SIEMENS

## Data sheet 3RA2315-8XB30-2BB4

REV. COMB. AC3, 3KW/400V DC24V 3-POLE, SZ S00 SPRING-LOADED TERMINAL ELECTR. AND MECH. INTERLOCK


| | |
|---|---|
| **Product brand name** | SIRIUS |
| **Product designation** | Reversing contactor assembly |
| **Product type designation** | 3RA23 |
| **Manufacturer's article number** | |
| • 1 of the supplied contactor | 3RT2015-2BB42 |
| • 2 of the supplied contactor | 3RT2015-2BB42 |
| • of the supplied RH assembly kit | 3RA2913-2AA2 |

| General technical data | |
|---|---|
| **Size of contactor** | S00 |
| **Product extension** | |
| • Auxiliary switch | Yes |
| **Insulation voltage** | |
| • with degree of pollution 3 rated value | 690 V |
| **Degree of pollution** | 3 |
| **Surge voltage resistance rated value** | 6 kV |
| **Protection class IP** | |
| • on the front | IP20 |
| **Shock resistance at rectangular impulse** | |
| • at AC | 6,7g / 5 ms, 4,2g / 10 ms |

| | |
|---|---|
| • at DC | 6,7g / 5 ms, 4,2g / 10 ms |
| **Shock resistance with sine pulse** | |
| • at AC | 10,5g / 5 ms, 6,6g / 10 ms |
| • at DC | 10,5g / 5 ms, 6,6g / 10 ms |
| **Mechanical service life (switching cycles)** | |
| • of contactor typical | 10 000 000 |
| • of the contactor with added auxiliary switch block typical | 10 000 000 |
| **Equipment marking** | |
| • acc. to DIN EN 81346-2 | Q |

## Ambient conditions

| | |
|---|---|
| **Ambient temperature** | |
| • during operation | -25 ... +60 °C |
| • during storage | -55 ... +80 °C |

## Main circuit

| | |
|---|---|
| **Number of poles for main current circuit** | 3 |
| **Number of NO contacts for main contacts** | 3 |
| **Number of NC contacts for main contacts** | 0 |
| **Operating voltage** | |
| • at AC-3 rated value maximum | 690 V |
| **Operating current** | |
| • at AC-1 at 400 V | |
| — at ambient temperature 40 °C rated value | 18 A |
| — at ambient temperature 60 °C rated value | 16 A |
| • at AC-2 at 400 V rated value | 7 A |
| • at AC-3 | |
| — at 400 V rated value | 7 A |
| **Operating current** | |
| • at 1 current path at DC-1 | |
| — at 24 V rated value | 15 A |
| — at 110 V rated value | 1.5 A |
| • with 2 current paths in series at DC-1 | |
| — at 24 V rated value | 15 A |
| — at 110 V rated value | 8.4 A |
| • with 3 current paths in series at DC-1 | |
| — at 24 V rated value | 15 A |
| — at 110 V rated value | 15 A |
| **Operating current** | |
| • at 1 current path at DC-3 at DC-5 | |
| — at 24 V rated value | 15 A |
| — at 110 V rated value | 0.1 A |

| | |
|---|---|
| • with 2 current paths in series at DC-3 at DC-5 | |
| — at 24 V rated value | 15 A |
| — at 110 V rated value | 0.25 A |
| • with 3 current paths in series at DC-3 at DC-5 | |
| — at 24 V rated value | 15 A |
| — at 110 V rated value | 15 A |
| **No-load switching frequency** | 1 500 1/h |
| **Operating frequency** | |
| • at AC-1 maximum | 1 000 1/h |
| • at AC-2 maximum | 750 1/h |
| • at AC-3 maximum | 750 1/h |
| • at AC-4 maximum | 250 1/h |

## Control circuit/ Control

| | |
|---|---|
| **Type of voltage of the control supply voltage** | DC |
| **Control supply voltage 1** | |
| • at DC rated value | 24 V |
| **Closing power of magnet coil at DC** | 4 W |
| **Holding power of magnet coil at DC** | 4 W |

## Auxiliary circuit

| | |
|---|---|
| **Operating current of auxiliary contacts at AC-12 maximum** | 10 A |
| **Operating current of auxiliary contacts at AC-15** | |
| • at 230 V | 6 A |
| • at 400 V | 3 A |
| **Operating current of auxiliary contacts at DC-13** | |
| • at 24 V | 10 A |
| • at 60 V | 2 A |
| • at 110 V | 1 A |
| • at 220 V | 0.3 A |
| **Contact reliability of auxiliary contacts** | < 1 error per 100 million operating cycles |

## UL/CSA ratings

| | |
|---|---|
| **Full-load current (FLA) for three-phase AC motor** | |
| • at 480 V rated value | 4.8 A |
| • at 600 V rated value | 6.1 A |
| **Yielded mechanical performance [hp]** | |
| • for single-phase AC motor | |
| — at 110/120 V rated value | 0.25 hp |
| — at 230 V rated value | 0.75 hp |
| • for three-phase AC motor | |
| — at 200/208 V rated value | 1.5 hp |
| — at 220/230 V rated value | 2 hp |

| | |
|---|---|
| — at 460/480 V rated value | 3 hp |
| — at 575/600 V rated value | 5 hp |
| **Contact rating of auxiliary contacts according to UL** | A600 / Q600 |

## Short-circuit protection

| | |
|---|---|
| **Design of the fuse link** | |
| • for short-circuit protection of the main circuit | |
| — with type of coordination 1 required | gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 35 A |
| — with type of assignment 2 required | gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 20 A |
| • for short-circuit protection of the auxiliary switch required | fuse gL/gG: 10 A |

## 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 |
| **Height** | 84 mm |
| **Width** | 90 mm |
| **Depth** | 83 mm |
| **Required spacing** | |
| • with side-by-side mounting | |
| — forwards | 6 mm |
| — Backwards | 0 mm |
| — upwards | 6 mm |
| — downwards | 6 mm |
| — at the side | 6 mm |
| • for grounded parts | |
| — forwards | 6 mm |
| — Backwards | 0 mm |
| — upwards | 6 mm |
| — at the side | 6 mm |
| — downwards | 6 mm |
| • for live parts | |
| — forwards | 6 mm |
| — Backwards | 0 mm |
| — upwards | 6 mm |
| — downwards | 6 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 (0.5 ... 4 mm²) |
| — single or multi-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 conductors for main contacts | 1x (20 ... 12) |
| **Type of connectable conductor cross-sections** | |
| • for auxiliary contacts | |
| — 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 ... 1.5 mm²) |
| • at AWG conductors for auxiliary contacts | 2x (20 ... 14) |

## Safety related data

| | |
|---|---|
| **B10 value** | |
| • with high demand rate acc. to SN 31920 | 1 000 000 |
| **Proportion of dangerous failures** | |
| • with low demand rate acc. to SN 31920 | 40 % |
| • with high demand rate acc. to SN 31920 | 75 % |
| **Failure rate [FIT]** | |
| • with low demand rate acc. to SN 31920 | 100 FIT |
| **T1 value for proof test interval or service life acc. to IEC 61508** | 20 y |

## Communication/ Protocol

| | |
|---|---|
| **Product function Bus communication** | No |
| **Protocol is supported** | |
| • AS-interface protocol | No |

## Certificates/approvals

| General Product Approval | | | Declaration of Conformity | Test Certificates | |
|---|---|---|---|---|---|
| CSA | UL | EAC | EG-Konf. | Type Test Certificates/Test Report | Special Test Certificate |

| Marine / Shipping | | | | | |
|---|---|---|---|---|---|
| ABS | BUREAU VERITAS | GL | LRS | PRS | RMRS |

| Marine / Shipping | other | | Railway |
|---|---|---|---|
| | Environmental Confirmations | Confirmation | Vibration and Shock |

## Further information

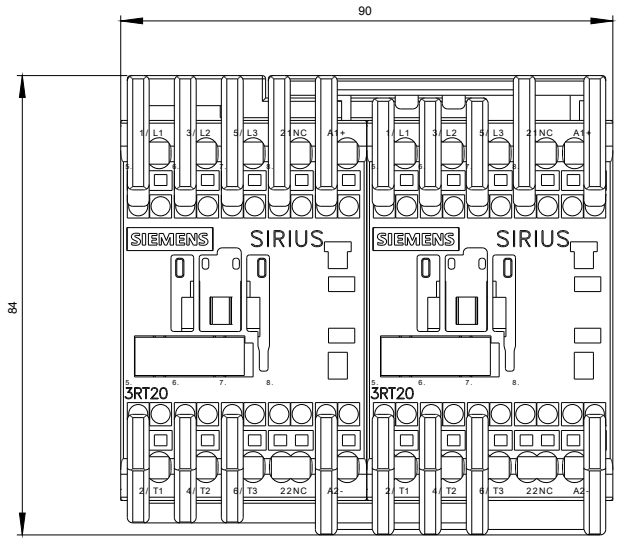
**Information- and Downloadcenter (Catalogs, Brochures,…)**
http://www.siemens.com/industrial-controls/catalogs

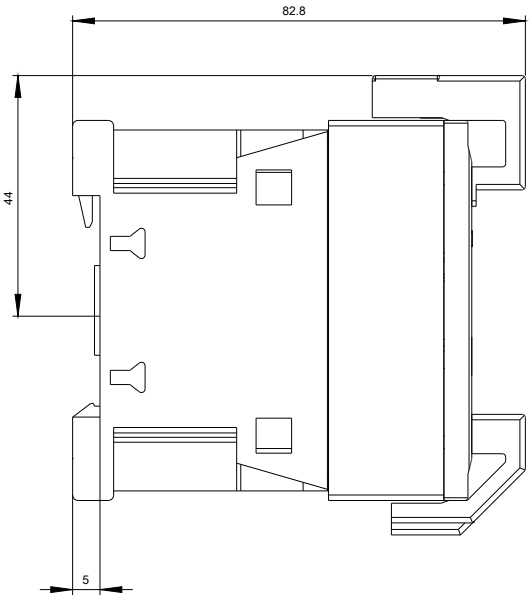
**Industry Mall (Online ordering system)**
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RA2315-8XB30-2BB4

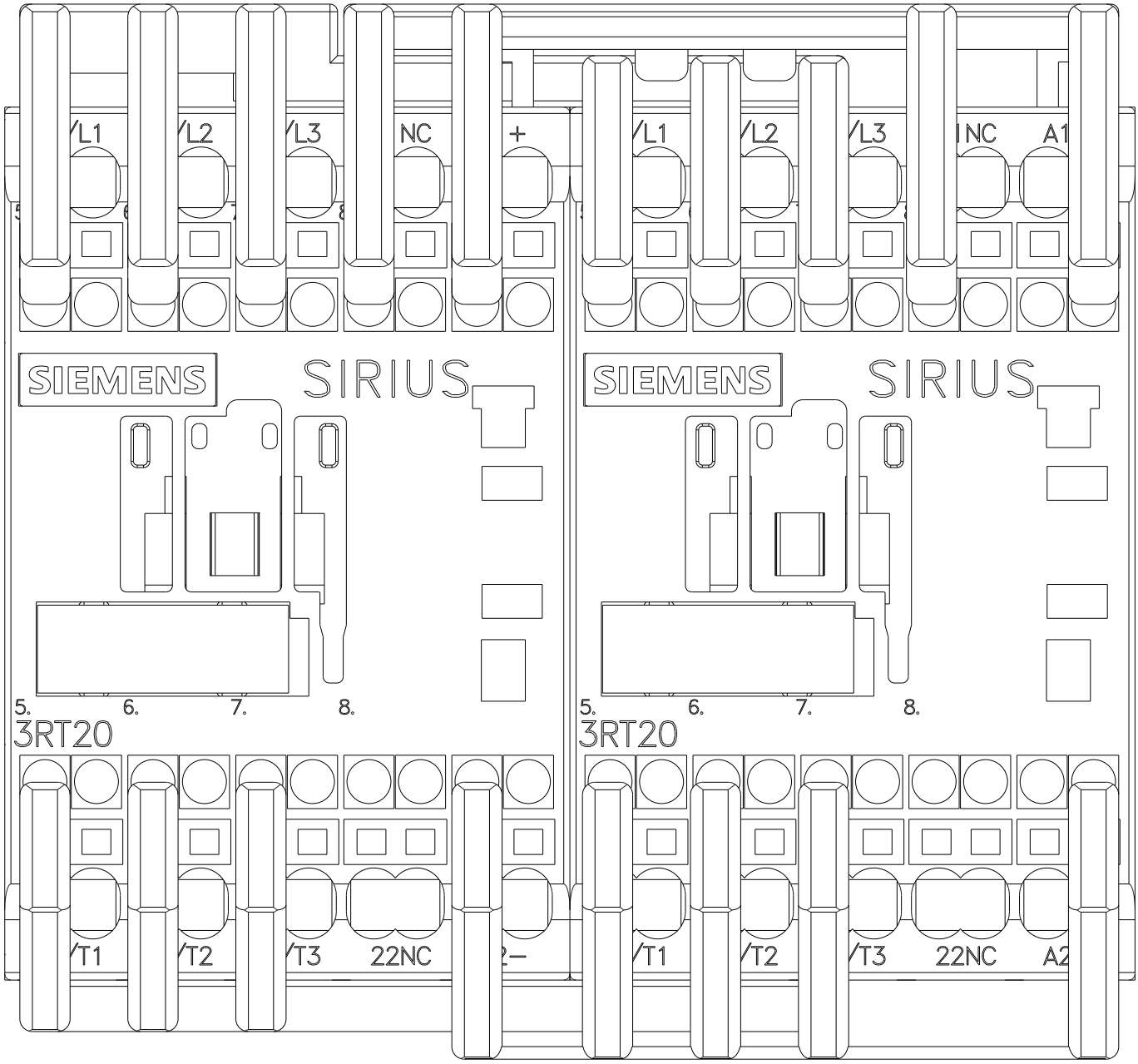
**Cax online generator**
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2315-8XB30-2BB4

**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**
https://support.industry.siemens.com/cs/ww/en/ps/3RA2315-8XB30-2BB4

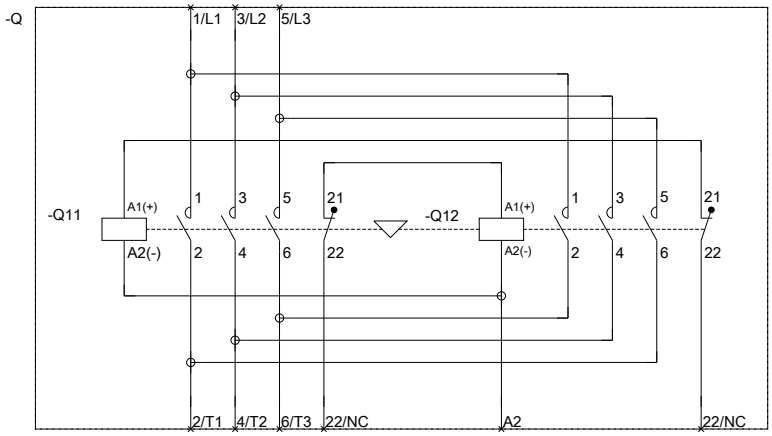
**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)**
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2315-8XB30-2BB4&lang=en





WENDEKOMBINATION BGR. S00




REVERSING COMB. SZ S00

**last modified:** 07/14/2017