SIEMENS

Data sheet 3RT2018-2BB41



Power contactor, AC-3 16 A, 7.5 kW / 400 V 1 NO, 24 V DC 3-pole, Size S00 Spring-type terminals

| product brand name | SIRIUS |
|-------------------------------------------------------------------------------------------------------------|----------------------------|
| product designation | Power contactor |
| product type designation | 3RT2 |
| 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 | 6.6 W |
| • per pole | 2.2 W |
| power loss [W] for rated value of the current without load current share typical | 4 W |
| surge voltage resistance | |
| of main circuit rated value | 6 kV |
| of auxiliary circuit rated value | 6 kV |
| maximum permissible voltage for safe isolation between coil and main contacts acc. to EN 60947-1 | 400 V |
| 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 (switching cycles) | |
| of contactor typical | 30 000 000 |
| 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 acc. to IEC 81346-2 | Q |
| Substance Prohibitance (Date) | 01.10.2009 00:00:00 |
| 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 |
| 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 |
| | |

| operational current | 00.4 |
|---------------------------------------------------------------------------------------------------|-------------------|
| 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 | 16 A |
| — at 500 V rated value | 12.4 A |
| — at 690 V rated value | 8.9 A |
| at AC-4 at 400 V rated value | 11.5 A |
| at AC-5a up to 690 V rated value | 19.4 A |
| at AC-5b up to 400 V rated value | 13.2 A |
| • at AC-6a | |
| up to 230 V for current peak value n=20 rated value | 9.6 A |
| up to 400 V for current peak value n=20 rated value | 9.6 A |
| up to 500 V for current peak value n=20 rated value | 9.6 A |
| — up to 690 V for current peak value n=20 rated value • at AC-6a | 8.9 A |
| up to 230 V for current peak value n=30 rated value | 6.6 A |
| up to 400 V for current peak value n=30 rated value | 6.4 A |
| up to 500 V for current peak value n=30 rated value | 6.4 A |
| up to 690 V for current peak value n=30 rated value | 6.4 A |
| minimum cross-section in main circuit at maximum AC-1 rated value | 4 mm ² |
| operational current for approx. 200000 operating cycles at AC-4 | |
| at 400 V rated value | 5.5 A |
| at 690 V rated value | 4.4 A |
| operational current | |
| at 1 current path at DC-1 | |
| — at 24 V rated value | 20 A |
| — at 110 V rated value | 2.1 A |
| — at 220 V rated value | 0.8 A |
| — at 440 V rated value | 0.6 A |
| — at 600 V rated value | 0.6 A |
| with 2 current paths in series at DC-1 | |
| — at 24 V rated value | 20 A |
| — at 110 V rated value | 12 A |
| — at 220 V rated value | 1.6 A |
| — at 440 V rated value | 0.8 A |
| — at 600 V rated value | 0.7 A |
| with 3 current paths in series at DC-1 | 20. A |
| — at 24 V rated value | 20 A |
| — at 110 V rated value | 20 A |
| — at 220 V rated value | 20 A |
| — at 440 V rated value | 1.3 A |
| — at 600 V rated value | 1 A |
| operational current | |
| at 1 current path at DC-3 at DC-5 at 24 V reted value. | 20.4 |
| — at 24 V rated value | 20 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 | 20 A |
| — at 110 V rated value | 0.35 A |
| with 3 current paths in series at DC-3 at DC-5 | |
| — at 24 V rated value | 20 A |
| — at 110 V rated value | 20 A |
| — at 220 V rated value | 1.5 A |
| — at 440 V rated value | 0.2 A |
| — at 600 V rated value | 0.2 A |
| operating power | V-2. |
| • at AC-3 | |
| — at 230 V rated value | 4 kW |
| — at 400 V rated value | 7.5 kW |
| — at 500 V rated value | 7.5 kW |
| — at 690 V rated value | 7.5 kW |
| operating power for approx. 200000 operating cycles | 7.0 KV |
| at AC-4 | |
| • at 400 V rated value | 2.5 kW |
| • at 690 V rated value | 3.5 kW |
| operating apparent power at AC-6a | |
| up to 230 V for current peak value n=20 rated value | 3.8 kV·A |
| up to 400 V for current peak value n=20 rated value | 6.6 kV·A |
| up to 500 V for current peak value n=20 rated value | 8.3 kV·A |
| up to 690 V for current peak value n=20 rated value | 10.6 kV·A |
| operating apparent power at AC-6a | |
| up to 230 V for current peak value n=30 rated value | 2.5 kV·A |
| up to 400 V for current peak value n=30 rated value | 4.4 kV·A |
| up to 500 V for current peak value n=30 rated value | 5.5 kV·A |
| up to 690 V for current peak value n=30 rated value | 7.6 kV·A |
| short-time withstand current in cold operating state | |
| up to 40 °C | |
| limited to 1 s switching at zero current maximum | 300 A; Use minimum cross-section acc. to AC-1 rated value |
| limited to 5 s switching at zero current maximum | 169 A; Use minimum cross-section acc. to AC-1 rated value |
| limited to 10 s switching at zero current maximum | 128 A; Use minimum cross-section acc. to AC-1 rated value |
| limited to 30 s switching at zero current maximum | 92 A; Use minimum cross-section acc. to AC-1 rated value |
| limited to 60 s switching at zero current maximum | 74 A; 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 |
| • 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 at DC | |
| rated value | 24 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 NO contacts for auxiliary contacts | 1 |
| instantaneous contact | ' |
| operational current at AC-12 maximum | 10 A |
| operational 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 |
| 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 | 10 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 | 14 A |
| at 600 V rated value | 11 A |
| yielded mechanical performance [hp] | |
| for single-phase AC motor | |
| — at 110/120 V rated value | 1 hp |
| — at 230 V rated value | 2 hp |
| • for 3-phase AC motor | |
| — at 200/208 V rated value | 3 hp |
| — at 220/230 V rated value | 5 hp |
| — at 460/480 V rated value | 10 hp |
| — at 575/600 V rated value | 10 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: 50A (690V,100kA), aM: 25A (690V,100kA), BS88: 50A (415V,80kA) |
| with type of assignment 2 required | gG: 25A (690V,100kA), aM: 20A (690V,100kA), BS88: 25A (415V,80kA) |
| for short-circuit protection of the auxiliary switch | gG: 10 A (500 V, 1 kA) |
| required | |
| 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 |
| fastening method | screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 |
| • side-by-side mounting | Yes |
| height | 70 mm |
| width | 45 mm |
| depth | 73 mm |
| required spacing | |
| with side-by-side mounting | |

| - forwards | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|--------------------------------------------------|
| - downwards | | |
| at the side • for grounded parts forwards upwards at the side downwards forwards downwards downwards downwards downwards downwards downwards downwards downwards downwards forwards for | · | |
| | — downwards | 10 mm |
| forwards | — at the side | 0 mm |
| - upwards | for grounded parts | |
| - at the side - downwards 10 mm 10 m | — forwards | 10 mm |
| • for live parts - forwards - upwards - upwards - downwards - downwards - at the side Connections/ Terminals type of electrical connection • for main current clicuit • at contactor for auxiliary contacts • of magnet coil type of connectable conductor cross-sections • for main contacts - solid - solid or stranded - finely stranded without core end processing - shall or stranded • finely stranded without core end processing • finel | — upwards | 10 mm |
| • for live parts — forwards — upwards — downwards — at the side 6 mm Connections/ Terminals type of electrical connection • for auxiliary and control circuit • for auxiliary and control circuit • for auxiliary and control circuit • for famin contacts • of magnet coil type of connectable conductor cross-sections • for finely stranded with core end processing • at AWG cables for main contacts • solid • siranded • finely stranded with core end processing • finely stranded without core end | — at the side | 6 mm |
| forwards upwards upward | — downwards | 10 mm |
| - upwards | for live parts | |
| - downwards - at the side - at | — forwards | 10 mm |
| - at the side Connectable conductor cross-section for main contable conductor cross-section for main current circuit • for auxiliary and control circuit • for auxiliary and control circuit • for auxiliary and control circuit • for for auxiliary contacts • for main contacts - solid - solid or stranded - finely stranded with core end processing - finely stranded with core end processing - at AWG cables for main contacts • solid • stranded • finely stranded with core end processing - finely stranded with core end processing - solid • stranded • stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded without core end processing • finely stranded without core end processing • for auxiliary contacts • for aux | — upwards | 10 mm |
| type of electrical connection of or main current circuit of or auxiliary and control circuit of or main contacts of magnet coil type of connectable conductor cross-sections of main contacts - solid - solid or stranded - finely stranded with core end processing of finely stranded with core end processing of finely stranded without core end processing of finely stranded with core end processing of finely stranded with core end processing of finely stranded without core end processing of finely stranded with core end processing of finely stranded without core end processing of finely stranded with core end processing of finely stranded without core end processing of naw stranded of finely stranded without core end processing of naw stranded of or stranded | — downwards | 10 mm |
| type of electrical connection • for main current circuit • at contactor for auxiliary contacts • of magnet coil type of connectable conductor cross-sections • for main contacts — solid — solid or stranded — finely stranded with core end processing • at AWG cables for main contacts • solid • stranded • finely stranded without core end processing • at AWG cables for main contacts • solid • stranded • finely stranded without core end processing • finely stranded without core end processing • solid • stranded • finely stranded without core end processing • for auxiliary contacts — solid or stranded — finely stranded without core end processing • for auxiliary contacts — solid or stranded • finely stranded without core end processing • for auxiliary contacts — solid or stranded • finely stranded without core end processing • for auxiliary contacts — solid or stranded • finely stranded without core end processing • for auxiliary contacts — solid or stranded • finely stranded without 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 • 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 • finely stranded with core end processing • finely stranded with core end processing • for auxiliary contacts • | — at the side | 6 mm |
| type of electrical connection • for main current circuit • at contactor for auxiliary contacts • of magnet coil type of connectable conductor cross-sections • for main contacts — solid — solid or stranded — finely stranded with core end processing • at AWG cables for main contacts • solid • stranded • finely stranded without core end processing • at AWG cables for main contacts • solid • stranded • finely stranded without core end processing • finely stranded without core end processing • solid • stranded • finely stranded without core end processing • for auxiliary contacts — solid or stranded — finely stranded without core end processing • for auxiliary contacts — solid or stranded • finely stranded without core end processing • for auxiliary contacts — solid or stranded • finely stranded without core end processing • for auxiliary contacts — solid or stranded • finely stranded without core end processing • for auxiliary contacts — solid or stranded • finely stranded without 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 • 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 • finely stranded with core end processing • finely stranded with core end processing • for auxiliary contacts • | Connections/ Terminals | |
| • 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 — solid | | |
| of rauxiliary and control circuit of magnet coil type of connectable conductor cross-sections of main contacts — solid — solid or stranded — finely stranded with core end processing • finely stranded with core end processing • solid | | enring-loaded terminals |
| at contactor for auxiliary contacts of magnet coil Spring-type eterminals of magnet coil Spring-type terminals for main contacts - solid - solid or stranded - finely stranded without ore end processing - finely stranded without core end processing - solid stranded - solid - stranded with core end processing - finely stranded with core end processing - finely stranded with core end processing - solid or stranded - stranded - stranded - stranded without core end processing - solid or stranded without core end processing - solid or stranded with core end processing - solid or stranded - | | |
| type of connectable conductor cross-sections • for main contacts - solid - solid or stranded - finely stranded with core end processing - finely stranded without core end processing - solid or stranded - finely stranded without core end processing - sit AWG cables for main contacts • solid • stranded • stranded • stranded • stranded • stranded • stranded with core end processing • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • finely stranded with core end processing • finely stranded with core end processing • finely stranded without core end processing • finely stranded without core end processing • finely stranded without core end processing • finely stranded with core end processing • for auxiliary contacts - solid or stranded - finely stranded with core end processing • for for stranded with core end processing • for for stranded without core end processing • at AWG cables for auxiliary contacts - solid or stranded - finely stranded without core end processing • at AWG cables for auxiliary contacts - solid or stranded - finely stranded without core end processing • at AWG cables for auxiliary contacts - solid or stranded - for or main contacts - for auxiliary contacts - solid or stranded - for main contacts - for auxiliary contacts - for main contacts - for or main contacts - | • | |
| type of connectable conductor cross-sections of for main contacts — solid — solid or stranded — finely stranded with core end processing — finely stranded without core end processing of at AWC cables for main contacts osolid stranded offinely stranded without core end processing offinely stranded with core end processing offinely stranded without core end processing offinely stranded with core end processing offinely stranded without core end processing offinely stranded with core end processing offinely stranded without core end processing offinel | • | |
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| solid or stranded finely stranded without core end processing at AWG cables for main contacts solid stranded sinely stranded with core end processing solid or stranded without core end processing solid or stranded without core end processing solid or stranded - | | |
| | | 0: (0.5 |
| finely stranded with core end processing finely stranded without core end processing at AWG cables for main contacts solid stranded stranded with core end processing stranded finely stranded with core end processing stranded | | |
| at AWG cables for main contacts as of a tame and the processing of the processing of | | |
| • at AWG cables for main contacts connectable conductor cross-section for main contacts • solid • stranded • finely stranded with core end processing • finely stranded without 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 • finely stranded without core end processing • finely stranded without core end processing • for auxiliary contacts - solid or stranded - finely stranded with core end processing - finely stranded with core end processing - finely stranded without core end processing - stranded - finely stranded without core end processing - finely stranded without core end processing - stranded - finely stranded with core end processing - stranded - finely stranded with core end processing - stranded - finely stranded - strand | | |
| connectable conductor cross-section for main contacts • solid • stranded • finely stranded with core end processing • finely stranded without core end processing • solid or stranded • finely stranded without core end processing • solid or stranded • finely stranded with core end processing • 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 • finely stranded with core end processing • at AWG cables for auxiliary contacts AWG number as coded connectable conductor cross section • for main contacts • for auxiliary contacts • for auxiliary contacts 20 12 20 12 Safety related data product function mirror contact acc. to IEC 60947-4-1 B10 value with high demand rate acc. to SN 31920 proportion of dangerous failures • with low demand rate acc. to SN 31920 with high demand rate acc. to SN 31920 with high demand rate acc. to SN 31920 failure rate [FIT] with low demand rate acc. to IEC 60529 protection class IP on the front acc. to IEC 60529 | | |
| e solid • stranded • stranded • finely stranded with core end processing • finely stranded without core end processing • finely stranded without core end processing • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • finely stranded without core end processing • finely stranded without core end processing • finely stranded without core end processing • for auxiliary contacts — solid or stranded — finely stranded with core end processing — finely stranded with core end processing — finely stranded without core end processing — finely stranded without core end processing — finely stranded without core end processing — at AWG cables for auxiliary contacts AWG number as coded connectable conductor cross section • for main contacts • for auxiliary contacts 20 12 Safety related data product function mirror contact acc. to IEC 60947-4-1 B10 value with high demand rate acc. to SN 31920 proportion of dangerous failures • with low demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 • with low demand rate acc. to SN 31920 • with low demand rate acc. to SN 31920 11 value for proof test interval or service life acc. to IEC 60529 protection class IP on the front acc. to IEC 60529 IP20 | | 2x (20 12) |
| solid stranded stranded inely stranded with core end processing inely stranded without core end processing connectable conductor cross-section for auxiliary contacts solid or stranded inely stranded without core end processing inely stranded with core end processing inely stranded without core end processing inely stranded with core end process | | |
| • stranded • finely stranded with core end processing • finely stranded without core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing • finely stranded with core end processing • finely stranded with core end processing • finely stranded without core end processing • finely stranded without core end processing • for auxiliary contacts - solid or stranded - finely stranded with core end processing - finely stranded without core end processing - finely stranded without core end processing - stranded for auxiliary contacts 2x (0.5 2.5 mm²) 2x (0.5 2.5 mm²) 2x (20 12) AWG number as coded connectable conductor cross section • for main contacts • for auxiliary contacts 20 12 Safety related data product function mirror contact acc. to IEC 60947-4-1 B10 value with high demand rate acc. to SN 31920 proportion of dangerous failures • with low demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 with high demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 T1 value for proof test interval or service life acc. to IEC 61508 protection class IP on the front acc. to IEC 60529 IP20 | | 0.5 42 |
| • finely stranded with core end processing • finely stranded without core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing • finely stranded with core end processing • finely stranded without core end processing • finely stranded without core end processing • for auxiliary contacts — solid or stranded — finely stranded with core end processing — finely stranded without core end processing — at AWG cables for auxiliary contacts AWG number as coded connectable conductor cross section • for main contacts • for auxiliary contacts • for auxiliary contacts 20 12 Safety related data product function mirror contact acc. to IEC 60947-4-1 proportion of dangerous failures • with low demand rate acc. to SN 31920 proportion of dangerous failures • with low demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 • with low demand rate acc. to SN 31920 protection class IP on the front acc. to IEC 60529 Protection class IP on the front acc. to IEC 60529 | | |
| • finely stranded without core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing • finely stranded without core end processing • finely stranded without core end processing • finely stranded without core end processing • for auxiliary contacts — solid or stranded — finely stranded with core end processing — finely stranded without core end processing — at AWG cables for auxiliary contacts AWG number as coded connectable conductor cross section • for main contacts • for auxiliary contacts • for auxiliary contacts 20 12 Safety related data product function mirror contact acc. to IEC 60947-4-1 B10 value with high demand rate acc. to SN 31920 • with low demand rate acc. to SN 31920 • with low demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 proportion of tangerous failures • with low demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 proportion of tangerous failures • with low demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 proportion of tangerous failures • with high demand rate acc. to SN 31920 proportion of tangerous failures • with high demand rate acc. to SN 31920 proportion of tangerous failures • with high demand rate acc. to SN 31920 proportion of tangerous failures • with high demand rate acc. to SN 31920 proportion of tangerous failures • with low demand rate acc. to SN 31920 proportion of tangerous failures vith low demand rate acc. t | | |
| connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing • finely stranded without 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 — finely stranded without core end processing — finely stranded without core end processing — at AWG cables for auxiliary contacts AWG number as coded connectable conductor cross section • for main contacts • for auxiliary contacts 20 12 Safety related data product function mirror contact acc. to IEC 60947-4-1 B10 value with high demand rate acc. to SN 31920 proportion of dangerous failures • with low demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 1000 FIT T1 value for proof test interval or service life acc. to IEC 60529 Protection class IP on the front acc. to IEC 60529 | | |
| contacts • solid or stranded • finely stranded with core end processing • finely stranded without core end processing • finely stranded without core end processing type of connectable conductor cross-sections • for auxiliary contacts — solid or stranded — finely stranded with core end processing — finely stranded without core end processing — finely stranded without core end processing — finely stranded without core end processing • at AWG cables for auxiliary contacts AWG number as coded connectable conductor cross section • for main contacts • for auxiliary contacts • for auxiliary contacts 20 12 Safety related data product function mirror contact acc. to IEC 60947-4-1 B10 value with high demand rate acc. to SN 31920 proportion of dangerous fallures • with low demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 a with high demand rate acc. to SN 31920 failure rate [FIT] with low demand rate acc. to SN 31920 protection class IP on the front acc, to IEC 60529 IP20 | | 0.5 2.5 mm² |
| solid or stranded finely stranded with core end processing finely stranded without core end processing finely stranded without core end processing for auxiliary contacts — solid or stranded — finely stranded with core end processing — finely stranded with core end processing — finely stranded with core end processing — finely stranded without core end processing — finely stranded without core end processing — finely stranded without core end processing — at AWG cables for auxiliary contacts AWG number as coded connectable conductor cross section • for main contacts • for auxiliary contacts 20 12 Safety related data product function mirror contact acc. to IEC 60947-4-1 B10 value with high demand rate acc. to SN 31920 proportion of dangerous failures • with low demand rate acc. to SN 31920 proportion of dangerous failures • with low demand rate acc. to SN 31920 a with high demand rate acc. to SN 31920 failure rate [FIT] with low demand rate acc. to SN 31920 protection class IP on the front acc. to IEC 60529 IP20 | | |
| finely stranded with core end processing finely stranded without 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 — finely stranded with core end processing — finely stranded without core end processing — finely stranded without core end processing — at AWG cables for auxiliary contacts AWG number as coded connectable conductor cross section — for main contacts — for auxiliary contacts 20 12 Safety related data product function mirror contact acc. to IEC 60947-4-1 B10 value with high demand rate acc. to SN 31920 proportion of dangerous failures — with low demand rate acc. to SN 31920 — with low demand rate acc. to SN 31920 T1 value for proof test interval or service life acc. to IEC 61508 protection class IP on the front acc. to IEC 60529 | | 0.5 4 mm² |
| • finely stranded without core end processing type of connectable conductor cross-sections • for auxiliary contacts | | |
| type of connectable conductor cross-sections • for auxiliary contacts — solid or stranded — finely stranded with core end processing — finely stranded without core end processing — at AWG cables for auxiliary contacts AWG number as coded connectable conductor cross section • for main contacts • for auxiliary contacts 20 12 Safety related data product function mirror contact acc. to IEC 60947-4-1 B10 value with high demand rate acc. to SN 31920 proportion of dangerous failures • with low demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 failure rate [FIT] with low demand rate acc. to SN 31920 T1 value for proof test interval or service life acc. to IEC 60529 protection class IP on the front acc. to IEC 60529 IP20 | | |
| • for auxiliary contacts — solid or stranded — finely stranded with core end processing — finely stranded without core end processing — finely stranded without core end processing — at AWG cables for auxiliary contacts AWG number as coded connectable conductor cross section • for main contacts • for auxiliary contacts 20 12 Safety related data product function mirror contact acc. to IEC 60947-4-1 B10 value with high demand rate acc. to SN 31920 proportion of dangerous failures • with low demand rate acc. to SN 31920 with high demand rate acc. to SN 31920 failure rate [FIT] with low demand rate acc. to SN 31920 T1 value for proof test interval or service life acc. to IEC 60529 protection class IP on the front acc. to IEC 60529 IZ (0.5 4 mm²) 2x (0.5 2.5 mm²) 2x (20 12) 2x (20 12) 2x (20 12) 100 12 20 12 20 12 20 12 Yes; with 3RH29 1 000 000 1 000 000 Proportion of dangerous failures 1 000 000 1 000 000 1 000 000 1 000 000 | , , , | 0.0 2.0 Hilli |
| - solid or stranded - finely stranded with core end processing - finely stranded without core end processing - finely stranded without core end processing - at AWG cables for auxiliary contacts AWG number as coded connectable conductor cross section • for main contacts • for auxiliary contacts 20 12 • for auxiliary contacts 20 12 Safety related data product function mirror contact acc. to IEC 60947-4-1 B10 value with high demand rate acc. to SN 31920 proportion of dangerous failures • with low demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 failure rate [FIT] with low demand rate acc. to SN 31920 T1 value for proof test interval or service life acc. to IEC 60529 protection class IP on the front acc. to IEC 60529 IP20 | | |
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| at AWG cables for auxiliary contacts AWG number as coded connectable conductor cross section for main contacts for auxiliary contacts for auxiliary contacts product function mirror contact acc. to IEC 60947-4-1 B10 value with high demand rate acc. to SN 31920 proportion of dangerous failures with low demand rate acc. to SN 31920 with high demand rate acc. to SN 31920 failure rate [FIT] with low demand rate acc. to SN 31920 T1 value for proof test interval or service life acc. to IEC 61508 protection class IP on the front acc. to IEC 60529 IP20 | | |
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| e for main contacts e for auxiliary contacts 20 12 Safety related data product function mirror contact acc. to IEC 60947-4-1 B10 value with high demand rate acc. to SN 31920 proportion of dangerous failures e with low demand rate acc. to SN 31920 e with high demand rate acc. to SN 31920 failure rate [FIT] with low demand rate acc. to SN 31920 T1 value for proof test interval or service life acc. to IEC 60529 protection class IP on the front acc. to IEC 60529 IP20 | | ZX (ZU 1Z) |
| for main contacts for auxiliary contacts 20 12 Safety related data product function mirror contact acc. to IEC 60947-4-1 B10 value with high demand rate acc. to SN 31920 with low demand rate acc. to SN 31920 with high demand rate acc. to SN 31920 with high demand rate acc. to SN 31920 with high demand rate acc. to SN 31920 failure rate [FIT] with low demand rate acc. to SN 31920 T1 value for proof test interval or service life acc. to IEC 61508 protection class IP on the front acc. to IEC 60529 | | |
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| product function mirror contact acc. to IEC 60947-4-1 B10 value with high demand rate acc. to SN 31920 proportion of dangerous failures • with low demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 failure rate [FIT] with low demand rate acc. to SN 31920 T1 value for proof test interval or service life acc. to IEC 61508 protection class IP on the front acc. to IEC 60529 Pes; with 3RH29 1 000 000 Yes; with 3RH29 1 000 000 1 000 000 40 % 73 % Failure rate [FIT] with low demand rate acc. to SN 31920 100 FIT 1 value for proof test interval or service life acc. to IEC 60529 | | |
| product function mirror contact acc. to IEC 60947-4-1 B10 value with high demand rate acc. to SN 31920 proportion of dangerous failures • with low demand rate acc. to SN 31920 • with high demand rate acc. to SN 31920 failure rate [FIT] with low demand rate acc. to SN 31920 T1 value for proof test interval or service life acc. to IEC 61508 protection class IP on the front acc. to IEC 60529 Yes; with 3RH29 1 000 000 1 000 000 40 % 100 FIT 20 y | · | |
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| proportion of dangerous failures • with low demand rate acc. to SN 31920 40 % • with high demand rate acc. to SN 31920 73 % 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 protection class IP on the front acc. to IEC 60529 IP20 | • | |
| with low demand rate acc. to SN 31920 with high demand rate acc. to SN 31920 failure rate [FIT] with low demand rate acc. to SN 31920 T1 value for proof test interval or service life acc. to IEC 61508 protection class IP on the front acc. to IEC 60529 IP20 | - | 1 000 000 |
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| T1 value for proof test interval or service life acc. to IEC 61508 protection class IP on the front acc. to IEC 60529 IP20 | · · · | |
| protection class IP on the front acc. to IEC 60529 IP20 | | |
| | | 20 y |
| touch protection on the front acc. to IEC 60529 finger-safe, for vertical contact from the front | protection class IP on the front acc. to IEC 60529 | IP20 |
| • | touch protection on the front acc. to IEC 60529 | finger-safe, for vertical contact from the front |

suitability for use

safety-related switching OFF

Yes

Certificates/ approvals

General Product Approval















| Functional |
|------------------|
| Safety/Safety of |
| Machinery |

Declaration of Conformity

Test Certificates

Type Examination Certificate



UK Declaration of Conformity

Type Test Certificates/Test Report

Special Test Certific-<u>ate</u>

Miscellaneous

Marine / Shipping













Marine / Shipping

other



Confirmation



Further information

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=3RT2018-2BB41

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2018-2BB41

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2018-2BB4

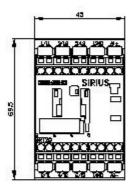
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

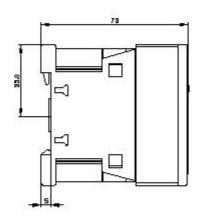
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2018-2BB41&lang=en

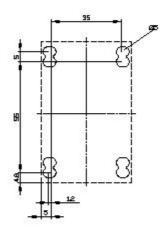
Characteristic: Tripping characteristics, I2t, Let-through current

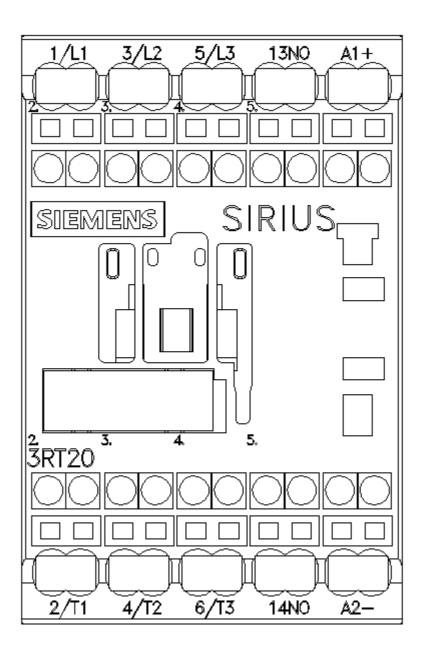
https://support.industry.siemens.com/cs/ww/en/ps/3RT2018-2BB41/char

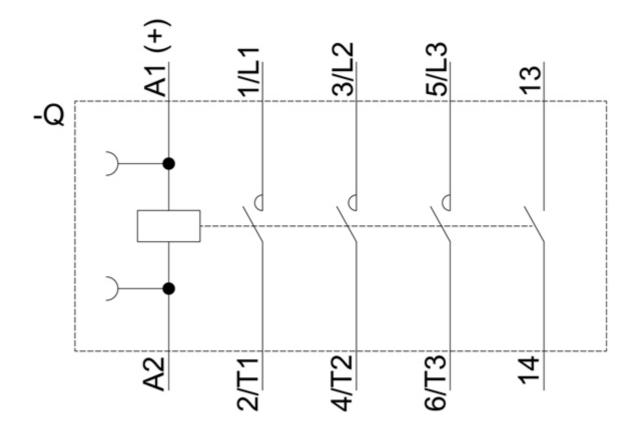
Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2018-2BB41&objecttype=14&gridview=view1











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