SIEMENS

## Data sheet 3RT2327-2AK60

Contactor, 4 NO, AC-1: 50 A 110 V AC, 50 Hz, 120 V, 60Hz, 4-pole, 4 NO, size: S0, Spring-type terminal 1 NO + 1 NC integrated


| | |
|---|---|
| **Product brand name** | SIRIUS |
| **Product designation** | Contactor |
| **Product type designation** | 3RT23 |

| General technical data | |
|---|---|
| **Size of contactor** | S0 |
| **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 |
| **Protection class IP** | |
| • on the front | IP20 |
| • of the terminal | IP20 |
| **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 (switching cycles)** | |

| | |
|---|---|
| • of contactor typical | 10 000 000 |
| • of the contactor with added auxiliary switch block typical | 100 000 000 |
| **Reference code acc. to DIN EN 81346-2** | Q |

## Ambient conditions

| | |
|---|---|
| **Installation altitude at height above sea level** | |
| • maximum | 2 000 m |
| **Relative humidity** | |
| • during operation | 95 % |

## Main circuit

| | |
|---|---|
| **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 |
| **Operating current** | |
| • at AC-1 at 400 V | |
| — at ambient temperature 40 °C rated value | 50 A |
| • at AC-1 | |
| — up to 690 V at ambient temperature 40 °C rated value | 50 A |
| — up to 690 V at ambient temperature 60 °C rated value | 42 A |
| • at AC-3 | |
| — at 400 V rated value | 15.5 A |
| • at AC-4 at 400 V rated value | 15.5 A |
| **Minimum cross-section in main circuit** | |
| • at maximum AC-1 rated value | 10 mm² |
| **Operating power** | |
| • at AC-3 | |
| — at 400 V rated value | 7.5 kW |
| • at AC-4 at 400 V rated value | 7.5 kW |
| **No-load switching frequency** | |
| • at AC | 5 000 1/h |
| **Operating frequency** | |
| • at AC-1 maximum | 1 000 1/h |

## Control circuit/ Control

| | |
|---|---|
| **Type of voltage** | AC |
| **Type of voltage of the control supply voltage** | AC |
| **Control supply voltage at AC** | |

| | |
|---|---|
| • at 50 Hz rated value | 110 V |
| • at 60 Hz rated value | 120 V |
| **Operating range factor control supply voltage rated value of magnet coil at AC** | |
| • at 50 Hz | 0.8 ... 1.1 |
| • at 60 Hz | 0.8 ... 1.1 |
| **Apparent pick-up power of magnet coil at AC** | |
| • at 50 Hz | 81 V·A |
| • at 60 Hz | 79 V·A |
| **Inductive power factor with closing power of the coil** | |
| • at 50 Hz | 0.72 |
| • at 60 Hz | 0.74 |
| **Apparent holding power of magnet coil at AC** | |
| • at 50 Hz | 10.5 V·A |
| • at 60 Hz | 8.5 V·A |
| **Inductive power factor with the holding power of the coil** | |
| • at 50 Hz | 0.25 |
| • at 60 Hz | 0.28 |
| **Closing delay** | |
| • at AC | 8 ... 40 ms |
| **Opening delay** | |
| • at AC | 4 ... 16 ms |
| **Arcing time** | 10 ... 10 ms |
| **Control version of the switch operating mechanism** | Standard A1 - A2 |

## Auxiliary circuit

| | |
|---|---|
| **Number of NC contacts for auxiliary contacts** | 1 |
| • attachable | 2 |
| • instantaneous contact | 1 |
| **Number of NO contacts for auxiliary contacts** | 1 |
| • attachable | 2 |
| • instantaneous contact | 1 |
| **Operating current at AC-12** | |
| • maximum | 10 A |
| **Operating current at AC-15** | |
| • at 230 V rated value | 10 A |
| • at 400 V rated value | 3 A |
| • at 500 V rated value | 2 A |
| • at 690 V rated value | 1 A |
| **Operating current at DC-12** | |
| • at 24 V rated value | 10 A |
| • at 48 V rated value | 6 A |

| | |
|---|---|
| • at 60 V rated value | 6 A |
| • at 110 V rated value | 3 A |
| • at 125 V rated value | 2 A |
| • at 220 V rated value | 1 A |
| • at 600 V rated value | 0.15 A |
| **Operating current at DC-13** | |
| • at 24 V rated value | 10 A |
| • at 48 V rated value | 2 A |
| • at 110 V rated value | 1 A |
| • at 125 V rated value | 0.9 A |
| • at 220 V rated value | 0.3 A |
| • at 600 V rated value | 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) |
| **Contact reliability of auxiliary contacts** | 1 faulty switching per 100 million (17 V, 1 mA) |

## UL/CSA ratings

| | |
|---|---|
| **Contact rating of auxiliary contacts according to UL** | A600 / Q600 |

## 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: 63 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 |
| **Mounting type** | screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 |
| • Side-by-side mounting | Yes |
| **Height** | 102 mm |
| **Width** | 60 mm |
| **Depth** | 97 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 | spring-loaded terminals |
| • for auxiliary and control current circuit | spring-loaded terminals |
| **Type of connectable conductor cross-sections** | |
| • for main contacts | |
| — solid | 2x (1 ... 10 mm²) |
| — single or multi-stranded | 2x (1 ... 10 mm²) |
| — finely stranded with core end processing | 2x (1 ... 6 mm²) |
| — finely stranded without core end processing | 2x (1 ... 6 mm²) |
| • at AWG conductors for main contacts | 2x (18 ... 8) |
| **Connectable conductor cross-section for main contacts** | |
| • solid | 1 ... 10 mm² |
| • single or multi-stranded | 1 ... 10 mm² |
| • stranded | 1 ... 10 mm² |
| • finely stranded with core end processing | 1 ... 6 mm² |
| • finely stranded without core end processing | 1 ... 6 mm² |
| **Connectable conductor cross-section for auxiliary contacts** | |
| • single or multi-stranded | 0.5 ... 2.5 mm² |
| • finely stranded with core end processing | 0.5 ... 1.5 mm² |
| • finely stranded without core end processing | 0.5 ... 2.5 mm² |
| **Type of connectable conductor cross-sections** | |
| • for auxiliary contacts | |
| — solid | 2x (0.5 ... 2.5 mm²) |
| — single or multi-stranded | 2x (0,5 ... 2,5 mm²) |
| — finely stranded with core end processing | 2x (0.5 ... 1.5 mm²) |
| — finely stranded without core end processing | 2x (0.5 ... 2.5 mm²) |
| • at AWG conductors for auxiliary contacts | 2x (20 ... 14) |

| | |
|---|---|
| **AWG number as coded connectable conductor cross section** | |
| • for main contacts | 18 ... 8 |
| • for auxiliary contacts | 20 ... 14 |

## Safety related data

| | |
|---|---|
| **Product function** | |
| • Mirror contact acc. to IEC 60947-4-1 | Yes |
| **T1 value for proof test interval or service life acc. to IEC 61508** | 20 y |
| **Protection against electrical shock** | finger-safe |

## Communication/ Protocol

| | |
|---|---|
| **Product function Bus communication** | No |

## Certificates/ approvals

| General Product Approval | | | | EMC | Functional Safety/Safety of Machinery |
|---|---|---|---|---|---|
| CCC | CSA | UL | | RCM | Type Examination Certificate |

| Declaration of Conformity | Test Certificates | | Marine / Shipping | |
|---|---|---|---|---|
| EG-Konf. | Miscellaneous | Type Test Certific-ates/Test Report | Special Test Certi-ficate | ABS | BUREAU VERITAS |

| Marine / Shipping | | | | | other |
|---|---|---|---|---|---|
| LRS | PRS | RINA | RMRS | DNVGL.COM/AF | Confirmation |

| other |
|---|
| VDE |

## Further information

**Information- and Downloadcenter (Catalogs, Brochures,…)**
www.siemens.com/sirius/catalogs

**Industry Mall (Online ordering system)**
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT2327-2AK60

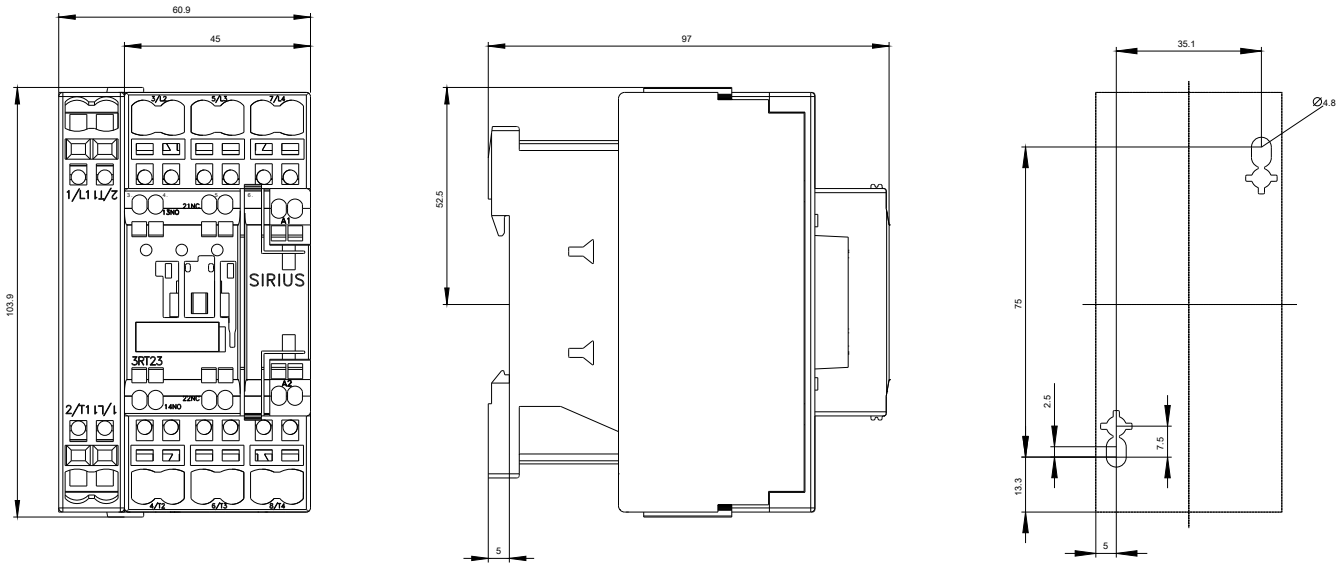
**Cax online generator**
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2327-2AK60

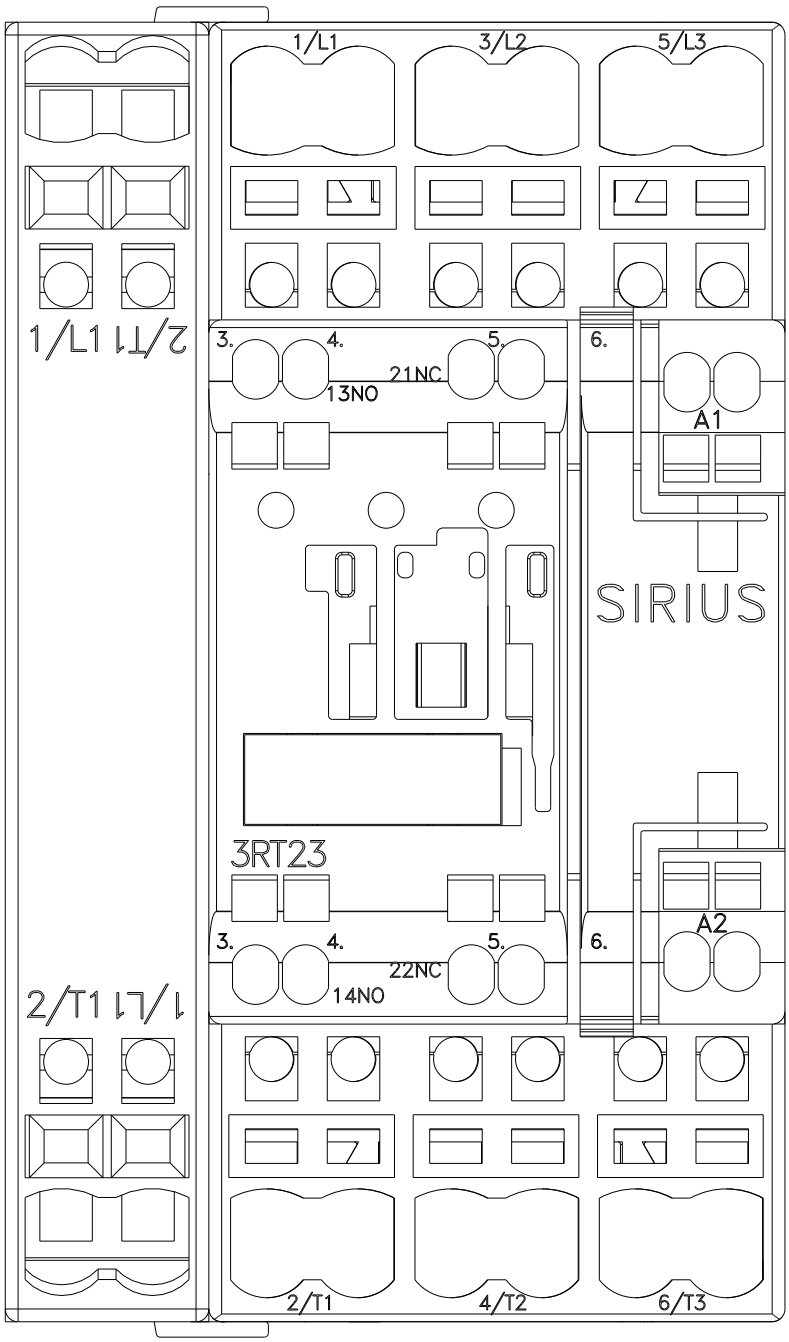
**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**
https://support.industry.siemens.com/cs/ww/en/ps/3RT2327-2AK60

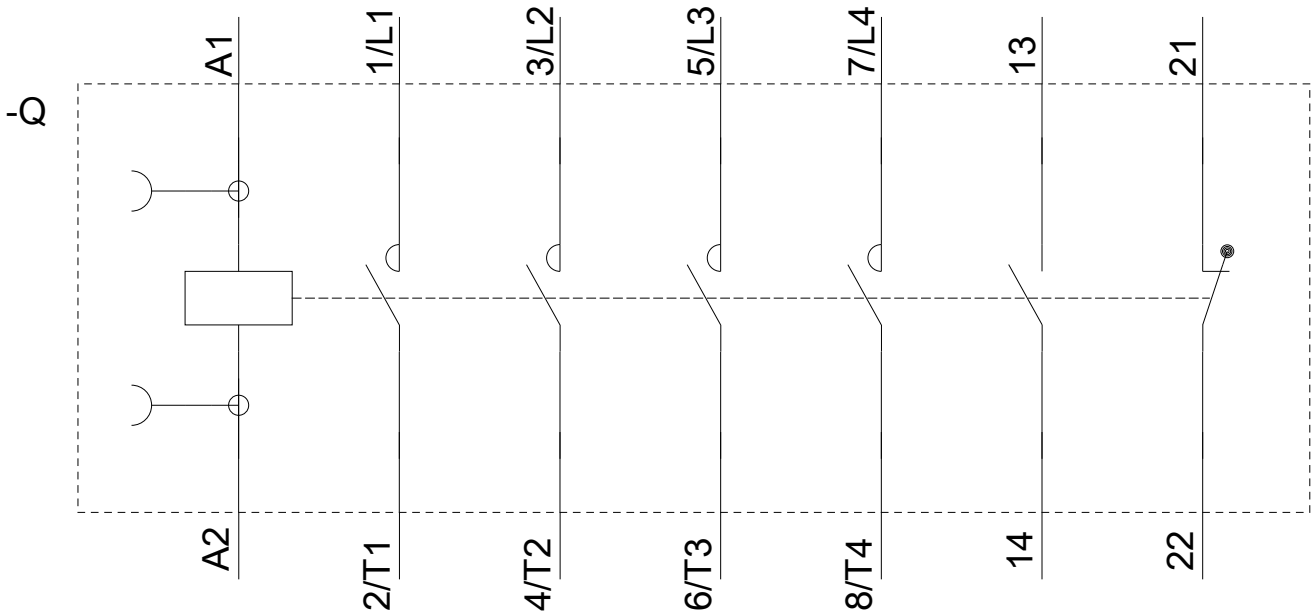
**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)**
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2327-2AK60&lang=en

**Characteristic: Tripping characteristics, I²t, Let-through current**
https://support.industry.siemens.com/cs/ww/en/ps/3RT2327-2AK60/char

**Further characteristics (e.g. electrical endurance, switching frequency)**
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2327-2AK60&objecttype=14&gridview=view1





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