SIEMENS

Data sheet 3RT1066-6AP36

SIRIUS





power contactor, AC-3e/AC-3 300 A, 160 kW / 400 V, AC (50-60 Hz) / DC Uc: 220-240 V 3-pole, auxiliary contacts 2 NO + 2 NC drive: conventional main circuit: busbar control and auxiliary circuit: screw terminal



| product brand name | SINIUS | |
|--|----------------------------|--|
| product designation | Power contactor | |
| product type designation | 3RT1 | |
| General technical data | | |
| size of contactor | S10 | |
| 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 | 66 W | |
| at AC in hot operating state per pole | 22 W | |
| without load current share typical | 7.4 W | |
| type of calculation of power loss depending on pole | quadratic | |
| insulation voltage | | |
| of main circuit with degree of pollution 3 rated value | 1 000 V | |
| of auxiliary circuit with degree of pollution 3 rated value | 500 V | |
| surge voltage resistance | | |
| of main circuit rated value | 8 kV | |
| of auxiliary circuit rated value | 6 kV | |
| maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1 | 690 V | |
| shock resistance at rectangular impulse | | |
| • at AC | 8,5g / 5 ms, 4,2g / 10 ms | |
| • at DC | 8,5g / 5 ms, 4,2g / 10 ms | |
| shock resistance with sine pulse | | |
| • at AC | 13,4g / 5 ms, 6,5g / 10 ms | |
| • at DC | 13,4g / 5 ms, 6,5g / 10 ms | |
| mechanical service life (operating cycles) | | |
| of contactor typical | 10 000 000 | |
| of the contactor with added electronically optimized auxiliary switch block typical | 5 000 000 | |
| of the contactor with added auxiliary switch block typical | 10 000 000 | |
| reference code according to IEC 81346-2 | Q | |
| Substance Prohibitance (Date) | 05/01/2012 | |
| SVHC substance name | Lead - 7439-92-1 | |
| Ambient conditions | | |
| installation altitude at height above sea level maximum | 2 000 m | |
| ambient temperature | | |

| during operation | -25 +60 °C |
|--|------------|
| during operationduring storage | -25 +80 °C |
| relative humidity minimum | 10 % |
| relative humidity at 55 °C according to IEC 60068-2-30 | 95 % |
| maximum | 33 /0 |
| Environmental footprint | |
| Environmental Product Declaration(EPD) | Yes |
| Global Warming Potential [CO2 eq] total | 580 kg |
| Global Warming Potential [CO2 eq] during manufacturing | 26.3 kg |
| Global Warming Potential [CO2 eq] during operation | 559 kg |
| Global Warming Potential [CO2 eq] after end of life | -4.89 kg |
| 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 | 1 000 V |
| at AC-3e rated value maximum | 1 000 V |
| operational current | |
| at AC-1 at 400 V at ambient temperature 40 °C rated | 330 A |
| value | |
| • at AC-1 | 330 A |
| up to 690 V at ambient temperature 40 °C rated value | 000 A |
| — up to 690 V at ambient temperature 60 $^{\circ}\text{C}$ rated value | 300 A |
| — up to 1000 V at ambient temperature 40 $^{\circ}\text{C}$ rated value | 150 A |
| — up to 1000 V at ambient temperature 60 $^{\circ}\text{C}$ rated value | 150 A |
| • at AC-3 | |
| — at 400 V rated value | 300 A |
| — at 500 V rated value | 300 A |
| — at 690 V rated value | 280 A |
| — at 1000 V rated value | 95 A |
| • at AC-3e | |
| — at 400 V rated value | 300 A |
| — at 500 V rated value | 300 A |
| — at 690 V rated value | 280 A |
| — at 1000 V rated value | 95 A |
| at AC-4 at 400 V rated value | 280 A |
| at AC-5a up to 690 V rated value at AC-5b up to 400 V rated value | 290 A |
| at AC-5b up to 400 V rated valueat AC-6a | 249 A |
| — up to 230 V for current peak value n=20 rated value | 292 A |
| — up to 400 V for current peak value n=20 rated value | 292 A |
| — up to 500 V for current peak value n=20 rated value | 292 A |
| — up to 690 V for current peak value n=20 rated value | 280 A |
| — up to 1000 V for current peak value n=20 rated value | 95 A |
| • at AC-6a | |
| — up to 230 V for current peak value n=30 rated value | 195 A |
| — up to 400 V for current peak value n=30 rated value | 195 A |
| — up to 500 V for current peak value n=30 rated value | 195 A |
| — up to 690 V for current peak value n=30 rated value | 195 A |
| — up to 1000 V for current peak value n=30 rated value | 95 A |
| minimum cross-section in main circuit at maximum AC-1 rated value | 185 mm² |
| operational current for approx. 200000 operating cycles at AC-4 | |
| at 400 V rated value | 125 A |
| at 690 V rated value | 115 A |
| operational current ● at 1 current path at DC-1 | |

| — at 24 V rated value | 300 A |
|--|-------------|
| — at 60 V rated value | 300 A |
| — at 110 V rated value | 33 A |
| — at 220 V rated value | 3.8 A |
| — at 440 V rated value | 0.9 A |
| — at 600 V rated value | 0.6 A |
| with 2 current paths in series at DC-1 | |
| — at 24 V rated value | 300 A |
| — at 60 V rated value | 300 A |
| — at 110 V rated value | 300 A |
| — at 220 V rated value | 300 A |
| — at 440 V rated value | 4 A |
| — at 600 V rated value | 2 A |
| with 3 current paths in series at DC-1 | |
| — at 24 V rated value | 300 A |
| — at 60 V rated value | 300 A |
| — at 110 V rated value | 300 A |
| — at 220 V rated value | 300 A |
| — at 440 V rated value | 11 A |
| — at 600 V rated value | 5.2 A |
| at 1 current path at DC-3 at DC-5 | 0.27 |
| — at 24 V rated value | 300 A |
| | 11 A |
| — at 60 V rated value | |
| — at 220 V rated value | 0.6 A |
| — at 440 V rated value | 0.18 A |
| — at 600 V rated value | 0.125 A |
| with 2 current paths in series at DC-3 at DC-5 | |
| — at 24 V rated value | 300 A |
| — at 60 V rated value | 300 A |
| — at 110 V rated value | 300 A |
| — at 220 V rated value | 2.5 A |
| — at 440 V rated value | 0.65 A |
| — at 600 V rated value | 0.37 A |
| with 3 current paths in series at DC-3 at DC-5 | |
| — at 24 V rated value | 300 A |
| — at 60 V rated value | 300 A |
| — at 110 V rated value | 300 A |
| — at 220 V rated value | 300 A |
| — at 440 V rated value | 1.4 A |
| — at 600 V rated value | 0.75 A |
| operating power | |
| • at AC-3 | |
| — at 230 V rated value | 90 kW |
| — at 400 V rated value | 160 kW |
| — at 500 V rated value | 200 kW |
| — at 690 V rated value | 250 kW |
| — at 1000 V rated value | 132 kW |
| • at AC-3e | |
| — at 230 V rated value | 90 kW |
| — at 400 V rated value | 160 kW |
| — at 500 V rated value | 200 kW |
| — at 690 V rated value | 250 kW |
| — at 1000 V rated value | 132 kW |
| operating power for approx. 200000 operating cycles at AC- | IVE IVI |
| operating power for approx. 200000 operating cycles at AC- | |
| • at 400 V rated value | 71 kW |
| at 690 V rated value | 112 kW |
| operating apparent power at AC-6a | |
| up to 230 V for current peak value n=20 rated value | 110 000 kVA |
| up to 400 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value | 200 000 VA |
| up to 500 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value | 250 000 VA |
| - up to ooo viioi ourrent peak value 11-20 lateu value | LOU VOU VII |

| • up to 690 V for current peak value n=20 rated value | 330 000 VA | |
|--|---|--|
| • up to 1000 V for current peak value n=20 rated value | 160 000 VA | |
| operating apparent power at AC-6a | | |
| • up to 230 V for current peak value n=30 rated value | 70 000 VA | |
| • up to 400 V for current peak value n=30 rated value | 130 000 VA | |
| up to 500 V for current peak value n=30 rated value | 160 000 VA | |
| up to 690 V for current peak value n=30 rated value | 230 000 VA | |
| up to 1000 V for current peak value n=30 rated value | 160 000 VA | |
| short-time withstand current in cold operating state up to 40 °C | | |
| limited to 1 s switching at zero current maximum | 5 524 A; Use minimum cross-section acc. to AC-1 rated value | |
| limited to 5 s switching at zero current maximum | 4 579 A; Use minimum cross-section acc. to AC-1 rated value | |
| limited to 10 s switching at zero current maximum | 3 153 A; Use minimum cross-section acc. to AC-1 rated value | |
| limited to 30 s switching at zero current maximum | 1 883 A; Use minimum cross-section acc. to AC-1 rated value | |
| Iimited to 60 s switching at zero current maximum | 1 445 A; Use minimum cross-section acc. to AC-1 rated value | |
| no-load switching frequency | | |
| • at AC | 2 000 1/h | |
| • at DC | 2 000 1/h | |
| operating frequency | 770.40 | |
| • at AC-1 maximum | 750 1/h | |
| • at AC-2 maximum | 250 1/h | |
| • at AC-3 maximum | 500 1/h | |
| • at AC-3e maximum | 500 1/h | |
| • at AC-4 maximum | 130 1/h | |
| Control circuit/ Control | AO/DO | |
| type of voltage of the control supply voltage | AC/DC | |
| control supply voltage at AC | 000 04014 | |
| at 50 Hz rated value | 220 240 V | |
| at 60 Hz rated value | 220 240 V | |
| control supply voltage at DC rated value | 220 240 V | |
| operating range factor control supply voltage rated value of | 220 240 V | |
| magnet coil at DC | | |
| • initial value | 0.8 | |
| • full-scale value | 1.1 | |
| 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 | |
| design of the surge suppressor | with varistor | |
| apparent pick-up power | | |
| at minimum rated control supply voltage at AC | | |
| — at 50 Hz | 490 VA | |
| — at 60 Hz | 490 VA | |
| at maximum rated control supply voltage at AC | | |
| — at 60 Hz | 590 VA | |
| — at 50 Hz | 590 VA | |
| apparent pick-up power of magnet coil at AC | | |
| • at 50 Hz | 590 VA | |
| • at 60 Hz | 590 VA | |
| inductive power factor with closing power of the coil | | |
| • at 50 Hz | 0.9 | |
| • at 60 Hz | 0.9 | |
| apparent holding power | 0.41/4 | |
| at minimum rated control supply voltage at DC | 6.1 VA | |
| at maximum rated control supply voltage at DC | 7.4 VA | |
| apparent holding power | | |
| at minimum rated control supply voltage at AC | | |
| — at 50 Hz | 5.6 VA | |
| — at 60 Hz | 5.6 VA | |
| at maximum rated control supply voltage at AC | 2-14 | |
| — at 50 Hz | 6.7 VA | |

| | — at 60 Hz | 6.7 VA | |
|--|--|---|--|
| e. at 60142 | inductive power factor with the holding power of the coil | | |
| Closing power of magnet coil at DC | ● at 50 Hz | 0.9 | |
| holdring power of magnet coil at DC | ● at 60 Hz | 0.9 | |
| Closing delay | closing power of magnet coil at DC | 650 W | |
| at at AC at 1DC opening detay at at AC at 1DC opening detay at 1DC arcing time arcing time control version of the switch operating mechanism Standard A1 - A2 Auxiliary circuit. number of NC contacts for auxiliary contacts instantaneous contact. arcing time arcing time control version of the switch operating mechanism Auxiliary circuit. number of NC contacts for auxiliary contacts instantaneous contact. arcing time at AC-12 maximum | holding power of magnet coil at DC | 7.4 W | |
| e at DC opening delay e at DC a t DC b DC a t DC b DC a t | closing delay | | |
| and AC | • at AC | 30 95 ms | |
| * at DC * at DC * at DC * at DC * arcing time control version of the switch operating mechanism control version of the switch operating mechanism Standard A1 - A2 **Williary circuit** number of NC contacts for auxiliary contacts instantaneous contact number of NC contacts for auxiliary contacts instantaneous contact operational current at AC-15 maximum operational current at AC-15 maximum operational current at AC-18 maximum operational current at AC-18 maximum operational current at AC-18 maximum operational current at DC-12 **at 290 V rated value **at 500 V rated value **at 500 V rated value **at 80 V rated value **at 100 V rated value **at 100 V rated value **at 100 V rated value **at 220 V rated value **at 220 V rated value **at 24 V rated value **at 280 V rated value **at 80 V rated | • at DC | 30 95 ms | |
| arcing time | opening delay | | |
| arcing time | • at AC | 40 80 ms | |
| Control version of the switch operating mechanism Standard A1 - A2 | • at DC | 40 80 ms | |
| Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact contact operational current at AC-12 maximum 0 | arcing time | 10 15 ms | |
| number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum 10 A operational current at AC-12 maximum 10 A operational current at AC-15 maximum 10 A operational current at AC-15 maximum 10 A operational current at AC-16 1 at 20 V rated value 1 at 60 V rated value 1 at 60 V rated value 1 at 60 V rated value 1 at 8 V rated value 1 at 8 V rated value 1 at 8 V rated value 1 at 12 V rated value 1 at 12 V rated value 1 at 12 V rated value 1 at 20 V rated value 1 at 30 V rated value 1 at 30 V rated value 1 at 48 V rated value 1 at 50 V rated value 1 at 60 V rated value 1 | control version of the switch operating mechanism | Standard A1 - A2 | |
| Contact Contacts | Auxiliary circuit | | |
| Description Contacts for auxiliary contacts instantaneous contact | number of NC contacts for auxiliary contacts instantaneous | 2 | |
| contact | | | |
| operational current at AC-15 | | | |
| at 230 V rated value | · | 10 A | |
| | • | | |
| | | | |
| • at 690 V rated value • at 24 V rated value • at 24 V rated value • at 30 V rated value • at 10 V rated value • at 110 V rated value • at 110 V rated value • at 110 V rated value • at 220 V rated value • at 220 V rated value • at 80 V rated value • at 800 V rated value • at 24 V rated value • at 24 V rated value • at 25 V rated value • at 148 V rated value • at 150 V rated value • at 100 V rated value • at 110 V rated value • at 110 V rated value • at 120 V rated value • at 20 V rated value • at 480 V rated value • at 800 V rated value • at 20 V rated value • at 500 V rated value • at 600 V | • at 400 V rated value | 3 A | |
| Operational current at DC-12 • at 24 V rated value | at 500 V rated value | 2 A | |
| | at 690 V rated value | 1A | |
| | 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 24 V rated value at 48 V rated value at 60 V rated value at 600 V rated value at 575/600 V rated value at 600 V rate | • at 125 V rated value | 2 A | |
| operational current at DC-13 at 24 V rated value at 48 V rated value 2 A at 60 V rated value 1 1 A at 125 V rated value 1 1 A at 125 V rated value 3 0.9 A at 220 V rated value 3 1 faulty switching per 100 million (17 V, 1 mA) UUCSA ratings full-load current (FLA) for 3-phase AC motor 4 ta 600 V rated value 3 02 A at 600 V rated value 302 A at 600 V rated value 302 A at 600 V rated value 302 A at 600 V rated value 305 A pielded mechanical performance [hp] for 3-phase AC motor - at 220/230 V rated value - at 220/230 V rated value - at 460/480 V rated value - at 460/480 V rated value 250 hp - at 460/480 V rated value 250 hp - at 575/600 V rated value 250 hp - at 575/600 V rated value 250 hp - at 575/600 V rated value 260 hp - at 575/600 V rated value 300 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 - with type of assignment 2 required for short-circuit protection of the auxiliary switch required for short-circuit protection of the auxiliary switch required gG: 500 A (690 V, 100 kA), aM: 315 A (690 V, 50 kA), BS88: 400 A (415 V, 50 kA) gG: 10 A (500 V, 1 kA) | at 220 V rated value | 1 A | |
| at 24 V rated value at 48 V rated value 2 A at 60 V rated value 2 A at 110 V rated value 3 1 A at 125 V rated value 3 0,9 A at 220 V rated value 3 0,3 A at 220 V rated value 3 0,1 A contact reliability of auxiliary contacts I 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 302 A at 600 V rated value 289 A yielded mechanical performance [hp] for 3-phase AC motor - at 220/230 V rated value 100 hp - at 220/230 V rated value 250 hp - at 460/480 V rated value 250 hp - at 460/480 V rated value 250 hp - at 575/600 V rated value 250 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 - with type of assignment 2 required White protection of the auxiliary switch required - with type of assignment 2 required AR A) GG: 500 A (690 V, 100 kA) GG: 10 A (500 V, 100 kA), aM: 315 A (690 V, 50 kA), BS88: 400 A (415 V, 50 kA) GG: 10 A (500 V, 100 kA) GG: 10 A (500 V, 100 kA) | at 600 V rated value | 0.15 A | |
| at 48 V rated value at 60 V rated value at 110 V rated value at 110 V rated value at 125 V rated value at 220 V rated value at 220 V rated value at 600 V rated value at 600 V rated value at 600 V rated value at 480 V rated value at 600 V rated value at 600 V rated value at 600 V rated value be for 3-phase AC motor at 220/230 V rated value at 575/600 V rated value at 575/600 V rated value 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 gG: 500 A (690 V, 100 kA), aM: 315 A (690 V, 50 kA), BS88: 400 A (415 V, 50 kA) o for short-circuit protection of the auxiliary switch required gG: 10 A (500 V, 1 kA) | operational current at DC-13 | | |
| at 60 V rated value at 110 V rated value at 125 V rated value at 220 V rated value at 220 V rated value at 600 V rated value at 200 V rated value 1 A at 600 V rated value 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 at 480 V rated value for 3-phase AC motor at 200/208 V rated value -at 200/208 V rated value -at 200/208 V rated value -at 460/480 V rated value -at 575/600 V rated value 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: 500 A (690 V, 100 kA), aM: 315 A (690 V, 50 kA), BS88: 400 A (415 V, 50 kA) for short-circuit protection of the auxiliary switch required GG: 10 A (500 V, 1 kA) | at 24 V rated value | 10 A | |
| at 110 V rated value at 125 V rated value 0.9 A at 220 V rated value 0.3 A at 600 V rated value 0.1 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 at 600 V rated value 289 A yielded mechanical performance [hp] for 3-phase AC motor at 200/208 V rated value 100 hp at 200/208 V rated value 25 hp at 460/480 V rated value 250 hp at 575/600 V rated value 300 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: 500 A (690 V, 100 kA) with type of assignment 2 required gG: 400 A (690 V, 100 kA), aM: 315 A (690 V, 50 kA), BS88: 400 A (415 V, 50 kA) for short-circuit protection of the auxiliary switch required gG: 10 A (500 V, 1 kA) | at 48 V rated value | 2 A | |
| at 125 V rated value at 220 V rated value at 600 V rated value contact reliability of auxiliary contacts I 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 at 600 V rated value at 600 V rated value at 600 V rated value bifor 3-phase AC motor - at 200/208 V rated value - at 220/230 V rated value - at 220/230 V rated value - at 575/600 V rated | at 60 V rated value | 2 A | |
| at 220 V rated value at 600 V rated value 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 at 600 V rated value at 600 V rated value befor 3-phase AC motor at 200/208 V rated value at 220/230 V rated value at 460/480 V rated value at 600 V rated value at 575/600 V rated value 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 assignment 2 required with type of assignment 2 required at 600 V, 100 kA), aM: 315 A (690 V, 50 kA), BS88: 400 A (415 V, 50 kA) at 600 V, 100 kA) at 600 V, 100 kA) at 600 V, 100 kA) at 600 V, 100 kA), aM: 315 A (690 V, 50 kA), BS88: 400 A (415 V, 50 kA) at 600 V, 100 kA), aM: 315 A (690 V, 50 kA), BS88: 400 A (415 V, 50 kA) at 600 V, 100 kA) | at 110 V rated value | 1 A | |
| ontact reliability of auxiliary contacts UL/CSA ratings full-load current (FLA) for 3-phase AC motor oat 480 V rated value oat 600 V rated value of 3-phase AC motor of 3-phase AC motor oat 200/208 V rated value | at 125 V rated value | 0.9 A | |
| contact reliability of auxiliary contacts UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value • for 3-phase AC motor — at 200/208 V rated value — at 220/230 V rated value — at 460/480 V rated value — at 460/480 V rated value 250 hp — at 575/600 V rated value contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link — 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 • 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 • 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 • 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 • 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 | at 220 V rated value | 0.3 A | |
| full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value • at 600 V rated value • for 3-phase AC motor — at 200/208 V rated value — at 220/230 V rated value — at 220/230 V rated value — at 460/480 V rated value — at 460/480 V rated value — at 575/600 V rated value 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 gG: 400 A (690 V, 100 kA), aM: 315 A (690 V, 50 kA), BS88: 400 A (415 V, 50 kA) • for short-circuit protection of the auxiliary switch required gG: 10 A (500 V, 1 kA) | at 600 V rated value | 0.1 A | |
| full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value • at 600 V rated value • for 3-phase AC motor — at 200/208 V rated value — at 220/230 V rated value — at 220/230 V rated value — at 460/480 V rated value — at 575/600 V rated value — at 575/600 V rated value 250 hp — at 575/600 V rated value 300 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 — 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 • 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 • 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 | contact reliability of auxiliary contacts | 1 faulty switching per 100 million (17 V, 1 mA) | |
| full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value • at 600 V rated value • for 3-phase AC motor — at 200/208 V rated value — at 220/230 V rated value — at 220/230 V rated value — at 460/480 V rated value — at 575/600 V rated value — at 575/600 V rated value 250 hp — at 575/600 V rated value 300 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 — 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 • 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 • 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 | | | |
| at 480 V rated value at 600 V rated value 289 A yielded mechanical performance [hp] • for 3-phase AC motor — at 200/208 V rated value 100 hp — at 220/230 V rated value 250 hp — at 460/480 V rated value 250 hp — at 575/600 V rated value 300 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: 500 A (690 V, 100 kA) — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required gG: 10 A (500 V, 1 kA) | | | |
| • at 600 V rated value yielded mechanical performance [hp] • for 3-phase AC motor — at 200/208 V rated value — at 220/230 V rated value — at 460/480 V rated value — at 575/600 V rated value 250 hp — at 575/600 V rated value 300 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 — 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 • 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 • 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 • 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 | | 302 A | |
| yielded mechanical performance [hp] ● for 3-phase AC motor — at 200/208 V rated value — at 220/230 V rated value — at 460/480 V rated value — at 575/600 V rated value — at 575/600 V rated value 300 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 — 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 ■ GS: 500 A (690 V, 100 kA) ■ GS: 400 A (690 V, 100 kA) | | | |
| • for 3-phase AC motor — at 200/208 V rated value — at 220/230 V rated value — at 460/480 V rated value — at 4575/600 V rated value — at 575/600 V rated value — other training of auxiliary contacts according to UL — A600 / Q600 Short-circuit protection design of the fuse link — with type of coordination 1 required — with type of coordination 1 required — with type of assignment 2 required — with type of assignment 2 required — of or short-circuit protection of the auxiliary switch required — of or short-circuit protection of the auxiliary switch required — of or short-circuit protection of the auxiliary switch required — of or short-circuit protection of the auxiliary switch required — of or short-circuit protection of the auxiliary switch required — of or short-circuit protection of the auxiliary switch required — of or short-circuit protection of the auxiliary switch required — of or short-circuit protection of the auxiliary switch required — of or short-circuit protection of the auxiliary switch required — of or short-circuit protection of the auxiliary switch required — of or short-circuit protection of the auxiliary switch required — of or short-circuit protection of the auxiliary switch required — of or short-circuit protection of the auxiliary switch required — of or short-circuit protection of the auxiliary switch required — of or short-circuit protection of the auxiliary switch required — of or short-circuit protection of the auxiliary switch required — of or short-circuit protection of the auxiliary switch required — of or short-circuit protection of the auxiliary switch required | | | |
| - at 200/208 V rated value - at 220/230 V rated value - at 460/480 V rated value - at 575/600 V rated value 250 hp - at 575/600 V rated value 300 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 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 gG: 500 A (690 V, 100 kA) A (690 V, 100 kA), aM: 315 A (690 V, 50 kA), BS88: 400 A (415 V, 50 kA) • for short-circuit protection of the auxiliary switch required gG: 10 A (500 V, 1 kA) | | | |
| - at 220/230 V rated value - at 460/480 V rated value 250 hp - at 575/600 V rated value 300 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 9G: 500 A (690 V, 100 kA) - with type of assignment 2 required 9G: 400 A (690 V, 100 kA), aM: 315 A (690 V, 50 kA), BS88: 400 A (415 V, 50 kA) ● for short-circuit protection of the auxiliary switch required 9G: 10 A (500 V, 1 kA) | · | 100 hp | |
| - at 460/480 V rated value - at 575/600 V rated value 300 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 with type of assignment 2 required • for short-circuit protection of the auxiliary switch required gG: 500 A (690 V, 100 kA), aM: 315 A (690 V, 50 kA), BS88: 400 A (415 V, 50 kA) • for short-circuit protection of the auxiliary switch required gG: 10 A (500 V, 1 kA) | | | |
| - at 575/600 V rated value 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 with type of assignment 2 required • for short-circuit protection of the auxiliary switch required gG: 500 A (690 V, 100 kA), aM: 315 A (690 V, 50 kA), BS88: 400 A (415 V, 50 kA) • for short-circuit protection of the auxiliary switch required gG: 10 A (500 V, 1 kA) | | | |
| 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 gG: 10 A (500 V, 1 kA) GG: 10 A (500 V, 1 kA) | | | |
| 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 gG: 500 A (690 V, 100 kA) gG: 400 A (690 V, 100 kA), aM: 315 A (690 V, 50 kA), BS88: 400 A (415 V, 50 kA) • for short-circuit protection of the auxiliary switch required gG: 10 A (500 V, 1 kA) | | | |
| 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 gG: 500 A (690 V, 100 kA) — with type of assignment 2 required gG: 400 A (690 V, 100 kA), aM: 315 A (690 V, 50 kA), BS88: 400 A (415 V, 50 kA) for short-circuit protection of the auxiliary switch required gG: 10 A (500 V, 1 kA) | | | |
| for short-circuit protection of the main circuit — with type of coordination 1 required — with type of assignment 2 required gG: 500 A (690 V, 100 kA) — with type of assignment 2 required gG: 400 A (690 V, 100 kA), aM: 315 A (690 V, 50 kA), BS88: 400 A (415 V, 50 kA) for short-circuit protection of the auxiliary switch required gG: 10 A (500 V, 1 kA) | | | |
| — with type of coordination 1 required — with type of assignment 2 required ■ for short-circuit protection of the auxiliary switch required gG: 500 A (690 V, 100 kA) gG: 400 A (690 V, 100 kA), aM: 315 A (690 V, 50 kA), BS88: 400 A (415 V, 50 kA) gG: 10 A (500 V, 1 kA) | - | | |
| — with type of assignment 2 required gG: 400 A (690 V, 100 kA), aM: 315 A (690 V, 50 kA), BS88: 400 A (415 V, 50 kA) ● for short-circuit protection of the auxiliary switch required gG: 10 A (500 V, 1 kA) | · | qG: 500 A (690 V, 100 kA) | |
| • for short-circuit protection of the auxiliary switch required gG: 10 A (500 V, 1 kA) | | gG: 400 A (690 V, 100 kA), aM: 315 A (690 V, 50 kA), BS88: 400 A (415 V, 50 | |
| Installation/ mounting/ dimensions | | | |
| | Installation/ mounting/ dimensions | | |

| mounting position | with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back | | |
|--|--|--|--|
| fastening method | screw fixing | | |
| height | 210 mm | | |
| width | 145 mm | | |
| depth | 202 mm | | |
| required spacing | | | |
| with side-by-side mounting | | | |
| — forwards | 20 mm | | |
| — upwards | 10 mm | | |
| — downwards | 10 mm | | |
| — at the side | 0 mm | | |
| for grounded parts | · | | |
| — forwards | 20 mm | | |
| — upwards | 10 mm | | |
| — at the side | 10 mm | | |
| — downwards | 10 mm | | |
| for live parts | | | |
| — forwards | 20 mm | | |
| | 20 mm | | |
| — upwards | | | |
| — downwards | 10 mm | | |
| — at the side | 10 mm | | |
| connections/ Terminals | | | |
| type of electrical connection | | | |
| for main current circuit | Connection bar | | |
| for auxiliary and control circuit | screw-type terminals | | |
| at contactor for auxiliary contacts | Screw-type terminals | | |
| of magnet coil | Screw-type terminals | | |
| width of connection bar | 25 mm | | |
| thickness of connection bar | 6 mm | | |
| diameter of holes | 11 mm | | |
| number of holes | 1 | | |
| type of connectable conductor cross-sections | | | |
| for AWG cables for main contacts | 2/0 500 kcmil | | |
| connectable conductor cross-section for main contacts | | | |
| • stranded | 70 240 mm² | | |
| connectable conductor cross-section for auxiliary contacts | | | |
| solid or stranded | 0.5 4 mm² | | |
| finely stranded with core end processing | 0.5 2.5 mm² | | |
| type of connectable conductor cross-sections | | | |
| for auxiliary contacts | | | |
| — solid | 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 4 mm²) | | |
| — solid or stranded | 2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²), max. 2x (0,75 4 mm²) | | |
| — finely stranded with core end processing | 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) | | |
| for AWG cables for auxiliary contacts | 2x (20 16), 2x (18 14), 1x 12 | | |
| AWG number as coded connectable conductor cross | (| | |
| section | | | |
| for auxiliary contacts | 18 14 | | |
| afety related data | | | |
| product function | | | |
| mirror contact according to IEC 60947-4-1 | Yes | | |
| positively driven operation according to IEC 60947-5-1 | No | | |
| suitability for use safety-related switching OFF | Yes; applies only to contactor operating mechanism | | |
| B10 value with high demand rate according to SN 31920 | 1 000 000 | | |
| IEC 61508 | | | |
| T1 value | | | |
| for proof test interval or service life according to IEC 61508 | 20 a | | |
| Electrical Safety | | | |
| protection class IP on the front according to IEC 60529 | IP00; IP20 with box terminal/cover | | |
| touch protection on the front according to IEC 60529 | finger-safe, for vertical contact from the front with box terminal/cover | | |

Approvals Certificates

General Product Approval









Confirmation



General Product Approval

EMV

Functional Saftey

Test Certificates

KC





Type Examination Certificate

Type Test Certificates/Test Report

Special Test Certificate

Test Certificates

Marine / Shipping

Miscellaneous

Confirmation











other

Miscellaneous

Miscellaneous

Confirmation

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

Railway



Environment

Environment



Environmental Confirmations

Further information

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=3RT1066-6AP36

Cax online generator

 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RT1066-6AP36}$

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT1066-6AP3

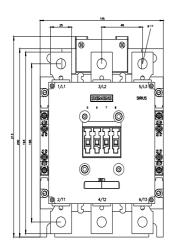
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

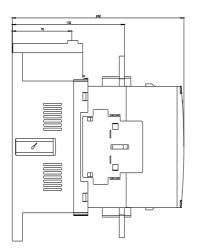
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1066-6AP36&lang=en

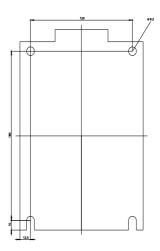
Characteristic: Tripping characteristics, I2t, Let-through current

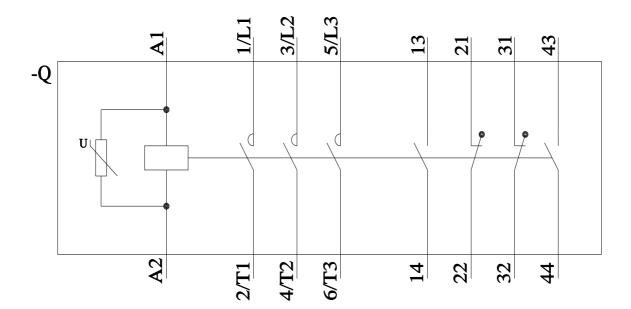
https://support.industry.siemens.com/cs/ww/en/ps/3RT1066-6AP36/char

Further characteristics (e.g. electrical endurance, switching frequency)
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT1066-6AP36&objecttype=14&gridview=view1









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