SIEMENS

Data sheet

3RT2027-2KB40



power contactor, AC-3 32 A, 15 kW / 400 V 1 NO + 1 NC, 24 V DC with integrated varistor 3-pole, size S0 spring-type terminal suitable for PLC outputs not expandable with auxiliary switch

| product brand name | SIRIUS | | |
|---|--------------------------|--|--|
| product designation | Coupling contactor | | |
| product type designation | 3RT2 | | |
| General technical data | | | |
| size of contactor | SO | | |
| product extension | | | |
| function module for communication | No | | |
| auxiliary switch | No | | |
| power loss [W] for rated value of the current | | | |
| at AC in hot operating state | 6.3 W | | |
| at AC in hot operating state per pole | 2.3 W | | |
| without load current share typical | 4.5 W | | |
| 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 safe isolation between coil and main contacts according to EN 60947-1 | 400 V | | |
| shock resistance at rectangular impulse | | | |
| • at DC | 10g / 5 ms, 7,5g / 10 ms | | |
| shock resistance with sine pulse | | | |
| • at DC | 15g / 5 ms, 10g / 10 ms | | |
| mechanical service life (switching 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) | 10/01/2009 | | |
| 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 % | | |

| number of 0 contacts for main control circuit 3 operating voltage 3 • at AC-3 rated value maximum 680 V • at AC-1 rated value 50 A - up to 680 V at ambient temperature 40 °C 50 A rated value 50 A - up to 680 V at ambient temperature 40 °C 70 A - at 400 V rated value 32 A - at 400 V rated value 30 A - at 400 V rated value 30 A - at 400 V rated value 40 A - at 40 | Main circuit | |
|--|--|--------|
| number of NO contacts for main contacts 3 operating volue maximum 680 v • at AC-3 rated value maximum 680 v • at AC-3 rated value maximum 680 v • at AC-3 rated value maximum 680 v • at AC-1 at 400 V at ambient temperature 40 °C 50 A • at AC-1 at 400 V at ambient temperature 40 °C 50 A • at AC-1 at 400 V rated value 32 A - at 600 V rated value 30 A - at 600 V rated value 30 A - at 600 V for current peak value me20 rated 30 A - aub 60 V for current | | 3 |
| • # AC-3 raied value maximum600 Voperational current600 V• # AC-1 at 400 V at ambient temperature 40 °C50 A• at AC-1 at 400 V at ambient temperature 40 °C50 A• at AC-150 A• at AC-1400 V at ambient temperature 40 °C• at AC-150 A• at AC-250 A• at AC-250 A• at AC-320 A• at AC-321 A• at AC-3 at ADO V rated value22 A• at AC-4 at ADO V rated value23 A• at AC-5 at D 60 O V rated value23 A• at AC-5 at D 60 O V rated value20 A• at AC-5 at D 60 O V rated value21 A• at AC-5 at D 60 O V rated value21 A• at AC-5 at D 60 O V rated value21 A• at AC-5 at D 60 O V rated value21 A• at AC-5 at D 60 O V rated value21 A• at AC-5 at D 60 O V rated value21 A• at AC-5 at D 60 O V rated value21 A• at AC-5 at D 60 O V rated value20 A• at AC-5 at D 70 O V rated value20 A• at AC-5 at D 70 O V rated | number of NO contacts for main contacts | 3 |
| • # AC-3c rated value maximum680 Voperational current50 Arated value50 A• at AC-1•- up to 680 V at ambient temperature 40 °C50 Arated value50 A- up to 680 V at ambient temperature 60 °C42 A• at AC-3•- at 400 V rated value32 A• at AC-332 A- at 600 V rated value32 A- at 600 V rated value30 A- at 600 V rated value44 A- at AC-3e- at 600 V rated value- up to 500 V for current peak value n=20 rated70 A- up to 600 V for current peak value n=20 rated70 A- up to 600 V for current peak value n=30 rated50 A- up to 600 V for current peak value n=30 rated50 A- up to 600 V for current peak value n=30 rated50 A- up to 600 V for current peak value n=30 rated10 rm²- up to 600 V for current peak value n=30 rated10 rm²- at 600 V rated value10 A- up to 600 | operating voltage | |
| operational current operational current ai AC-14 400 via ambient temperature 40 °C 50 A | at AC-3 rated value maximum | 690 V |
| • at AC-1 at 400 v1 ambient temperature 40 °C 50 A • up to 569 v1 at ambient temperature 60 °C 50 A • up to 569 v1 at ambient temperature 60 °C 42 A • up to 569 v1 at ambient temperature 60 °C 42 A • up to 509 v1 at ambient temperature 60 °C 42 A • up to 500 v1 at ambient temperature 60 °C 42 A • up to 500 v1 at ambient temperature 60 °C 42 A • up to 500 v1 at at value 32 A • up to 500 v1 at at value 32 A • up to 700 v1 at at value 32 A • up to 700 v1 at at value 32 A • up to 700 v1 at at value 32 A • up to 700 v1 at at value 32 A • up to 700 v1 at at value 22 A • up to 700 v1 at at value 22 A • up to 700 v1 at at value 22 A • up to 700 v1 at at value 25 A • up to 700 v1 at at value 30.8 A • up to 700 v1 for current peak value n=20 rated 70.8 A • up to 600 v1 for current peak value n=30 rated 20.5 A • up to 700 v1 for current peak value n=30 rated 18 A • up to 700 v1 for current peak value n=30 ra | at AC-3e rated value maximum | 690 V |
| retar value i al AC-1 | operational current | |
| ei AC-1 up to 800 V at ambient temperature 40 °C ried Vaule - up to 800 V at ambient temperature 60 °C ried Vaule ei AC-3 - ei 400 V rated value 2 A - ei 500 V rated value 21 A - ei 400 V rated value 22 A - ei 400 V rated value 22 A - ei 600 V rated value 22 A - ei 70 Current pack value n=20 rated - up fo 600 V for current pack value n=20 rated - up fo 600 V for current pack value n=20 rated - up fo 600 V for current pack value n=20 rated - up fo 600 V for current pack value n=20 rated - up fo 600 V for current pack value n=30 rated - up fo 600 V for current pack value n=30 rated - up fo 600 V for current pack value n=30 rated - up fo 600 V for current pack value n=30 rated - up fo 600 V for current pack value n=30 rated - up fo 600 V for current pack value n=30 rated - up fo 600 V for current pack value n=30 rated - up fo 700 V for current pack value n=30 rated - ei 600 V fact value - ei 600 V fact value - ei 62 V rated value - ei 62 V rated | | 50 A |
| | | |
| | | |
| | | 50 A |
| raide value in the construction of the constru | | 42 A |
| | | |
| | • at AC-3 | |
| | — at 400 V rated value | 32 A |
| | — at 500 V rated value | 32 A |
| | — at 690 V rated value | 21 A |
| - at 500 V rated value32 Å- at 690 V rated value21 Å- at 690 V rated value22 Å- at 44 00 V rated value22 Å- at AC-5a up to 690 V rated value24 Å- at AC-5a up to 100 V for current peak value n=20 rated30.8 Å- up to 100 V for current peak value n=20 rated30.8 Å- up to 500 V for current peak value n=20 rated30.8 Å- up to 500 V for current peak value n=20 rated21 Å- up to 500 V for current peak value n=20 rated21 Å- up to 500 V for current peak value n=20 rated20.5 Å- up to 500 V for current peak value n=30 rated20.5 Å- up to 500 V for current peak value n=30 rated20.5 Å- up to 500 V for current peak value n=30 rated18 Å- up to 500 V for current peak value n=30 rated18 Å- up to 600 V for current peak value n=30 rated12 Å- at 400 V rated value12 Å- at 400 V rated value20.5 Å- at 400 V rated value20.5 Å- at 400 V rated value18 Å- at 400 V rated value12 Å- at 400 V rated value20.5 Å- at 400 V rated value35 Å- at 400 V rated value35 Å- at 4100 V rated value35 Å- at 4100 V rated value35 Å- at 4100 V rated value36 Å- at 420 V rated value35 Å- at 4100 V rated value36 Å- at 400 | • at AC-3e | |
| | — at 400 V rated value | 32 A |
| • at AC-4 at 400 V rated value 22 A • at AC-5a up to 690 V rated value 26 A • at AC-5a up to 400 V for current peak value n=20 rated 30.8 A - up to 500 V for current peak value n=20 rated 30.8 A - up to 500 V for current peak value n=20 rated 30.8 A - up to 500 V for current peak value n=20 rated 21 A - up to 500 V for current peak value n=20 rated 21 A - up to 500 V for current peak value n=30 rated 20.5 A - up to 500 V for current peak value n=30 rated 20.5 A - up to 500 V for current peak value n=30 rated 18 A - up to 600 V for current peak value n=30 rated 10 mm² outer 10 mm² et al 00 V for durent peak value n=30 rated 10 mm² operational current for approx. 200000 operating 20.5 A et al 00 V for durent peak value n=30 rated 10 mm² et al 00 V fated value 20 FA • at 400 V fated value 25 A | — at 500 V rated value | 32 A |
| • at AC-5a up to 690 V rated value 44 A • at AC-5b up to 400 V rated value 25 A • at AC-6a | — at 690 V rated value | 21 A |
| et AC-5b up to 400 V rated value et AC-5a | • at AC-4 at 400 V rated value | 22 A |
| • at AC-5b up to 400 V rated value 26.5 A • at AC-5a 30.8 A - up to 230 V for current peak value n=20 rated 30.8 A value 30.8 A - up to 500 V for current peak value n=20 rated 30.8 A - up to 500 V for current peak value n=20 rated 27 A - up to 500 V for current peak value n=20 rated 21 A • at AC-5a 21 A - up to 230 V for current peak value n=30 rated 20.5 A value 20.5 A - up to 500 V for current peak value n=30 rated 20.5 A value 18 A - up to 500 V for current peak value n=30 rated 10 mm² rated value 10 mm² operational current for approx. 20000 operating 12 A operational current for approx. 20000 operating 12 A operational current path at DC-1 12 A - at 240 V rated value 35 A - at 440 V rated value 025 A • with 2 current path in series at DC-1 14 AO - at 440 V rated value 35 A - at 440 V rated value 35 A - at 600 V rated value 35 A - at 600 V rated value 35 A </td <td>• at AC-5a up to 690 V rated value</td> <td>44 A</td> | • at AC-5a up to 690 V rated value | 44 A |
| at AC-6a | | 26.5 A |
| valuevalue | | |
| value27 A | | 30.8 A |
| value21 Aup to 690 V for current peak value n=20 rated value21 A• at AC-6a20.5 Aup to 230 V for current peak value n=30 rated value20.5 Aup to 400 V for current peak value n=30 rated value20.5 Aup to 500 V for current peak value n=30 rated value18 Aup to 690 V for current peak value n=30 rated value18 Aup to 690 V for current peak value n=30 rated value18 Aup to 690 V for current peak value n=30 rated value10 mm²up to 690 V for current peak value n=30 rated value10 mm²up to 690 V for current peak value n=30 rated value12 Aup to 690 V for current peak value n=30 rated value12 Aup to 690 V for current for approx. 200000 operating cycles at AC-412 A- at 400 V rated value12 A- at 240 V rated value35 A- at 240 V rated value35 A- at 240 V rated value0.4 A- at 440 V rated value0.4 A- at 440 V rated value35 A- at 4110 V rated value35 A- at 440 V rated value35 A- | | 30.8 A |
| value• at AC-6a up to 230 V for current peak value n=30 rated value20.5 A up to 400 V for current peak value n=30 rated value20.5 A up to 500 V for current peak value n=30 rated value18 A up to 6300 V for current peak value n=30 rated value18 A up to 6300 V for current peak value n=30 rated value10 mm²minimum cross-section in main circuit at maximum AC-1 rated value10 mm²operational current for approx. 200000 operating cycles at AC-412 A• at 400 V rated value12 A• at 400 V rated value35 A- at 24 V rated value35 A- at 24 V rated value0.4 A- at 240 vrated value0.25 A• with 2 current pats in series at DC-1 at 220 V rated value35 A- at 410 V rated value0.25 A- at 240 vrated value35 A- at 240 vrated value35 A- at 220 V rated value35 A- at 220 V rated value35 A- at 440 V rated value35 A- at 440 V rated value35 A- at 440 V rated value35 A- at 110 V rated value35 A- at 440 V rated value36 A | | 27 A |
| up to 230 V for current peak value n=30 rated value20.5 Aup to 400 V for current peak value n=30 rated value20.5 Aup to 500 V for current peak value n=30 rated value18 Aup to 690 V for current peak value n=30 rated value18 Aup to 690 V for current peak value n=30 rated value10 mm²up to 690 V for current peak value n=30 rated value12 A | value | 21 A |
| valueConstraint of a provide walue n=30 rated value20.5 A-up to 500 V for current peak value n=30 rated value18 A-up to 500 V for current peak value n=30 rated value18 A-up to 690 V for current peak value n=30 rated value10 mm²minimum cross-section in main circuit at maximum AC-1 rated value10 mm²operational current for approx. 200000 operating cycles at AC-412 A• at 400 V rated value12 A• at 400 V rated value12 A• at 400 V rated value35 A- at 24 V rated value0.4 A- at 240 V rated value0.4 A- at 400 V rated value0.5 A- at 400 V rated value35 A- at 410 V rated value35 A- at 220 V rated value35 A- at 240 V rated value35 A- at 240 V rated value35 A- at 410 V rated value35 A- at 410 V rated value35 A- at 420 V rated value35 A- at 440 V rated value36 A </td <td></td> <td></td> | | |
| valueI8 A- up to 500 V for current peak value n=30 rated value18 A- up to 690 V for current peak value n=30 rated value18 Aminimum cross-section in main circuit at maximum AC-1 rated value10 mm²operational current for approx. 20000 operating cycles at AC-412 A• at 400 V rated value12 A• at 400 V rated value12 A• at 400 V rated value35 A• at 10 V rated value35 A- at 24 V rated value4.5 A- at 220 V rated value1A- at 440 V rated value0.25 A• at 600 V rated value35 A- at 24 V rated value35 A- at 24 V rated value35 A- at 210 V rated value35 A- at 220 V rated value35 A- at 220 V rated value35 A- at 440 V rated value35 A- at 24 V rated value35 A- at 440 V rated value35 A- at 220 V rated value35 A- at 440 V rated value35 A- at 24 V rated value35 A- at 440 V rated value35 A- at 24 V rated value35 A- at 440 V rated value35 A <td>value</td> <td></td> | value | |
| value18 Aup to 690 V for current peak value n=30 rated value10 mm2minimum cross-section in main circuit at maximum AC-1 rated value10 mm2operational current for approx. 200000 operating cycles at AC-412 Aoperational current for approx. 200000 operating cycles at AC-425 A- at 24 V rated value0.4 A- at 440 V rated value0.4 A- at 24V rated value35 A- at 440 V rated value35 A- at 440 V rated value36 A- at 440 V rated value36 A <td>value</td> <td></td> | value | |
| valueminimum cross-section in main circuit at maximum AC-1 rated value10 mm2operational current for approx. 200000 operating cycles at AC-412 A• at 400 V rated value12 A• at 690 V rated value12 A• at 690 V rated value12 A• at 1 current path at DC-1 at 24 V rated value35 A- at 24 V rated value1 A- at 20 V rated value0.4 A- at 440 V rated value0.25 A- at 600 V rated value35 A- at 24 V rated value35 A- at 24 V rated value35 A- at 24 V rated value35 A- at 440 V rated value35 A- at 440 V rated value35 A- at 440 V rated value1 A- at 440 V rated value35 A- at 440 V rated value5 A- at 460 V rated va | value | |
| rated valueoperational current for approx. 200000 operating cycles at AC-4• at 400 V rated value12 A• at 400 V rated value12 Aoperational current12 Aoperational current12 A• at 1 current path at DC-1 at 24 V rated value35 A- at 24 V rated value4.5 A- at 20 V rated value1 A- at 440 V rated value0.4 A- at 600 V rated value0.25 A• with 2 current paths in series at DC-1 at 24 V rated value35 A- at 24 V rated value35 A- at 440 V rated value0.25 A- at 440 V rated value35 A- at 24 V rated value35 A- at 24 V rated value1 A- at 24 V rated value1 A- at 24 V rated value35 A- at 440 V rated value35 A- at 200 V rated value35 A- at 200 V rated value35 A- at 200 V rated value35 A- at 440 V rated value35 A- at 440 V rated value36 A- a | value | |
| cycles at AC-412 A• at 400 V rated value12 A• at 690 V rated value12 Aoperational current12 A• at 1 current path at DC-1 at 24 V rated value35 A- at 110 V rated value4.5 A- at 220 V rated value0.4 A- at 600 V rated value0.25 A• with 2 current paths in series at DC-1 at 24 V rated value35 A- at 24 V rated value35 A- at 20 V rated value0.25 A• with 2 current paths in series at DC-1 at 20 V rated value35 A- at 440 V rated value35 A- at 440 V rated value14- at 20 V rated value5 A- at 440 V rated value5 A- at 440 V rated value5 A- at 440 V rated value5 A- at 600 V rated value1 A- at 600 V rated value5 A- at 440 V rated value5 A- at 600 V rated value1 A- at 600 V rated value5 A- at 600 V rated value1 A- at 600 V rated value1 A- at 600 V rated value0.8 A | rated value | |
| • at 690 V rated value 12 A operational current - • at 1 current path at DC-1 - - at 24 V rated value 35 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 - at 24 V rated value 35 A - at 24 V rated value 35 A - at 24 V rated value 0.25 A - at 24 V rated value 5 A - at 24 V rated value 35 A - at 440 V rated value 5 A - at 440 V rated value 1 A - at 440 V rated value 5 A - at 440 V rated value 0.8 A | cycles at AC-4 | |
| operational current• at 1 current path at DC-1- at 24 V rated value- at 24 V rated value- at 110 V rated value- at 220 V rated value- at 220 V rated value- at 440 V rated value- at 600 V rated value- at 600 V rated value- at 24 V rated value- at 240 V rated value- at 260 V rated value- at 440 V rated value- at 440 V rated value- at 440 V rated value- at 600 V rated value | | |
| • at 1 current path at DC-135 A- at 24 V rated value35 A- at 210 V rated value4.5 A- at 220 V rated value1 A- at 440 V rated value0.4 A- at 600 V rated value0.25 A• with 2 current paths in series at DC-1 at 24 V rated value35 A- at 20 V rated value35 A- at 24 V rated value35 A- at 24 V rated value35 A- at 24 V rated value35 A- at 210 V rated value35 A- at 440 V rated value1 A- at 440 V rated value5 A- at 440 V rated value1 A- at 600 V rated value0.8 A | | 12 A |
| at 24 V rated value35 A at 210 V rated value4.5 A at 220 V rated value1 A at 440 V rated value0.4 A at 600 V rated value0.25 A•- at 24 V rated value35 A at 24 V rated value35 A at 210 V rated value35 A at 220 V rated value35 A at 220 V rated value5 A at 240 V rated value5 A at 240 V rated value5 A at 240 V rated value5 A at 440 V rated value5 A at 440 V rated value1 A at 600 V rated value0.8 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 35 A - at 110 V rated value 35 A - at 220 V rated value 5 A - at 220 V rated value 1 A - at 240 V rated value 35 A - at 240 V rated value 35 A - at 220 V rated value 5 A - at 240 V rated value 5 A - at 440 V rated value 5 A - at 600 V rated value 1 A | - | |
| at 220 V rated value at 440 V rated value at 600 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 35 A at 110 V rated value 35 A at 220 V rated value 5 A at 440 V rated value 1 A at 440 V rated value 0.8 A | — at 24 V rated value | |
| at 440 V rated value at 600 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 35 A at 110 V rated value 35 A at 220 V rated value 5 A at 440 V rated value 1 A at 600 V rated value 0.8 A | — at 110 V rated value | |
| at 600 V rated value0.25 A• with 2 current paths in series at DC-1 at 24 V rated value35 A at 110 V rated value35 A at 220 V rated value5 A at 440 V rated value1 A at 600 V rated value0.8 A | — at 220 V rated value | 1 A |
| with 2 current paths in series at DC-1 | — at 440 V rated value | 0.4 A |
| at 24 V rated value35 A at 110 V rated value35 A at 220 V rated value5 A at 440 V rated value1 A at 600 V rated value0.8 A | | 0.25 A |
| at 110 V rated value35 A at 220 V rated value5 A at 440 V rated value1 A at 600 V rated value0.8 A | with 2 current paths in series at DC-1 | |
| at 220 V rated value5 A at 440 V rated value1 A at 600 V rated value0.8 A | — at 24 V rated value | |
| at 440 V rated value 1 A at 600 V rated value 0.8 A | — at 110 V rated value | 35 A |
| — at 600 V rated value 0.8 A | — at 220 V rated value | 5 A |
| | — at 440 V rated value | 1 A |
| with 3 current paths in series at DC-1 | — at 600 V rated value | 0.8 A |
| | with 3 current paths in series at DC-1 | |

| — at 24 V rated value | 35 A | | | | |
|---|---|--|--|--|--|
| — at 110 V rated value | 35 A | | | | |
| — at 220 V rated value | 35 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 | 20 A | | | | |
| — at 110 V rated value | 2.5 A | | | | |
| — at 220 V rated value | 1 A | | | | |
| — at 440 V rated value | 0.09 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 | 35 A | | | | |
| — at 110 V rated value | 15 A | | | | |
| — at 220 V rated value | 3 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 | 35 A | | | | |
| — at 110 V rated value | 35 A | | | | |
| — at 220 V rated value | 10 A | | | | |
| — at 440 V rated value | 0.6 A | | | | |
| — at 600 V rated value | 0.6 A | | | | |
| operating power | | | | | |
| • at AC-3 | | | | | |
| — at 230 V rated value | 7.5 kW | | | | |
| — at 400 V rated value | 15 kW | | | | |
| — at 500 V rated value | 15 kW | | | | |
| — at 690 V rated value | 18.5 kW | | | | |
| • at AC-3e | | | | | |
| — at 230 V rated value | 7.5 kW | | | | |
| — at 400 V rated value | 15 kW | | | | |
| — at 500 V rated value | 15 kW | | | | |
| — at 690 V rated value | 18.5 kW | | | | |
| operating power for approx. 200000 operating cycles | | | | | |
| at AC-4 | | | | | |
| at 400 V rated value | 6 kW | | | | |
| at 690 V rated value | 10.3 kW | | | | |
| operating apparent power at AC-6a | | | | | |
| up to 230 V for current peak value n=20 rated value | 12.2 kVA | | | | |
| up to 400 V for current peak value n=20 rated value | 21.3 kVA | | | | |
| up to 500 V for current peak value n=20 rated value | 23.3 kVA | | | | |
| • up to 690 V for current peak value n=20 rated value | 25 kVA | | | | |
| operating apparent power at AC-6a | | | | | |
| up to 230 V for current peak value n=30 rated value | 8.1 kVA | | | | |
| up to 400 V for current peak value n=30 rated value | 14.2 kVA | | | | |
| up to 500 V for current peak value n=30 rated value | 15.5 kVA | | | | |
| up to 690 V for current peak value n=30 rated value | 21.5 kVA | | | | |
| short-time withstand current in cold operating state up to 40 °C | | | | | |
| limited to 1 s switching at zero current maximum | 499 A; Use minimum cross-section acc. to AC-1 rated value | | | | |
| limited to 5 s switching at zero current maximum | 395 A; Use minimum cross-section acc. to AC-1 rated value | | | | |
| limited to 10 s switching at zero current maximum | 260 A; Use minimum cross-section acc. to AC-1 rated value | | | | |
| limited to 30 s switching at zero current maximum | 186 A; Use minimum cross-section acc. to AC-1 rated value | | | | |
| limited to 60 s switching at zero current maximum | 152 A; Use minimum cross-section acc. to AC-1 rated value | | | | |
| no-load switching frequency | | | | | |
| • at DC | 1 500 1/h | | | | |
| operating frequency | | | | | |
| • at AC-1 maximum | 1 000 1/h | | | | |
| • at AC-2 maximum | 750 1/h | | | | |
| • at AC-3 maximum | 750 1/h | | | | |
| | | | | | |

| • at AC-3e maximum | 750 1/h |
|---|---|
| • at AC-4 maximum | 250 1/h |
| Control circuit/ Control | 20 |
| type of voltage of the control supply voltage | DC |
| control supply voltage at DC | 2434 |
| rated value | 24 V |
| operating range factor control supply voltage rated value of magnet coil at DC | |
| • initial value | 0.7 |
| full-scale value | 1.25 |
| design of the surge suppressor | with varistor |
| closing power of magnet coil at DC | 4.5 W |
| holding power of magnet coil at DC | 4.5 W |
| closing delay | |
| • at DC | 52 270 ms |
| opening delay | |
| • at DC | 19 21 ms |
| arcing time | 10 10 ms |
| control version of the switch operating mechanism | Standard A1 - A2 |
| Auxiliary circuit | |
| number of NC contacts for auxiliary contacts instantaneous contact | 1 |
| number of NO 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 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 | 27 A |
| at 600 V rated value | 27 A |
| yielded mechanical performance [hp] | |
| for single-phase AC motor | |
| — at 110/120 V rated value | 2 hp |
| — at 230 V rated value | 5 hp |
| for 3-phase AC motor | |
| — at 200/208 V rated value | 10 hp |
| — at 220/230 V rated value | 10 hp |
| — at 460/480 V rated value | 20 hp |
| — at 575/600 V rated value | 25 hp |

| contact rating of auxiliary contacts according to UL | A600 / P600 | | | |
|---|--|--|--|--|
| Short-circuit protection | | | | |
| design of the fuse link | | | | |
| for short-circuit protection of the main circuit | | | | |
| — with type of coordination 1 required | gG: 125A (690V,100kA), aM: 50A (690V,100kA), BS88: 125A (415V,80kA) | | | |
| — with type of assignment 2 required | gG: 50A (690V,100kA), aM: 25A (690V, 100kA), BS88: 50A (415V, 80kA) | | | |
| for short-circuit protection of the auxiliary switch required | gG: 10 A (500 V, 1 kA) | | | |
| 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 | 102 mm | | | |
| width | 45 mm | | | |
| depth | 107 mm | | | |
| required spacing | | | | |
| with side-by-side mounting | | | | |
| — forwards | 10 mm | | | |
| — upwards | 10 mm | | | |
| — downwards | 10 mm | | | |
| — at the side | 0 mm | | | |
| for grounded parts | | | | |
| — forwards | 10 mm | | | |
| — upwards | 10 mm | | | |
| — at the side | 6 mm | | | |
| — downwards | 10 mm | | | |
| for live parts | | | | |
| — forwards | 10 mm | | | |
| — upwards | 10 mm | | | |
| — downwards | 10 mm | | | |
| — at the side | 6 mm | | | |
| Connections/ Terminals | - | | | |
| type of electrical connection | | | | |
| for main current circuit | spring-loaded terminals | | | |
| for auxiliary and control circuit | spring-loaded terminals | | | |
| at contactor for auxiliary contacts | Spring-type terminals | | | |
| of magnet coil | Spring-type terminals | | | |
| type of connectable conductor cross-sections | | | | |
| for main contacts | | | | |
| — solid | 2x (1 10 mm²) | | | |
| — solid or stranded | 2x (1 10 mm²) | | | |
| - finely stranded with core end processing | 2x (1 6 mm²) | | | |
| - finely stranded without core end processing | 2x (1 6 mm ²) | | | |
| at AWG cables for main contacts | 2x (18 8) | | | |
| connectable conductor cross-section for main contacts | | | | |
| • solid | 1 10 mm² | | | |
| • stranded | 1 10 mm² | | | |
| finely stranded with core end processing | 1 6 mm² | | | |
| finely stranded without core end processing | 1 6 mm² | | | |
| connectable conductor cross-section for auxiliary contacts | | | | |
| solid or stranded | 0.5 2.5 mm² | | | |
| finely stranded with core end processing | 0.5 1.5 mm² | | | |
| finely stranded without core end processing | 0.5 2.5 mm² | | | |
| type of connectable conductor cross-sections | | | | |
| for auxiliary contacts | | | | |

| — solid or str | randad | | 2× (0 E 2 E | (mm ²) | | | |
|---------------------------------------|---|---------------------|-----------------|--------------------|--|-------------------------------|--|
| | | e e e i e e | 2x (0.5 2.5 | | | | |
| | nded with core end proc | • | 2x (0.5 1.5 | | | | |
| | nded without core end p | rocessing | 2x (0.5 2.5 | | | | |
| | at AWG cables for auxiliary contacts AWG number as coded connectable conductor cross action | | 2x (20 14) | | | | |
| for main contact | | | 18 8 | | | | |
| for auxiliary cor | | | 20 14 | | | | |
| Safety related data | liacia | | 20 14 | _ | | | |
| | | | | _ | | | |
| product function | | | | | | | |
| | according to IEC 60947- | | Yes | | | | |
| | emand rate according t | o SN 31920 | 450 000 | | | | |
| proportion of dange | | | | | | | |
| | id rate according to SN | | 40 % | | | | |
| | nd rate according to SN | | 73 % | | | | |
| 31920 | low demand rate accord | | 100 FIT | | | | |
| T1 value for proof tes IEC 61508 | t interval or service life | according to | 20 y | | | | |
| protection class IP c 60529 | on the front according | to IEC | IP20 | | | | |
| | the front according to | IEC 60529 | finger-safe, fo | or vertical cont | act from the front | | |
| suitability for use | | | | | | | |
| safety-related s | witching OFF | | Yes | | | | |
| Certificates/ approval | s | | | | | | |
| General Product Ap | proval | | | | | | |
| | | | | | | LH | |
| EMC | Functional Safety/Safety of Machinery | Declaration o | of Conformity | | Test Certificates | | |
| RCM | <u>Type Examination</u> <u>Certificate</u> | | | CE EG-Konf. | <u>Type Test Certific-</u> ates/Test Report | Special Test Certific- ate | |
| Test Certificates | Marine / Shipping | | | | | | |
| <u>Miscellaneous</u> | ABS | BUREAU VERITAS | | | Lloyd's Register Lis | PRS | |
| Marine / Shipping | | other | | | Dangerous Good | | |
| RINA | RMRS | <u>Confirmation</u> | <u>on</u> 4 | VDE | <u>Transport Informa-</u> <u>tion</u> | | |
| Further information | | | | | | | |
| Information- and Do | wnloadcenter (Catalog | gs, Brochures,. |) | | | | |
| https://www.siemens.com/ic10 | | | | | | | |

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