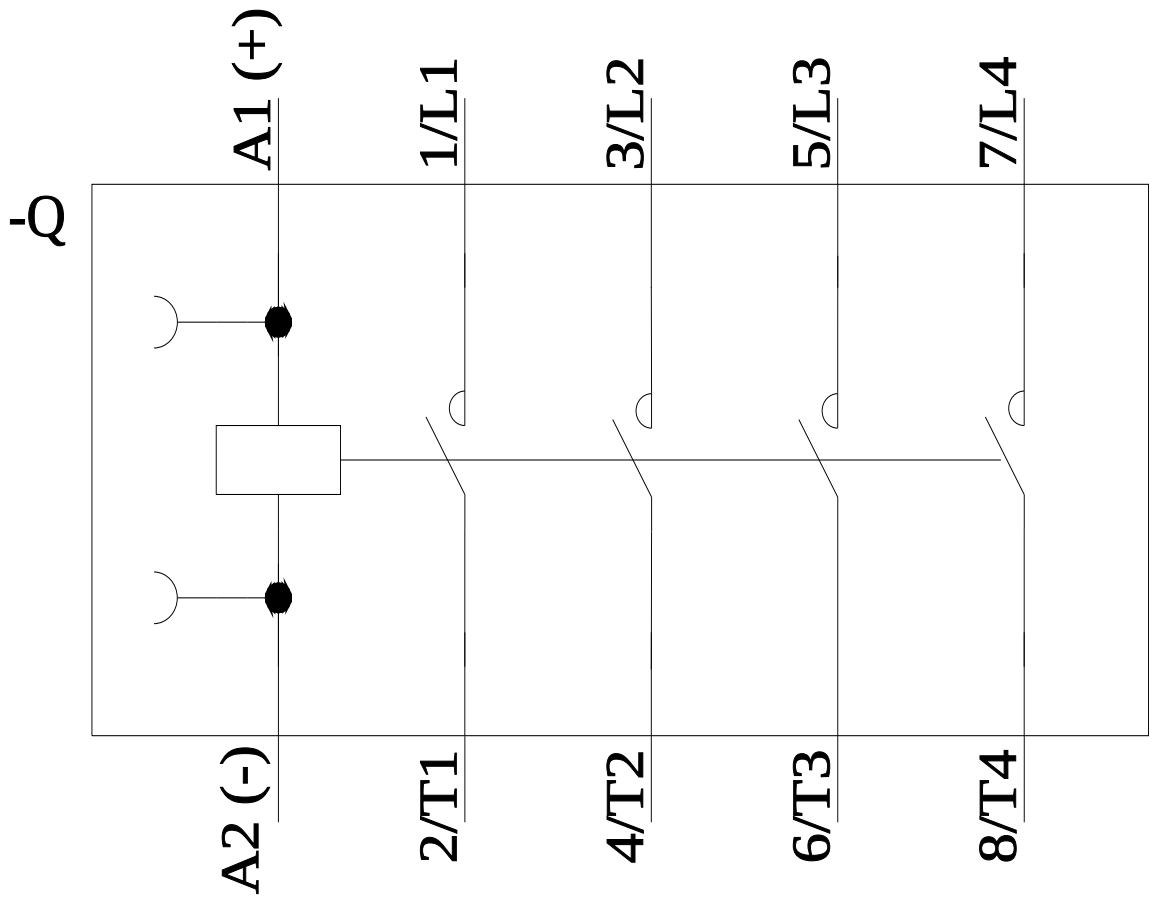
**Further characteristics (e.g. electrical endurance, switching frequency)**
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2317-1BF40&objecttype=14&gridview=view1


Subject to change without notice
© Copyright Siemens





Subject to change without notice
© Copyright Siemens




**last modified:** 10/27/2023


Subject to change without notice
© Copyright Siemens