SIEMENS

Data sheet 3RT2016-4AP62



power contactor, AC-3e/AC-3, 9 A, 4 kW / 400 V, 3-pole, 220 V AC, 50 Hz / 240 V, 60 Hz, auxiliary contacts: 1 NC, ring cable lug connection, size: S00

| 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 | 0.9 W |
| at AC in hot operating state per pole | 0.3 W |
| without load current share typical | 1.2 W |
| type of calculation of power loss depending on pole | quadratic |
| insulation voltage | |
| 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 | 6,7g / 5 ms, 4,2g / 10 ms |
| shock resistance with sine pulse | |
| • at AC | 10,5g / 5 ms, 6,6g / 10 ms |
| mechanical service life (operating 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 according to IEC 81346-2 | Q |
| Substance Prohibitance (Date) | |
| Weight | 0.225 kg |
| 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 % |

| Environmental footprint | |
|--|----------------|
| Environmental Product Declaration(EPD) | Yes |
| Global Warming Potential [CO2 eq] total | 39.6 kg |
| Global Warming Potential [CO2 eq] during manufacturing | 1.18 kg |
| Global Warming Potential [CO2 eq] during managed mining Global Warming Potential [CO2 eq] during operation | 38.5 kg |
| Global Warming Potential [CO2 eq] after end of life | -0.155 kg |
| Main circuit | 0.100 Ng |
| 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 | 22 A |
| at AC-1 up to 690 V at ambient temperature 40 °C rated | 22 A |
| value | |
| — up to 690 V at ambient temperature 60 °C rated value | 20 A |
| • at AC-3 | 0.0 |
| — at 400 V rated value | 9 A |
| — at 500 V rated value— at 690 V rated value | 7.7 A 6.7 A |
| at AC-3e | U.1 A |
| — at 400 V rated value | 9 A |
| — at 500 V rated value | 7.7 A |
| — at 690 V rated value | 6.7 A |
| at AC-4 at 400 V rated value | 8.5 A |
| • at AC-5a up to 690 V rated value | 19.4 A |
| • at AC-5b up to 400 V rated value | 7.4 A |
| • at AC-6a | |
| — up to 230 V for current peak value n=20 rated value | 5.3 A |
| — up to 400 V for current peak value n=20 rated value | 5.3 A |
| — up to 500 V for current peak value n=20 rated value | 5.3 A |
| — up to 690 V for current peak value n=20 rated value | 5 A |
| • at AC-6a | |
| — up to 230 V for current peak value n=30 rated value | 3.5 A |
| — up to 400 V for current peak value n=30 rated value | 3.5 A |
| — up to 500 V for current peak value n=30 rated value | 3.6 A |
| — up to 690 V for current peak value n=30 rated value | 3.3 A |
| minimum cross-section in main circuit at maximum AC-1 rated value | 4 mm² |
| operational current for approx. 200000 operating cycles at AC-4 | |
| at 400 V rated value | 4.1 A |
| at 690 V rated value | 3.3 A |
| operational current | |
| at 1 current path at DC-1 at 24 V roted value. | 20.4 |
| — at 24 V rated value | 20 A |
| — at 60 V rated value — at 110 V rated value | 20 A 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 60 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 naths in series at DC-1 | |
|--|---|
| with 3 current paths in series at DC-1 at 24 V rated value | 20 A |
| | 20 A 20 A |
| — at 60 V rated value | 20 A |
| — at 110 V rated value | |
| — at 220 V rated value | 20 A |
| — at 440 V rated value | 1.3 A |
| — at 600 V rated value | 1A |
| at 1 current path at DC-3 at DC-5 | 00.4 |
| — at 24 V rated value | 20 A |
| — at 60 V rated value | 0.5 A |
| — at 110 V rated value | 0.15 A |
| with 2 current paths in series at DC-3 at DC-5 | 00 A |
| — at 24 V rated value | 20 A |
| — at 60 V rated value | 5 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 60 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 | |
| at AC-2 at 400 V rated value | 4 kW |
| • at AC-3 | |
| — at 230 V rated value | 2.2 kW |
| — at 400 V rated value | 4 kW |
| — at 500 V rated value | 4 kW |
| — at 690 V rated value | 5.5 kW |
| • at AC-3e | |
| — at 230 V rated value | 2.2 kW |
| — at 400 V rated value | 4 kW |
| — at 500 V rated value | 4 kW |
| — at 690 V rated value | 5.5 kW |
| operating power for approx. 200000 operating cycles at AC- | |
| • at 400 V rated value | 2 kW |
| | |
| at 690 V rated value | 2.5 kW |
| | 2.5 kW |
| • at 690 V rated value | 2.5 kW 2 kVA |
| at 690 V rated value operating apparent power at AC-6a | |
| at 690 V rated value operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value | 2 kVA |
| at 690 V rated value operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value | 2 kVA 3.6 kVA |
| at 690 V rated value operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value | 2 kVA 3.6 kVA 4.6 kVA |
| at 690 V rated value operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value | 2 kVA 3.6 kVA 4.6 kVA |
| at 690 V rated value operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value operating apparent power at AC-6a | 2 kVA 3.6 kVA 4.6 kVA 5.9 kVA |
| at 690 V rated value operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value operating apparent power at AC-6a up to 230 V for current peak value n=30 rated value | 2 kVA 3.6 kVA 4.6 kVA 5.9 kVA |
| at 690 V rated value operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value operating apparent power at AC-6a up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value | 2 kVA 3.6 kVA 4.6 kVA 5.9 kVA 1.3 kVA 2.4 kVA |
| at 690 V rated value operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value operating apparent power at AC-6a up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value | 2 kVA 3.6 kVA 4.6 kVA 5.9 kVA 1.3 kVA 2.4 kVA |
| at 690 V rated value operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value operating apparent power at AC-6a up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to | 2 kVA 3.6 kVA 4.6 kVA 5.9 kVA 1.3 kVA 2.4 kVA |
| at 690 V rated value operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value operating apparent power at AC-6a up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to 40 °C | 2 kVA 3.6 kVA 4.6 kVA 5.9 kVA 1.3 kVA 2.4 kVA 3.1 kVA |
| at 690 V rated value operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value operating apparent power at AC-6a up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value limited to 1 s switching at zero current maximum | 2 kVA 3.6 kVA 4.6 kVA 5.9 kVA 1.3 kVA 2.4 kVA 3.1 kVA 4 kVA |
| at 690 V rated value operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value operating apparent power at AC-6a up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to 40 °C Ilimited to 1 s switching at zero current maximum Ilimited to 5 s switching at zero current maximum | 2 kVA 3.6 kVA 4.6 kVA 5.9 kVA 1.3 kVA 2.4 kVA 3.1 kVA 4 kVA 155 A; Use minimum cross-section acc. to AC-1 rated value 111 A; Use minimum cross-section acc. to AC-1 rated value |
| at 690 V rated value operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value operating apparent power at AC-6a up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to 40 °C limited to 1 s switching at zero current maximum limited to 10 s switching at zero current maximum | 2 kVA 3.6 kVA 4.6 kVA 5.9 kVA 1.3 kVA 2.4 kVA 3.1 kVA 4 kVA 155 A; Use minimum cross-section acc. to AC-1 rated value 111 A; Use minimum cross-section acc. to AC-1 rated value 86 A; Use minimum cross-section acc. to AC-1 rated value |
| at 690 V rated value operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value operating apparent power at AC-6a up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to 40 °C limited to 1 s switching at zero current maximum limited to 30 s switching at zero current maximum limited to 30 s switching at zero current maximum | 2 kVA 3.6 kVA 4.6 kVA 5.9 kVA 1.3 kVA 2.4 kVA 3.1 kVA 4 kVA 155 A; Use minimum cross-section acc. to AC-1 rated value 111 A; Use minimum cross-section acc. to AC-1 rated value 86 A; Use minimum cross-section acc. to AC-1 rated value 66 A; Use minimum cross-section acc. to AC-1 rated value |
| at 690 V rated value operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value operating apparent power at AC-6a up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value limited to 1s switching at zero current maximum limited to 1s switching at zero current maximum limited to 30 s switching at zero current maximum limited to 60 s switching at zero current maximum | 2 kVA 3.6 kVA 4.6 kVA 5.9 kVA 1.3 kVA 2.4 kVA 3.1 kVA 4 kVA 155 A; Use minimum cross-section acc. to AC-1 rated value 111 A; Use minimum cross-section acc. to AC-1 rated value 86 A; Use minimum cross-section acc. to AC-1 rated value 66 A; Use minimum cross-section acc. to AC-1 rated value |
| at 690 V rated value operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value limited to 1 s switching at zero current maximum limited to 1 s switching at zero current maximum limited to 30 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum | 2 kVA 3.6 kVA 4.6 kVA 5.9 kVA 1.3 kVA 2.4 kVA 3.1 kVA 4 kVA 155 A; Use minimum cross-section acc. to AC-1 rated value 111 A; Use minimum cross-section acc. to AC-1 rated value 86 A; Use minimum cross-section acc. to AC-1 rated value 66 A; Use minimum cross-section acc. to AC-1 rated value 55 A; Use minimum cross-section acc. to AC-1 rated value |
| at 690 V rated value operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value up to 230 V for current peak value n=30 rated value up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value limited to 1 s switching at zero current maximum limited to 1 s switching at zero current maximum limited to 10 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum olimited to 60 s switching at zero current maximum | 2 kVA 3.6 kVA 4.6 kVA 5.9 kVA 1.3 kVA 2.4 kVA 3.1 kVA 4 kVA 155 A; Use minimum cross-section acc. to AC-1 rated value 111 A; Use minimum cross-section acc. to AC-1 rated value 86 A; Use minimum cross-section acc. to AC-1 rated value 66 A; Use minimum cross-section acc. to AC-1 rated value 55 A; Use minimum cross-section acc. to AC-1 rated value |
| at 690 V rated value operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value operating apparent power at AC-6a up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to 40 °C ilimited to 1 s switching at zero current maximum limited to 10 s switching at zero current maximum limited to 30 s switching at zero current maximum limited to 60 s switching at zero current maximum ilimited to 60 s switching at zero current maximum ro-load switching frequency at AC operating frequency | 2 kVA 3.6 kVA 4.6 kVA 5.9 kVA 1.3 kVA 2.4 kVA 3.1 kVA 4 kVA 155 A; Use minimum cross-section acc. to AC-1 rated value 111 A; Use minimum cross-section acc. to AC-1 rated value 86 A; Use minimum cross-section acc. to AC-1 rated value 66 A; Use minimum cross-section acc. to AC-1 rated value 55 A; Use minimum cross-section acc. to AC-1 rated value 10 000 1/h |

| at AC 2a maying | 750 4 % |
|---|---|
| • at AC-3e maximum | 750 1/h |
| • at AC-4 maximum | 250 1/h |
| Control circuit/ Control | |
| type of voltage of the control supply voltage | AC |
| control supply voltage at AC | |
| at 50 Hz rated value | 220 V |
| at 60 Hz rated value | 240 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 | 0.0 1.1 |
| • at 50 Hz | 26.4 VA |
| • at 60 Hz | 26.4 VA |
| inductive power factor with closing power of the coil | 20.4 VA |
| • at 50 Hz | 0.81 |
| • at 60 Hz | 0.81 |
| apparent holding power of magnet coil at AC | 0.01 |
| at 50 Hz | 4.4 VA |
| • at 50 Hz | 4.4 VA 4.4 VA |
| | 7. T.T. |
| inductive power factor with the holding power of the coil | 0.24 |
| • at 50 Hz | 0.24 |
| • at 60 Hz | 0.24 |
| closing delay | 0.05 |
| • at AC | 9 35 ms |
| opening delay | |
| • at AC | 4 15 ms |
| arcing time | 10 15 ms |
| control version of the switch operating mechanism | Standard A1 - A2 |
| Auxiliary circuit | |
| number of NC contacts for auxiliary contacts instantaneous contact | 1 |
| 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 40 V rated value at 60 V rated value | 2 A |
| at 110 V rated value | 1A |
| at 115 V rated value at 125 V rated value | 0.9 A |
| at 220 V rated value | 0.3 A |
| at 600 V rated value | 0.3 A 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 | 70.4 |
| at 480 V rated value | 7.6 A |
| at 600 V rated value | 9 A |
| yielded mechanical performance [hp] | |
| for single-phase AC motor | |

| — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position +/-180° rot backward fastening method screw and height 58 mm width 45 mm depth 73 mm required spacing • with side-by-side mounting — forwards — upwards — downwards — at the side • for grounded parts — forwards — at the side — downwards — at the side — for live parts — forwards — at the side — downwards — at the side — downwards — at the side — downwards — at the side — for main current circuit — for auxiliary and control circuit — for auxiliary and control circuit — for auxiliary and control circuit — at contactor for auxiliary contacts — of magnet coil Ring cable — Ring cable | 00V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) 00V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA) 00 V, 1 kA) ution possible on vertical mounting surface; can be tilted forward and y +/- 22.5° on vertical mounting surface snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 |
|--|--|
| • for 3-phase AC motor — at 200/208 V rated value — at 220/230 V rated value — at 480/480 V rated value — at 575/600 V rated value — at 696 rate value — at 697 rate | 20V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) 20V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA) 00 V, 1 kA) attion possible on vertical mounting surface; can be tilted forward and y +/- 22.5° on vertical mounting surface |
| - at 200/208 V rated value 2 hp - at 220/230 V rated value 3 hp - at 220/230 V rated value 5 hp - at 575/600 V rated value 7.5 hp - at 575/600 V rated value 7.5 hp contact rating of auxiliary contacts according to UL A600 / Q6/25 Mort-circuit protection design of the fuse link • for short-circuit protection of the main circuit — with type of coordination 1 required gG: 20A (6 with type of assignment 2 required gG: 20A (6 with type of assignment 2 required gG: 20A (6 with type of assignment 2 required gG: 10 A (8 with stallation/ mounting/ dimensions mounting position +/-180° rot backward I fastening method screw and height 58 mm width 45 mm depth 73 mm required spacing • with side-by-side mounting 10 mm 10 | 20V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) 20V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA) 00 V, 1 kA) attion possible on vertical mounting surface; can be tilted forward and y +/- 22.5° on vertical mounting surface |
| — at 220/230 V rated value — at 460/480 V rated value — 5 hp — at 575/600 V rated value — 7.5 hp contact rating of auxiliary contacts according to UL A600 / Q6/25 Short-circuit protection design of the fuse link | 20V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) 20V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA) 00 V, 1 kA) attion possible on vertical mounting surface; can be tilted forward and y +/- 22.5° on vertical mounting surface |
| - at 460/480 V rated value 7.5 hp - at 575/600 V rated value 7.5 hp contact rating of auxiliary contacts according to UL A600 / Q60 Short-circuit protection design of the fuse link • for short-circuit protection of the main circuit — with type of coordination 1 required 9G: 20A (6) • for short-circuit protection of the auxiliary switch required 9G: 10 A (6) Installation/ mounting/ dimensions mounting position +/-180° rot backward fastening method screw and height 58 mm 45 mm depth 73 mm required spacing • with side-by-side mounting — forwards 10 mm — downwards 10 mm — at the side 0 mm — orwards 10 mm — orwards 10 mm — orwards 10 mm — orwards 10 mm • for grounded parts — forwards 10 mm — at the side 6 mm — upwards 10 mm • for live parts — forwards 10 mm • for auxiliary and control circuit ring termin • at contactor for auxiliary contacts • of magnet coil | 20V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) 20V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA) 00 V, 1 kA) attion possible on vertical mounting surface; can be tilted forward and y +/- 22.5° on vertical mounting surface |
| - at 575/600 V rated value 7.5 hp contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link • for short-circuit protection of the main circuit — with type of coordination 1 required gG: 35A (6 gG: 20A (6 gG | 20V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) 20V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA) 00 V, 1 kA) attion possible on vertical mounting surface; can be tilted forward and y +/- 22.5° on vertical mounting surface |
| contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link • for short-circuit protection of the main circuit — with type of coordination 1 required — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position #/-180° rot backward in the sackward in the strength of the series and height width depth 73 mm required spacing • with side-by-side mounting — forwards — upwards — downwards — at the side • for grounded parts — for grounded parts — at the side — downwards — at the side — for raury and control circuit — for auxiliary and control circuit — for auxiliary and control circuit — at contactor for auxiliary contacts — of magnet coil Ring cable Ring cable Ring cable Ring cable Ring cable | 20V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) 20V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA) 00 V, 1 kA) attion possible on vertical mounting surface; can be tilted forward and y +/- 22.5° on vertical mounting surface |
| Short-circuit protection design of the fuse link | 20V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) 20V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA) 00 V, 1 kA) attion possible on vertical mounting surface; can be tilted forward and y +/- 22.5° on vertical mounting surface |
| design of the fuse link • for short-circuit protection of the main circuit — with type of coordination 1 required — with type of assignment 2 required 9G: 20A (6 9 for short-circuit protection of the auxiliary switch required 9G: 10 A (8 Installation/ mounting/ dimensions mounting position fastening method height width 45 mm depth 73 mm required spacing • with side-by-side mounting — forwards — upwards — downwards — at the side • for grounded parts — rorwards — upwards — at the side — downwards — at the side — for live parts — forwards — upwards — at the side — downwards — at the side — for main current circuit — for main current circuit — for auxiliary and control circuit — it at contactor for auxiliary contacts — of magnet coil Ring cable Ring cable Ring cable Ring cable Ring cable Ring cable | 20V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA) 00 V, 1 kA) ution possible on vertical mounting surface; can be tilted forward and y +/- 22.5° on vertical mounting surface |
| • for short-circuit protection of the main circuit — with type of coordination 1 required — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position #/-180° rot backward I fastening method height ## serve and height ## serve and height ## serve and height ## serve and ## serve and height ## serve and ## serve | 20V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA) 00 V, 1 kA) ution possible on vertical mounting surface; can be tilted forward and y +/- 22.5° on vertical mounting surface |
| — with type of coordination 1 required — with type of assignment 2 required | 20V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA) 00 V, 1 kA) ution possible on vertical mounting surface; can be tilted forward and y +/- 22.5° on vertical mounting surface |
| — with type of assignment 2 required | 20V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA) 00 V, 1 kA) ution possible on vertical mounting surface; can be tilted forward and y +/- 22.5° on vertical mounting surface |
| • for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position | 00 V, 1 kA) Ition possible on vertical mounting surface; can be tilted forward and y +/- 22.5° on vertical mounting surface |
| Installation/ mounting/ dimensions mounting position +/-180° rot backward I fastening method screw and height 58 mm width 45 mm depth 73 mm required spacing • with side-by-side mounting — forwards — upwards — downwards — at the side • for grounded parts — forwards — upwards — at the side • for grounded parts — forwards — at the side 6 mm • for live parts — forwards — upwards — to mm • for live parts — forwards — to mm • for live parts — forwards — the side Connections/ Terminals type of electrical connection • for main current circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil Ring cable • of magnet coil | ation possible on vertical mounting surface; can be tilted forward and y +/- 22.5° on vertical mounting surface |
| mounting position +/-180° rot backward I fastening method screw and height 58 mm width 45 mm depth 73 mm required spacing • with side-by-side mounting - forwards 10 mm - upwards 10 mm - downwards 10 mm - at the side 0 mm - forwards 10 mm - at the side 0 mm - forwards 10 mm - at the side 0 mm - for live parts 10 mm - at the side 0 mm - forwards 10 mm - for live parts 10 mm - at the side 0 mm - for live parts 10 mm - at the side 0 mm - at the side | y +/- 22.5° on vertical mounting surface |
| fastening method height width depth required spacing with side-by-side mounting - forwards - upwards - downwards - at the side - forwards - upwards - ifor grounded parts - forwards - upwards - for grounded parts - forwards - upwards - the side - forwards - upwards - at the side - downwards - at the side - downwards 10 mm - at the side - downwards 10 mm - at the side - downwards 10 mm - to mm | y +/- 22.5° on vertical mounting surface |
| fastening method height width 45 mm depth 73 mm required spacing • with side-by-side mounting — forwards — upwards — downwards — at the side • for grounded parts — forwards — upwards — 10 mm • for grounded parts — forwards — 10 mm • for for grounded parts — forwards — upwards — at the side — downwards — 10 mm • for live parts — forwards — upwards — upwards — to mm • for live parts — forwards — upwards — at the side — downwards — to mm • for live parts — forwards — upwards — to mm Connections/ Terminals type of electrical connection • for main current circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil Ring cable Ring cable • Ring cable | , |
| height width depth required spacing with side-by-side mounting — forwards — upwards — downwards — at the side for grounded parts — forwards — upwards — the side for grounded parts — forwards — at the side — downwards — to mm for live parts — forwards — upwards — upwards — upwards — to mm for live parts — forwards — upwards — to mm Connections/ Terminals type of electrical connection for auxiliary and control circuit — for auxiliary and control circuit at contactor for auxiliary contacts — of magnet coil Ring cable Ring cable Ring cable | map-on mounting onto 35 min bin rail according to bin En 007 15 |
| width 45 mm depth 73 mm required spacing 10 mm • with side-by-side mounting 10 mm — forwards 10 mm — upwards 10 mm — at the side 0 mm • for grounded parts 10 mm — upwards 10 mm — at the side 6 mm — downwards 10 mm • for live parts 10 mm — upwards 10 mm — downwards 10 mm — at the side 6 mm Connections/ Terminals type of electrical connection 6 mm • for main current circuit Ring cable • for auxiliary and control circuit ring termin • at contactor for auxiliary contacts Ring cable • of magnet coil Ring cable | |
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| with side-by-side mounting — forwards — upwards — downwards — at the side • for grounded parts — forwards — upwards — upwards — upwards — upwards — at the side — downwards — at the side — downwards • for live parts — forwards — upwards — upwards — upwards — downwards — upwards — upwards — at the side — downwards — upwards — downwards — upwards — downwards — at the side Connections/ Terminals type of electrical connection • for main current circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil Ring cable Ring cable | |
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| - downwards - at the side • for grounded parts - forwards - upwards - upwards - at the side - downwards • for live parts - forwards - upwards - upwards - to mm • for live parts - forwards - upwards - upwards - downwards - downwards - downwards - at the side - at the side Connections/ Terminals type of electrical connection • for main current circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil 10 mm - 10 mm | |
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| - downwards - at the side 6 mm Connections/ Terminals type of electrical connection • for main current circuit Ring cable • for auxiliary and control circuit ring termin • at contactor for auxiliary contacts • of magnet coil Ring cable | |
| — at the side 6 mm Connections/ Terminals type of electrical connection • for main current circuit Ring cable • for auxiliary and control circuit ring termin • at contactor for auxiliary contacts • of magnet coil Ring cable | |
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| of magnet coil Ring cable | lug connection |
| - | lug connection |
| Safety related data | |
| product function | |
| mirror contact according to IEC 60947-4-1 Yes | |
| positively driven operation according to IEC 60947-5-1 No | |
| suitable for safety function Yes | |
| suitability for use safety-related switching OFF Yes | |
| service life maximum 20 a | |
| test wear-related service life necessary Yes | |
| proportion of dangerous failures | |
| with low demand rate according to SN 31920 40 % | |
| with low demand rate according to SN 31920 with high demand rate according to SN 31920 73 % | |
| 3 | |
| 3 | |
| failure rate [FIT] with low demand rate according to SN 100 FIT 31920 | |
| ISO 13849 | |
| device type according to ISO 13849-1 | |
| overdimensioning according to ISO 13849-2 necessary Yes | |
| IEC 61508 | |

Type A safety device type according to IEC 61508-2 **Electrical Safety** protection class IP on the front according to IEC 60529 IP00

Approvals Certificates

General Product Approval





Confirmation





<u>KC</u>

General Product Approval

EMV

Functional Saftey

Test Certificates

Marine / Shipping





Type Examination Certificate

Type Test Certificates/Test Report

Special Test Certificate



Marine / Shipping











Miscellaneous

other

other

Railway

Environment

Confirmation

Special Test Certificate



Environmental Confirmations

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=3RT2016-4AP62

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2016-4AP62

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2016-4AP6

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

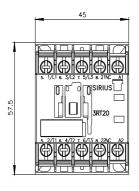
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2016-4AP62&lang=en

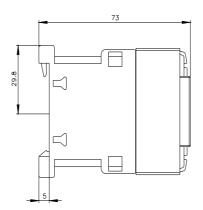
Characteristic: Tripping characteristics, I2t, Let-through current

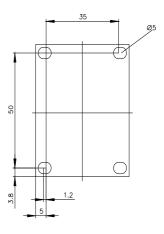
https://support.industry.siemens.com/cs/ww/en/ps/3RT2016-4AP62/char

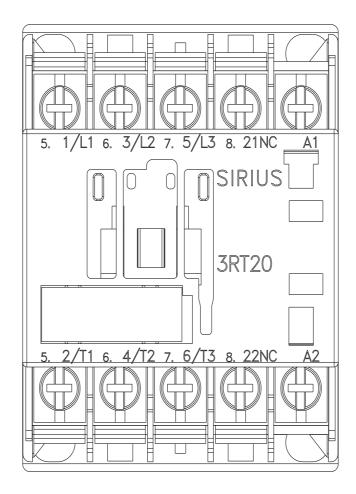
Further characteristics (e.g. electrical endurance, switching frequency)

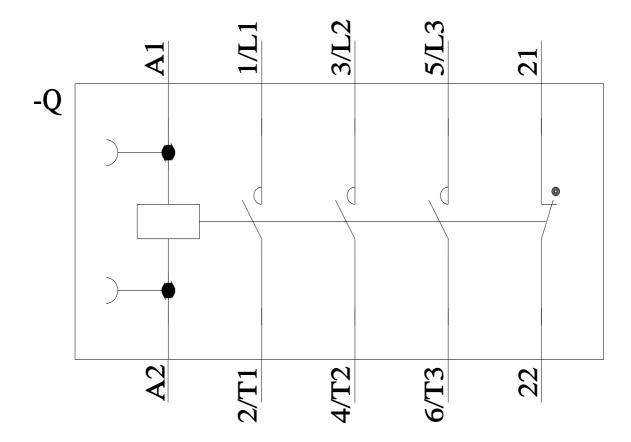
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2016-4AP62&objecttype=14&gridview=view1











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