SIEMENS

Data sheet 3RT2038-1AK64

| | power contactor, AC-3e/AC-3, 80 A, 37 kW / 400 V, 3-pole, 110 V AC, 50 Hz / 120 V, 60 Hz, auxiliary contacts: 2 NO + 2 NC, screw terminal, size: S2, removable auxiliary switch |
|--|---|
| product brand name | SIRIUS |
| product designation | Power contactor |
| product type designation | 3RT2 |
| General technical data | |
| size of contactor | S2 |
| product extension | 02 |
| function module for communication | No |
| auxiliary switch | No |
| power loss [W] for rated value of the current | NO |
| | 17.1 W |
| at AC in hot operating state at AC in hot operating state per pole | |
| at AC in hot operating state per pole | 5.7 W |
| without load current share typical | 18.5 W |
| insulation voltage | 2001 |
| of main circuit with degree of pollution 3 rated value | 690 V |
| of auxiliary 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 |
| maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1 | 400 V |
| shock resistance at rectangular impulse | |
| • at AC | 9.8g / 5 ms, 6.5g / 10 ms |
| shock resistance with sine pulse | |
| • at AC | 15.3g / 5 ms, 10.1g / 10 ms |
| mechanical service life (operating cycles) | |
| of contactor typical | 10 000 000 |
| of the contactor with added electronically optimized auxiliary switch block typical | 5 000 000 |
| of the contactor with added auxiliary switch block typical | 10 000 000 |
| reference code according to IEC 81346-2 | Q |
| Substance Prohibitance (Date) | 10/01/2014 |
| 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 % |
| Main circuit | |
| number of poles for main current circuit | 3 |
| number of NO contacts for main contacts | 3 |
| operating voltage | |
| at AC-3 rated value maximum | 690 V |
| at AC-3e rated value maximum | 690 V |
| operational current | |
| at AC-1 at 400 V at ambient temperature 40 °C rated value | 90 A |
| • at AC-1 | |
| — up to 690 V at ambient temperature 40 $^{\circ}\text{C}$ rated value | 90 A |
| up to 690 V at ambient temperature 60 °C rated | 80 A |

| value | |
|---|--------------------|
| • at AC-3 | 20.4 |
| — at 400 V rated value | 80 A |
| — at 500 V rated value | 80 A |
| — at 690 V rated value | 58 A |
| • at AC-3e | |
| — at 400 V rated value | 80 A |
| — at 500 V rated value | 80 A |
| — at 690 V rated value | 58 A |
| at AC-4 at 400 V rated value | 55 A |
| at AC-5a up to 690 V rated value | 79.2 A |
| at AC-5b up to 400 V rated value | 66.4 A |
| • at AC-6a | 70 A |
| — up to 230 V for current peak value n=20 rated value | 70 A |
| — up to 400 V for current peak value n=20 rated value | 70 A |
| — up to 500 V for current peak value n=20 rated value | 70 A |
| — up to 690 V for current peak value n=20 rated value | 58 A |
| • at AC-6a | 4C 7 A |
| — up to 230 V for current peak value n=30 rated value | 46.7 A 46.7 A |
| — up to 400 V for current peak value n=30 rated value | 46.7 A |
| — up to 500 V for current peak value n=30 rated value | 46.7 A 46.7 A |
| — up to 690 V for current peak value n=30 rated value | |
| minimum cross-section in main circuit at maximum AC-1 rated value | 35 mm ² |
| operational current for approx. 200000 operating cycles at AC-4 | |
| at 400 V rated value | 30 A |
| at 690 V rated value | 24 A |
| operational current | 2477 |
| • at 1 current path at DC-1 | |
| — at 24 V rated value | 55 A |
| — at 60 V rated value | 23 A |
| — at 110 V rated value | 4.5 A |
| — at 220 V rated value | 1 A |
| — at 440 V rated value | 0.4 A |
| — at 600 V rated value | 0.25 A |
| • with 2 current paths in series at DC-1 | |
| — at 24 V rated value | 55 A |
| — at 60 V rated value | 45 A |
| — at 110 V rated value | 45 A |
| — at 220 V rated value | 5 A |
| — at 440 V rated value | 1 A |
| — at 600 V rated value | 0.8 A |
| with 3 current paths in series at DC-1 | |
| — at 24 V rated value | 55 A |
| — at 60 V rated value | 55 A |
| — at 110 V rated value | 55 A |
| — at 220 V rated value | 45 A |
| — at 440 V rated value | 2.9 A |
| — at 600 V rated value | 1.4 A |
| • at 1 current path at DC-3 at DC-5 | |
| — at 24 V rated value | 35 A |
| — at 60 V rated value | 6 A |
| — at 220 V rated value | 1 A |
| — at 440 V rated value | 0.1 A |
| — at 600 V rated value | 0.06 A |
| with 2 current paths in series at DC-3 at DC-5 | |
| — at 24 V rated value | 55 A |
| — at 60 V rated value | 45 A |
| — at 110 V rated value | 25 A |
| — at 220 V rated value | 5 A |

| — at 440 V rated value | 0.27 A |
|--|---|
| — at 600 V rated value | 0.16 A |
| with 3 current paths in series at DC-3 at DC-5 | |
| — at 24 V rated value | 55 A |
| — at 60 V rated value | 55 A |
| — at 110 V rated value | 55 A |
| — at 220 V rated value | 25 A |
| — at 440 V rated value | 0.6 A |
| — at 600 V rated value | 0.35 A |
| operating power | |
| • at AC-2 at 400 V rated value | 37 kW |
| • at AC-3 | |
| — at 230 V rated value | 22 kW |
| — at 400 V rated value | 37 kW |
| — at 500 V rated value | 37 kW |
| — at 690 V rated value | 45 kW |
| • at AC-3e | |
| — at 230 V rated value | 22 kW |
| — at 400 V rated value | 37 kW |
| — at 500 V rated value | 37 kW |
| — at 690 V rated value | 45 kW |
| operating power for approx. 200000 operating cycles at AC- | |
| 4 | |
| • at 400 V rated value | 15.8 kW |
| at 690 V rated value | 21.8 kW |
| operating apparent power at AC-6a | |
| up to 230 V for current peak value n=20 rated value | 27.8 kVA |
| up to 400 V for current peak value n=20 rated value | 48.4 kVA |
| up to 500 V for current peak value n=20 rated value | 60.6 kVA |
| • up to 690 V for current peak value n=20 rated value | 69.3 kVA |
| operating apparent power at AC-6a | |
| • up to 230 V for current peak value n=30 rated value | 18.6 kVA |
| up to 400 V for current peak value n=30 rated value | 32.3 kVA |
| up to 500 V for current peak value n=30 rated value | 40.4 kVA |
| up to 690 V for current peak value n=30 rated value | 55.8 kVA |
| short-time withstand current in cold operating state up to 40 °C | |
| limited to 1 s switching at zero current maximum | 1 298 A; Use minimum cross-section acc. to AC-1 rated value |
| limited to 5 s switching at zero current maximum | 898 A; Use minimum cross-section acc. to AC-1 rated value |
| limited to 10 s switching at zero current maximum | 640 A; Use minimum cross-section acc. to AC-1 rated value |
| limited to 30 s switching at zero current maximum | 414 A; Use minimum cross-section acc. to AC-1 rated value |
| limited to 60 s switching at zero current maximum | 333 A; Use minimum cross-section acc. to AC-1 rated value |
| no-load switching frequency | |
| • at AC | 5 000 1/h |
| operating frequency | |
| • at AC-1 maximum | 700 1/h |
| • at AC-2 maximum | 350 1/h |
| • at AC-3 maximum | 500 1/h |
| • at AC-3e maximum | 500 1/h |
| • at AC-4 maximum | 150 1/h |
| Control circuit/ Control | |
| 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 | 212 VA |
| ● at 60 Hz | 188 VA |
| | |

| industive newer factor with closing names of the sail | |
|--|--|
| inductive power factor with closing power of the coil • at 50 Hz | 0.69 |
| | |
| • at 60 Hz | 0.65 |
| apparent holding power of magnet coil at AC | 40.714 |
| • at 50 Hz | 18.5 VA |
| • at 60 Hz | 16.5 VA |
| inductive power factor with the holding power of the coil | 0.00 |
| • at 50 Hz | 0.36 |
| • at 60 Hz | 0.39 |
| closing delay | |
| • at AC | 10 80 ms |
| opening delay | |
| • at AC | 10 18 ms |
| arcing time | 10 20 ms |
| control version of the switch operating mechanism | Standard A1 - A2 |
| Auxiliary circuit | |
| number of NC contacts for auxiliary contacts instantaneous contact | 2 |
| number of NO contacts for auxiliary contacts instantaneous contact | 2 |
| operational current at AC-12 maximum | 10 A |
| operational current at AC-15 | |
| at 230 V rated value | 6 A |
| at 400 V rated value | 3 A |
| at 500 V rated value | 2 A |
| at 690 V rated value | 1 A |
| operational 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 |
| operational current at DC-13 | |
| at 24 V rated value | 6 A |
| • at 48 V rated value | 2 A |
| • at 60 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 |
| contact reliability of auxiliary contacts | 1 faulty switching per 100 million (17 V, 1 mA) |
| UL/CSA ratings | |
| full-load current (FLA) for 3-phase AC motor | |
| • at 480 V rated value | 65 A |
| at 600 V rated value | 62 A |
| yielded mechanical performance [hp] | |
| • for single-phase AC motor | |
| — at 110/120 V rated value | 5 hp |
| — at 230 V rated value | 15 hp |
| • for 3-phase AC motor | |
| — at 200/208 V rated value | 20 hp |
| — at 220/230 V rated value | 25 hp |
| — at 460/480 V rated value | 50 hp |
| — at 575/600 V rated value | 60 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 | gG: 250 A (690 V, 100 kA), aM: 160 A (690 V, 100 kA), BS88: 200 A (415 V, 80 |
| · · · · · · · · · · · · · · · · · · · | |

| with type of assignment 2 required of or short-circuit protection of the auxiliary switch required installation/ mounting/ dimensions mounting position ### 14-180* rotation possible on vertical mounting surface; can be tilted forward and backward by #-/ 22.5* on vertical mounting surface; can be tilted forward and backward by #-/ 22.5* on vertical mounting surface; can be tilted forward and backward by #-/ 22.5* on vertical mounting surface; can be tilted forward and backward by #-/ 22.5* on vertical mounting surface; can be tilted forward and backward by #-/ 22.5* on vertical mounting surface; can be tilted forward and backward by #-/ 22.5* on vertical mounting surface; can be tilted forward and backward by #-/ 22.5* on vertical mounting surface; can be tilted forward and backward by #-/ 22.5* on vertical mounting surface; can be tilted forward and backward by #-/ 22.5* on vertical mounting surface; can be tilted forward and backward by #-/ 22.5* on vertical mounting surface; can be tilted forward and backward by #-/ 22.5* on vertical mounting surface; can be tilted forward and backward by #-/ 22.5* on vertical mounting surface; can be tilted forward and backward by #-/ 22.5* on vertical mounting surface; can be tilted forward and backward by #-/ 22.5* on vertical mounting surface; can be tilted forward and backward by #-/ 22.5* on vertical mounting surface; can be tilted forward and backward by #-/ 22.5* on vertical mounting surface; can be tilted forward and backward by #-/ 22.5* on vertical mounting surface; can be tilted forward and backward by #-/ 22.5* on vertical mounting surface; can be tilted forward and backward by #-/ 22.5* on vertical mounting surface; can be tilted forward and backward by #-/ 22.5* on vertical mounting surface; can be tilted forward and backward by #-/ 22.5* on vertical mounting surface; can be tilted forward and backward by #-/ 22.5* on vertical mounting surface; can be tilted forward and backward by #-/ 22.5* on vertical mounting surface; can be tilted forward and backward by | | kA) |
|--|--|--|
| For an anti-critical protection of the auxiliary switch required mounting position 14,160° rigistion possition 14,160° rigistion 14,160° r | — with type of assignment 2 required | |
| Marchitant mounting dimensions | | |
| Mathematical position | | |
| Maight 114 mm 1 | | |
| Might Migh | fastening method | screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 |
| Meditable | side-by-side mounting | Yes |
| International Commercial Commer | height | 114 mm |
| Forwards | width | 55 mm |
| with side-by-side mounting — forwards — upwards — at the side or orgrounded parts — for grounded parts — for grounded parts — for grounded parts — for words — upwards — upwards — upwards — upwards — upwards — at the side — downwards — for live parts — for live parts — for words — upwards — upwards — for mine contents — upwards — upwards — upwards — upwards — upwards — upwards — for mine — upwards — upwards — upwards — for mine — upwards — upwards — upwards — to formain content (crout) — so for main current (crout) — for my stranded with core end processing — finely stranded with core end processing — for auxiliary contacts — solid or stranded — finely stranded with core end processing — for auxiliary contacts — solid or stranded — finely stranded with core end processing — for auxiliary contacts — solid or stranded — finely stranded with core end processing — for auxiliary contacts — solid or stranded — finely stranded with core end processing — for auxiliary contacts — solid or stranded — finely stranded with core end processing — for auxiliary contacts — solid or stranded — finely stranded with core end processing — for auxiliary contacts — solid or stranded — for auxiliary contacts — solid or stranded — for auxiliary contacts — solid o | depth | 174 mm |
| - forwards | required spacing | |
| - upwards | with side-by-side mounting | |
| - downwards | — forwards | 10 mm |
| at the side | — upwards | 10 mm |
| | — downwards | 10 mm |
| forwards | — at the side | 0 mm |
| - upwards | for grounded parts | |
| - at the side - downwards 10 mm 10 m | | |
| • for live parts - forwards - upwards - upwards - downwards - at the side - of main current circuit • for auxiliary and control circuit • of magnet coil • for finely stranded with core end processing • for auxiliary contacts • for auxiliary contacts • finely stranded with core end processing • for auxiliary contacts • for auxiliary contacts • for auxiliary contacts • finely stranded with core end processing • for auxiliary contacts • for auxiliary contacts • finely stranded with core end processing • for for stranded • finely stranded with core end processing • for auxiliary contacts • finely stranded with core end processing • for auxiliary contacts • for for main contacts • for for | — upwards | 10 mm |
| • for live parts — forwards — upwards — downwards — at the side — at the side — one memoral for main current circuit • of main current circuit • of main current circuit • at contactor for auxiliary contacts • of magnet coil type of object on ductor cross-sections for main contacts • of magnet coil type of connectable conductor cross-sections for main contacts • solid or stranded • (inney stranded with core end processing • solid or stranded with core end processing • finely stranded with core end processing • for auxiliary contacts • for auxiliary contacts • for auxiliary contacts • for one catable conductor cross-section for auxiliary contacts • for auxiliary contacts • for auxiliary contacts • for one conductor cross-sections • for main contacts • for one conductor cross-sections • for auxiliary contacts • for one conductor cross-sections • for main contacts • for main contacts • for one conductor cross-sections • for main contacts • for with ligh demand rate according to IEC 60947-6-1 • positively driven operation according to IEC 60947-6-1 • No B10 value with high demand rate according to SN 31920 • with high demand rate according to SN 31920 • with high demand rate according to SN 31920 • with high demand rate according to SN 31920 • with high demand rate according to SN 31920 • with high demand rate according to SN 31920 • with high demand rate according to SN 31920 • with high demand rate according to SN 31920 • with high demand rate according to SN 31920 • with high demand rate according to SN 31920 • with high demand rate according to SN 31920 | | |
| forwards | — downwards | 10 mm |
| - upwards | for live parts | |
| - downwards - at the side 6 mm Connections/ Torminals type of electrical connection • for main current circuit screw-type terminals • at contactor for auxiliary and control circuit screw-type terminals • at contactor for auxiliary contacts • of magnet coil Screw-type terminals • solid or stranded • finely stranded with core end processing 2x (1 35 mm²), 1x (1 50 mm²) connectable conductor cross-section for main contacts • finely stranded with core end processing 2x (1 25 mm²), 1x (1 35 mm²) connectable conductor cross-section for main contacts • finely stranded with core end processing 1 35 mm² connectable conductor cross-section for auxiliary contacts • solid or stranded 5 2.5 mm² connectable conductor cross-section or auxiliary contacts • finely stranded with core end processing 5 2.5 mm² connectable conductor cross-sections • for auxiliary contacts • for auxiliary contacts • solid or stranded 2 2.5 mm² top auxiliary contacts • solid or stranded 5 2.5 mm² connectable conductor cross-sections • for auxiliary contacts • solid or stranded 2 2.5 mm² top auxiliary contacts • solid or stranded 2 2.5 mm² 2x (0 1.5 mm²), 2x (0.75 2.5 mm²) • for auxiliary contacts • for auxiliary contacts • for auxiliary contacts • for main contact according to IEC 60947-4-1 • positively driven operation according to IEC 60947-5-1 No B10 value with high demand rate according to SN 31920 • with low demand rate according to SN 31920 • with low demand rate according to SN 31920 • with low demand rate according to SN 31920 • with low demand rate according to SN 31920 • with low demand rate according to SN 31920 • with low demand rate according to SN 31920 • with low demand rate according to SN 31920 • with low demand rate according to SN 31920 • with low demand rate according to SN 31920 • with low demand rate according | — forwards | 10 mm |
| Connectable conductor cross-section for main contacts • finely stranded with core end processing • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • for auxiliary contacts • for auxiliary contacts • for for auxiliary cont | — upwards | 10 mm |
| type of electrical connection • for main current circuit • at contactor for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil type of connectable conductor cross-sections for main contacts • solid or stranded • finely stranded with core end processing connectable conductor cross-section for main contacts • finely stranded with core end processing connectable conductor cross-section for main contacts • finely stranded with core end processing connectable conductor cross-section for main contacts • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts — solid or stranded — finely stranded with core end processing • for AWG cables for auxiliary contacts • for one cable conductor cross-sections • for for main contacts • for main contacts • for main contacts • for auxiliary contac | — downwards | 10 mm |
| type of electrical connection • for main current circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil type of connectable conductor cross-sections for main contacts • solid or stranded • finely stranded with core end processing connectable conductor cross-section for main contacts • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts - solid or stranded • finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts - solid or stranded - solid or stranded - solid or stranded - finely stranded with core end processing • for AWG cables for auxiliary contacts - solid or stranded - finely stranded with core end processing • for auxiliary contacts - solid or stranded - finely stranded with core end processing • for auxiliary contacts - solid or stranded - finely stranded with core end processing • for auxiliary contacts - solid or stranded - solid | — at the side | 6 mm |
| • for main current circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil type of connectable conductor cross-sections for main contacts • solid or stranded • finely stranded with core end processing connectable conductor cross-section for main contacts • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • for auxilia | Connections/ Terminals | |
| of rauxiliary and control circuit ot a contactor for auxiliary contacts of magnet coil type of connectable conductor cross-sections for main contacts of finely stranded with core end processing connectable conductor cross-section for main contacts olid or stranded of inely stranded with core end processing connectable conductor cross-section for main contacts olid or stranded of inely stranded with core end processing connectable conductor cross-section for auxiliary contacts olid or stranded of inely stranded with core end processing of auxiliary contacts of or or auxiliary contacts of or auxiliary con | type of electrical connection | |
| • at contactor for auxiliary contacts • of magnet coil type of connectable conductor cross-sections for main contacts • solid or stranded • finely stranded with core end processing connectable conductor cross-section for main contacts • finely stranded with core end processing connectable conductor cross-section for main contacts • finely stranded with core end processing tonnectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts - solid or stranded - finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts - solid or stranded - finely stranded with core end processing • for AWG cables for auxiliary contacts AWG number as coded connectable conductor cross section • for main contacts • for auxiliary contacts - for auxiliary contacts - for auxiliary contacts - solid or stranded - finely stranded with core end processing • for AWG cables for auxiliary contacts - solid or stranded - finely stranded with core end processing • for AWG number as coded connectable conductor cross section • for auxiliary contacts - for auxi | for main current circuit | screw-type terminals |
| of magnet coil type of connectable conductor cross-sections for main contacts • solid or stranded • finely stranded with core end processing connectable conductor cross-section for main contacts • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded with core end processing • for auxiliary contacts • solid or stranded with core end processing • for auxiliary contacts • solid or stranded with core end processing • for auxiliary contacts • solid or stranded with core end processing • for auxiliary contacts • solid or stranded with core end processing • for auxiliary contacts • solid or stranded with core end processing • for auxiliary contacts • solid or stranded with core end processing • for auxiliary contacts • solid or stranded with core end processing • for auxiliary contacts • for auxiliary contacts • for auxiliary contacts • for auxiliary contacts • for main contacts • for main contacts • for main contacts • for auxiliary contacts • for auxiliary contacts • positively driven operation according to IEC 60947-4-1 • positively driven operation according to SN 31920 Proportion of dangerous failures • with low demand rate according to SN 31920 • with low demand rate according to SN 31920 T1 value for proof test interval or service life according to IEC 20 a T1 value for proof test interval or service life according to IEC 20 a | for auxiliary and control circuit | screw-type terminals |
| type of connectable conductor cross-sections for main contacts • solid or stranded • finely stranded with core end processing connectable conductor cross-section for main contacts • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts — solid or stranded — finely stranded with core end processing • for Auxiliary contacts — solid or stranded — finely stranded with core end processing • for Auxiliary contacts — solid or stranded — finely stranded with core end processing • for Auxiliary contacts — solid or stranded — finely stranded with core end processing • for Auxiliary contacts AWG number as coded connectable conductor cross section • for main contacts • for main contacts • for auxiliary contacts 2x (20 1.5 mm²), 2x (0.75 2.5 mm²) 2x (20 16), 2x (18 14) AWG number as coded connectable conductor cross section • for main contacts • for auxiliary contacts 2x (20 14) Safety related data product function • mirror contact according to IEC 60947-4-1 • positively driven operation according to IEC 60947-5-1 No B10 value with high demand rate according to SN 31920 proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 T1 value for proof test interval or service life according to IEC 50 N 31920 T1 value for proof test interval or service life according to IEC 50 N 31920 T1 value for proof test interval or service life according to IEC 50 N 31920 T1 value for proof test interval or service life according to IEC 50 N 31920 | at contactor for auxiliary contacts | Screw-type terminals |
| • solid or stranded • finely stranded with core end processing connectable conductor cross-section for main contacts • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts - solid or stranded - finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts - solid or stranded - finely stranded with core end processing 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) • for AWG cables for auxiliary contacts AWG number as coded connectable conductor cross-section • for main contacts • for auxiliary contacts 18 1 20 14 Safety related data product function • mirror contact according to IEC 60947-4-1 • positively driven operation according to IEC 60947-5-1 No B10 value with high demand rate according to SN 31920 proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 1 value for proof test interval or service life according to IEC 50 a T1 value for proof test interval or service life according to IEC 50 a T1 value for proof test interval or service life according to IEC 50 a | of magnet coil | Screw-type terminals |
| • finely stranded with core end processing connectable conductor cross-section for main contacts • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts — solid or stranded — finely stranded with core end processing • for AWG cables for auxiliary contacts 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 4 (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 4 (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 5 (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 4 (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 4 (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 5 (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 5 (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 4 (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 5 (0.5 1 | type of connectable conductor cross-sections for main contacts | |
| connectable conductor cross-section for main contacts • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts — solid or stranded — finely stranded with core end processing • for AWG cables for auxiliary contacts 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (0.5 1.5 mm²), 2x | solid or stranded | 2x (1 35 mm²), 1x (1 50 mm²) |
| • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing very endit or end processing consectable conductor cross-sections • for auxiliary contacts — solid or stranded — finely stranded with core end processing • for auxiliary contacts — solid or stranded — finely stranded with core end processing very endit or stranded — finely stranded with core end processing very endit or stranded very endit or end processing very end or end or end processing very end or end | finely stranded with core end processing | 2x (1 25 mm²), 1x (1 35 mm²) |
| connectable conductor cross-section for auxiliary contacts | connectable conductor cross-section for main contacts | |
| solid or stranded finely stranded with core end processing type of connectable conductor cross-sections for auxiliary contacts — solid or stranded — finely stranded with core end processing — finely stranded with core end processing — for AWG cables for auxiliary contacts AWG number as coded connectable conductor cross section — for main contacts — for auxiliary contacts 18 1 — for auxiliary contacts 20 14 Safety related data | finely stranded with core end processing | 1 35 mm² |
| • finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts — solid or stranded — finely stranded with core end processing • for AWG cables for auxiliary contacts 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) • for AWG cables for auxiliary contacts 2x (20 16), 2x (18 14) AWG number as coded connectable conductor cross section • for main contacts • for auxiliary contacts 18 1 • for auxiliary contacts 20 14 Safety related data product function • mirror contact according to IEC 60947-4-1 • positively driven operation according to IEC 60947-5-1 No B10 value with high demand rate according to SN 31920 proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 100 FIT T1 value for proof test interval or service life according to IEC 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (20 16), 2x (18 14) 3 1 3 1 3 1 3 1 3 1 4 1 4 1 5 1 5 1 5 1 | connectable conductor cross-section for auxiliary contacts | |
| type of connectable conductor cross-sections • for auxiliary contacts — solid or stranded — finely stranded with core end processing • for AWG cables for auxiliary contacts AWG number as coded connectable conductor cross section • for main contacts • for auxiliary contacts 18 1 • for auxiliary contacts 20 14 Safety related data product function • mirror contact according to IEC 60947-4-1 • positively driven operation according to SN 31920 proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to IEC 30 and so IEC 30 and | solid or stranded | 0.5 2.5 mm² |
| • for auxiliary contacts — solid or stranded — finely stranded with core end processing • for AWG cables for auxiliary contacts AWG number as coded connectable conductor cross section • for main contacts • for auxiliary contacts • for auxiliary contacts • for auxiliary contacts • for auxiliary contacts • for auxiliary contacts • product function • mirror contact according to IEC 60947-4-1 • positively driven operation according to SN 31920 B10 value with high demand rate according to SN 31920 proportion of dangerous failures • with low demand rate according to SN 31920 with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 T1 value for proof test interval or service life according to IEC 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (20 16), 2x (18 14) T1 value for proof test interval or service life according to SN 31920 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (20 16), 2x (18 14) T1 value for proof test interval or service life according to IEC | finely stranded with core end processing | 0.5 2.5 mm² |
| solid or stranded finely stranded with core end processing finely stranded with core end processing for AWG cables for auxiliary contacts for AWG number as coded connectable conductor cross section for main contacts for auxiliary | type of connectable conductor cross-sections | |
| - finely stranded with core end processing • for AWG cables for auxiliary contacts AWG number as coded connectable conductor cross section • for main contacts • for auxiliary contacts 18 1 • for auxiliary contacts 20 14 Safety related data product function • mirror contact according to IEC 60947-4-1 • positively driven operation according to IEC 60947-5-1 B10 value with high demand rate according to SN 31920 proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 T1 value for proof test interval or service life according to IEC 2 (20 16), 2x (18 14) 2x (20 16), 2x (18 14) 18 1 20 14 Yes • 1000 000 40 % • with low demand rate according to SN 31920 100 FIT T1 value for proof test interval or service life according to IEC | • | |
| • for AWG cables for auxiliary contacts AWG number as coded connectable conductor cross section • for main contacts • for auxiliary contacts • for auxiliary contacts • for auxiliary contacts • for auxiliary contacts • for auxiliary contacts • for auxiliary contacts • for auxiliary contacts • for auxiliary contacts • for auxiliary contacts • mirror contact according to IEC 60947-4-1 • positively driven operation according to IEC 60947-5-1 B10 value with high demand rate according to SN 31920 proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 T1 value for proof test interval or service life according to IEC 20 a | | |
| AWG number as coded connectable conductor cross section • for main contacts • for auxiliary contacts 20 14 Safety related data product function • mirror contact according to IEC 60947-4-1 • positively driven operation according to IEC 60947-5-1 B10 value with high demand rate according to SN 31920 proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 • with high demand rate according to SN 31920 • with high demand rate according to SN 31920 100 FIT T1 value for proof test interval or service life according to IEC 20 a | finely stranded with core end processing | 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) |
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| failure rate [FIT] with low demand rate according to SN 31920 100 FIT T1 value for proof test interval or service life according to IEC 20 a | - | |
| T1 value for proof test interval or service life according to IEC 20 a | • • • | |
| | | |
| | | 20 α |

IP20 protection class IP on the front according to IEC 60529 touch protection on the front according to IEC 60529 finger-safe, for vertical contact from the front suitability for use • safety-related switching OFF Yes

Certificates/ approvals

General Product Approval





Confirmation



<u>KC</u>



Functional EMC Safety/Safety of Ma-**Declaration of Conformity Test Certificates** chinery



Type Examination Certificate





Type Test Certificates/Test Report

Special Test Certificate

Marine / Shipping













Marine / Shipping other Railway **Dangerous Good Environment**



Confirmation

Confirmation

Vibration and Shock

Transport Information

Environmental Confirmations

Siemens has decided to exit the Russian market (see here).

.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=3RT2038-1AK64

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2038-1AK64

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2038-1AK64

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

Characteristic: Tripping characteristics, I2t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RT203

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

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2038-1AK64&objecttype=14&gridview=view1

last modified: 2/10/2023