SIEMENS

Product data sheet

3RA2337-8XB30-1NB3

REVERSING COMB., AC3:30KW/400V, 20-33V AC/DC, 3-POLE, SIZE S2 SCREW TERMINAL ELECTR. AND MECH. INTERLOCK 2NO INTEGR.

| General technical data: | | |
|---|----|------------------------------|
| product brand name | | SIRIUS |
| Product function | | Reversing contactor assembly |
| Size of contactor | | S2 |
| Protection class IP / on the front | _ | IP20 |
| Degree of pollution | _ | 3 |
| Insulation voltage / with degree of pollution 3 / Rated value | V | 690 |
| Installation altitude / at height above sea level / maximum | m | 2,000 |
| Ambient temperature / during storage | °C | -55 +80 |
| Ambient temperature / during operation | °C | -25 +60 |
| Surge voltage resistance / Rated value | kV | 6 |
| Active power loss / per conductor / typical | W | 3.8 |
| Manufacturer article number | | |
| 1 / of the supplied contactor | | <u>3RT2037-1NB30</u> |
| 2 / of the supplied contactor | | <u>3RT2037-1NB30</u> |
| of the supplied RS assembly kit | _ | 3RA2934-2BB1 |
| Mechanical service life (switching cycles) | | |
| of the contactor / typical | | 10,000,000 |
| of the contactor with added auxiliary switch block / typical | | 10,000,000 |
| Communication/ Protocol: | | |
| Product function | | |
| Bus communication | | No |
| Control circuit interface with IO link | | No |
| Protocol / is supported / AS-interface protocol | | No |
| Main circuit: | | |
| Number of poles / for main current circuit | | 3 |
| Number of NC contacts / for main contacts | | 0 |
| Number of NO contacts / for main contacts | | 3 |
| Operating voltage / at AC-3 / Rated value / maximum | V | 690 |
| Operating current | | |

| • at AC-1 / at 400 V | | |
|--|-----|-------|
| • at ambient temperature 40 °C / Rated value | А | 80 |
| • at ambient temperature 60 °C / Rated value | А | 70 |
| • at AC-2 / at 400 V / Rated value | А | 65 |
| • at AC-3 / at 400 V / Rated value | А | 65 |
| • at AC-4 / at 400 V / Rated value | А | 55 |
| • with 1 current path / at DC-1 | | |
| • at 24 V / Rated value | А | 55 |
| • at 110 V / Rated value | А | 4.5 |
| • with 2 current paths in series / at DC-1 | | |
| • at 24 V / Rated value | А | 55 |
| • at 110 V / Rated value | А | 25 |
| • with 3 current paths in series / at DC-1 | | |
| • at 24 V / Rated value | А | 55 |
| • at 110 V / Rated value | А | 55 |
| • with 1 current path / at DC-3 / at DC-5 | | |
| • at 24 V / Rated value | А | 35 |
| • at 110 V / Rated value | А | 2.5 |
| • with 2 current paths in series / at DC-3 / at DC-5 | | |
| • at 24 V / Rated value | А | 55 |
| • at 110 V / Rated value | А | 25 |
| • with 3 current paths in series / at DC-3 / at DC-5 | | |
| • at 24 V / Rated value | А | 55 |
| • at 110 V / Rated value | А | 55 |
| Operating power | | |
| • at AC-2 / at 400 V / Rated value | kW | 30 |
| • at AC-3 | | |
| • at 400 V / Rated value | kW | 30 |
| • at 690 V / Rated value | kW | 30 |
| • at AC-4 / at 400 V / Rated value | kW | 30 |
| No-load switching frequency | 1/h | 1,500 |
| Operating frequency | | |
| • at AC-1 / maximum | 1/h | 800 |
| • at AC-2 / maximum | 1/h | 400 |
| • at AC-3 / maximum | 1/h | 700 |
| • at AC-4 / maximum | 1/h | 200 |
| Control circuit/ Control: | | |
| Type of voltage / of the control supply voltage | | AC/DC |
| Control supply voltage / 1 | | |

| • for DC | V | 20 33 |
|--|-----|---------|
| • with AC | | |
| • at 50 Hz | V | 20 33 |
| • with AC | | |
| • at 60 Hz | V | 20 33 |
| Operating range factor control supply voltage rated value / of the magnet coil | | |
| • with AC / at 50 Hz | | 0.8 1.1 |
| • with AC / at 60 Hz | | 0.8 1.1 |
| • for DC | | 0.8 1.1 |
| Apparent pick-up power / of the magnet coil / with AC | | |
| • at 50 Hz | V-A | 40 |
| • at 60 Hz | V·A | 40 |
| Inductive power factor / with closing power of the coil | | |
| • at 50 Hz | | 0.64 |
| • at 60 Hz | | 0.5 |
| Apparent holding power / of the magnet coil / with AC | | |
| • at 50 Hz | V·A | 2 |
| • at 60 Hz | V·A | 2 |
| Inductive power factor / with the holding power of the coil | | |
| • at 50 Hz | | 0.36 |
| • at 60 Hz | | 0.39 |
| Closing power / of the magnet coil / for DC | W | 23 |
| Holding power / of the magnet coil / for DC | W | 1 |

Auxiliary circuit:

| Product expansion / Auxiliary switch | | Yes |
|---|---|--|
| Contact reliability / of the auxiliary contacts | | < 1 error per 100 million operating cycles |
| Number of NC contacts / for auxiliary contacts | | |
| per direction of rotation | | 0 |
| instantaneous contact | | 0 |
| lagging switching | | 0 |
| Number of NO contacts / for auxiliary contacts | - | |
| per direction of rotation | | 0 |
| instantaneous contact | | 0 |
| leading contact | | 0 |
| Operating current / of the auxiliary contacts | - | |
| • at AC-12 / maximum | А | 10 |
| • at AC-15 | | |
| • at 230 V | А | 6 |
| | | |

| • at 400 V | А | 3 |
|--|----|--|
| • at DC-12 | | |
| • at 48 V | А | 6 |
| • at 60 V | А | 6 |
| • at 110 V | А | 3 |
| • at 220 V | А | 1 |
| • at DC-13 | | |
| • at 24 V | А | 10 |
| • at 48 V | А | 2 |
| • at 60 V | А | 2 |
| • at 110 V | А | 1 |
| • at 220 V | А | 0.3 |
| Short-circuit: | | |
| Design of the fuse link | | |
| 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 |
| Width | mm | 120 |
| Height | mm | 141 |
| Depth | mm | 130 |
| Connections/ terminals: | | |
| Design of the electrical connection | | |
| for main current circuit | | screw-type terminals |
| for auxiliary and control current circuit | | screw-type terminals |
| Type of connectable conductor cross-section | | |
| for main contacts | | |
| single or multi-stranded | | 2x (1 35 mm²), 1x (1 50 mm²) |
| finely stranded / with core end processing | | 2x (1 25 mm²), 1x (1 35 mm²) |
| for AWG conductors / for main contacts | | 2x (18 2), 1x (18 1) |
| Type of connectable conductor cross-section | | |
| for auxiliary contacts | | |
| | | $2x (0.5 - 1.5 mm^2) - 2x (0.75 - 0.5 mm^2)$ |
| single or multi-stranded | | 2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²) |
| single or multi-stranded finely stranded / with core end processing | | 2x (0,5 1,5 mm ²), 2x (0,75 2,5 mm ²) 2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²) |

Declaration of Conformity



| UL/CSA ratings: | | |
|---|----|-------------|
| yielded mechanical performance [hp] | | |
| for single-phase AC motor | | |
| • at 110/120 V / Rated value | hp | 5 |
| • at 230 V / Rated value | hp | 10 |
| for three-phase AC motor | | |
| • at 220/230 V / Rated value | hp | 20 |
| • at 460/480 V / Rated value | hp | 50 |
| • at 575/600 V / Rated value | hp | 50 |
| Full-load current (FLA) / for three-phase AC motor | | |
| • at 480 V / Rated value | А | 65 |
| • at 600 V / Rated value | А | 62 |
| Contact rating / of the auxiliary contacts / acc. to UL | | A600 / Q600 |

| Safety related data: | | |
|--|-----|-----------|
| B10 value / with high demand rate | | |
| • acc. to SN 31920 | | 1,000,000 |
| Failure rate [FIT] / with low demand rate | | |
| • acc. to SN 31920 | FIT | 100 |
| Proportion of dangerous failures | - | |
| • with low demand rate / acc. to SN 31920 | % | 40 |
| • with high demand rate / acc. to SN 31920 | % | 73 |
| T1 value / for proof test interval or service life | - | |
| • acc. to IEC 61508 | а | 20 |

Further information:

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

Industry Mall (Online ordering system)

http://www.siemens.com/industrymall

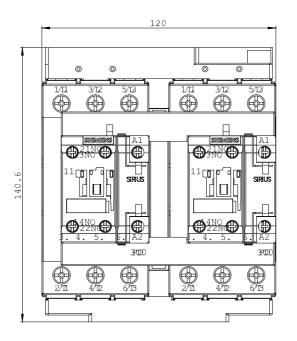
Cax online generator

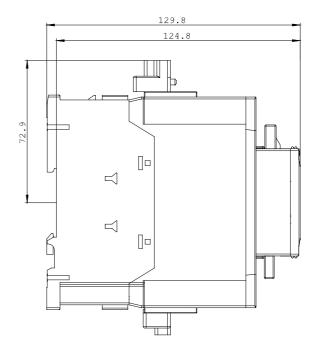
http://www.siemens.com/cax

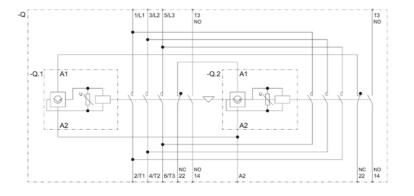
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

 $\underline{http://support.automation.siemens.com/WW/view/en/3RA2337-8XB30-1NB3/all}$

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RA2337-8XB30-1NB3







last change:

Dec 17, 2014