SIEMENS

Data sheet 3RT2035-1AK60



power contactor, AC-3 40 A, 18.5 kW / 400 V 1 NO + 1 NC, 110 V AC 50 Hz / 120 V, 60 Hz, 3-pole, Size S2, screw terminal

| product designation product type designation General technical data size of contactor product extension • function module for communication • auxiliary switch power loss [W] for rated value of the current at AC in hot operating state • per pole power loss [W] for rated value of the current without load current share typical surge voltage resistance • of main circuit rated value • of auxiliary circuit rated value • of tax AC shock resistance at rectangular impulse • at AC 11.8g / 5 ms, 7.4g / 10 ms shock resistance with sine pulse • at AC shock resistance with sine pulse • at AC mechanical service life (switching cycles) • of contactor typical • of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical reference code acc. to IEC 81346-2 Q Ambient conditions installation altitude at height above sea level maximum • ambient temperature during operation • armbient temperature during storage Alon circuit number of NO contacts for main current circuit number of NO contacts for main current circuit number of PO contacts for main contacts • operating voltage at AC-3 rated value maximum operational current | product brand name | SIRIUS |
|---|--|-----------------------------|
| Second technical data size of contactor product extension | product designation | Power contactor |
| size of contactor product extension • function module for communication • auxiliary switch power loss [W] for rated value of the current at AC in hot operating state • per pole • per pole • of main circuit rated value of the current without load current share typical surge voltage resistance • of main circuit rated value • of auxiliary circuit rated value • at AC shock resistance at rectangular impulse • at AC shock resistance with sine pulse • at AC at AB.5 / 5 ms, 11.6g / 10 ms mechanical service life (switching cycles) • of contactor typical • of the contactor with added electronically optimized auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block • ambient temperature during operation • ambient temperature during operation • ambient temperature during storage • of poles for main current circuit 10 unmber of poles for main current circuit 3 unmber of NO contacts for main contacts • operating voltage at AC-3 rated value maximum 690 V | product type designation | 3RT2 |
| product extension • function module for communication • auxiliary switch power loss [W] for rated value of the current at AC in hot operating state • per pole power loss [W] for rated value of the current without load current share typical surge voltage resistance • of main circuit rated value • of auxiliary circuit rated value • of main cortacts acc. to EN 60947-1 shock resistance at rectangular impulse • at AC mechanical service life (switching cycles) • of contactor typical • of the contactor with added electronically optimized auxiliary switch block typical • of the contactor with added auxiliary switch block typical reference code acc. to EC 81346-2 Ambient conditions installation altitude at height above sea level maximum • ambient temperature during operation • ambient temperature during storage • operating voltage at AC-3 rated value maximum • operating voltage at AC-3 rated value maximum 600 V | General technical data | |
| • function module for communication • auxiliary switch power loss [W] for rated value of the current at AC in hot operating state • per pole power loss [W] for rated value of the current without load current share typical surge voltage resistance • of main circuit rated value • of auxiliary circuit rated value • of the contacts ac. to EN 60947-1 shock resistance at rectangular impulse • at AC shock resistance with sine pulse • at AC shock resistance with sine pulse • of contactor life (switching cycles) • of contactor typical • of the contactor with added electronically optimized auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added electronically optimized | size of contactor | S2 |
| ower loss [W] for rated value of the current at AC in hot operating state o per pole power loss [W] for rated value of the current without load current share typical surge voltage resistance of main circuit rated value of auxiliary circuit rated value of auxiliary circuit rated value in at AC shock resistance at rectangular impulse of AC at AC shock resistance with sine pulse of contactor typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical reference code acc. to IEC 81346-2 Ambient conditions installation altitude at height above sea level maximum operating voltage at AC-3 rated value maximum 686 W acc. 2 W 885 W | product extension | |
| power loss [W] for rated value of the current at AC in hot operating state • per pole power loss [W] for rated value of the current without load current share typical surge voltage resistance • of main circuit rated value • of auxiliary circuit rated value • of auxiliary circuit rated value • of auxiliary circuit rated value maximum permissible voltage for safe isolation between coil and main contacts acc. to EN 60947-1 shock resistance at rectangular impulse • at AC shock resistance with sine pulse • at AC at AC shock resistance with sine pulse • of contactor typical • of the contactor with added electronically optimized auxiliary switch block typical • of the contactor with added auxiliary switch block typical reference code acc. to IEC 81346-2 Ambient conditions installation altitude at height above sea level maximum • ambient temperature during operation • ambient temperature during storage • operating voltage at AC-3 rated value maximum 600 V | function module for communication | No |
| operating state | auxiliary switch | Yes |
| power loss [W] for rated value of the current without load current share typical surge voltage resistance of main circuit rated value for MV of auxiliary circuit rated value of auxiliary circuit rated value of auxiliary circuit rated value for MV maximum permissible voltage for safe isolation between coil and main contacts acc. to EN 60947-1 shock resistance at rectangular impulse of the Contactor with sine pulse of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added electronically optimized auxiliary switch block typical 10 000 000 10 000 000 10 000 000 10 000 00 | | 6.6 W |
| Ioad current share typical Surge voltage resistance Of main circuit rated value Of Auxiliary circuit rated value value rated value value value rated value rated value value value | • per pole | 2.2 W |
| of main circuit rated value of auxiliary circuit rated value of auxiliary circuit rated value amximum permissible voltage for safe isolation between coil and main contacts acc. to EN 60947-1 shock resistance at rectangular impulse o at AC | | 18.5 W |
| of auxiliary circuit rated value maximum permissible voltage for safe isolation between coil and main contacts acc. to EN 60947-1 shock resistance at rectangular impulse ot AC ot AC interpretation of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical reference code acc. to IEC 81346-2 Ambient conditions installation altitude at height above sea level maximum one ambient temperature during operation one ambient temperature during storage one of NO contacts for main current circuit number of NO contacts for main contacts one of NO contacts for MO contacts for MO contacts for MO contacts | surge voltage resistance | |
| maximum permissible voltage for safe isolation between coil and main contacts acc. to EN 60947-1 shock resistance at rectangular impulse • at AC shock resistance with sine pulse • at AC at AC mechanical service life (switching cycles) • of contactor typical • of the contactor with added electronically optimized auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor | of main circuit rated value | 6 kV |
| coil and main contacts acc. to EN 60947-1 shock resistance at rectangular impulse • at AC shock resistance with sine pulse • at AC 18.5g / 5 ms, 7.4g / 10 ms mechanical service life (switching cycles) • of contactor typical • of the contactor with added electronically optimized auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • ambient conditions installation altitude at height above sea level maximum • ambient temperature during operation • ambient temperature during storage • ambient temperature during storage • abo °C • ambient temperature during storage • operating voltage at AC-3 rated value maximum 690 V | of auxiliary circuit rated value | 6 kV |
| * at AC * shock resistance with sine pulse * at AC * at AC * 18.5g / 5 ms, 11.6g / 10 ms mechanical service life (switching cycles) * of contactor typical * of the contactor with added electronically optimized auxiliary switch block typical * of the contactor with added auxiliary switch block typical * of the contactor with added auxiliary switch block typical * of the contactor with added auxiliary switch block typical * of the contactor with added auxiliary switch block typical * of the contactor with added auxiliary switch block typical reference code acc. to IEC 81346-2 Q Ambient conditions installation altitude at height above sea level maximum * ambient temperature during operation * ambient temperature during storage * of the contactor with added electronically optimized * ambient temperature during operation * ambient temperature during storage Main circuit number of poles for main current circuit 3 number of NO contacts for main contacts 3 • operating voltage at AC-3 rated value maximum 690 V | | 400 V |
| shock resistance with sine pulse • at AC mechanical service life (switching cycles) • of contactor typical • of the contactor with added electronically optimized auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical reference code acc. to IEC 81346-2 Ambient conditions installation altitude at height above sea level maximum • ambient temperature during operation • ambient temperature during storage Main circuit number of poles for main current circuit number of NO contacts for main contacts • operating voltage at AC-3 rated value maximum 10 000 000 10 000 000 10 000 000 20 000 10 000 000 10 000 000 10 000 00 | shock resistance at rectangular impulse | |
| at AC mechanical service life (switching cycles) of contactor typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical reference code acc. to IEC 81346-2 Ambient conditions installation altitude at height above sea level maximum ambient temperature during operation ambient temperature during storage Main circuit number of poles for main current circuit number of NO contacts for main contacts operating voltage at AC-3 rated value maximum 10 000 000 10 000 000 10 000 000 10 000 00 | • at AC | 11.8g / 5 ms, 7.4g / 10 ms |
| mechanical service life (switching cycles) • of contactor typical • of the contactor with added electronically optimized auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical reference code acc. to IEC 81346-2 Q Ambient conditions installation altitude at height above sea level maximum • ambient temperature during operation • ambient temperature during storage -25 +60 °C • ambient temperature during storage Main circuit number of poles for main current circuit number of NO contacts for main contacts • operating voltage at AC-3 rated value maximum 690 V | shock resistance with sine pulse | |
| of contactor typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical reference code acc. to IEC 81346-2 Q Ambient conditions installation altitude at height above sea level maximum ambient temperature during operation -25 +60 °C ambient temperature during storage -55 +80 °C Main circuit number of poles for main current circuit number of NO contacts for main contacts operating voltage at AC-3 rated value maximum 690 V | • at AC | 18.5g / 5 ms, 11.6g / 10 ms |
| of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical reference code acc. to IEC 81346-2 Ambient conditions installation altitude at height above sea level maximum ambient temperature during operation ambient temperature during storage -25 +60 °C ambient temperature during storage Main circuit number of poles for main current circuit number of NO contacts for main contacts operating voltage at AC-3 rated value maximum 5 000 000 10 000 000 10 000 000 10 000 000 10 000 000 10 000 00 10 | mechanical service life (switching cycles) | |
| auxiliary switch block typical of the contactor with added auxiliary switch block typical reference code acc. to IEC 81346-2 Ambient conditions installation altitude at height above sea level maximum ombient temperature during operation ombient temperature during storage -25 +60 °C ombient circuit number of poles for main current circuit number of NO contacts for main contacts operating voltage at AC-3 rated value maximum 10 000 000 10 000 000 10 000 000 10 000 00 | of contactor typical | 10 000 000 |
| typical reference code acc. to IEC 81346-2 Ambient conditions installation altitude at height above sea level maximum • ambient temperature during operation • ambient temperature during storage -25 +60 °C • ambient temperature during storage -55 +80 °C Main circuit number of poles for main current circuit number of NO contacts for main contacts • operating voltage at AC-3 rated value maximum 690 V | | 5 000 000 |
| Ambient conditions installation altitude at height above sea level maximum ● ambient temperature during operation • ambient temperature during storage -25 +60 °C • ambient temperature during storage -55 +80 °C Main circuit number of poles for main current circuit number of NO contacts for main contacts • operating voltage at AC-3 rated value maximum 690 V | The state of the s | 10 000 000 |
| installation altitude at height above sea level maximum • ambient temperature during operation • ambient temperature during storage -25 +60 °C • ambient temperature during storage -55 +80 °C Main circuit number of poles for main current circuit number of NO contacts for main contacts • operating voltage at AC-3 rated value maximum 690 V | reference code acc. to IEC 81346-2 | Q |
| ambient temperature during operation ambient temperature during storage -25 +60 °C Main circuit number of poles for main current circuit number of NO contacts for main contacts operating voltage at AC-3 rated value maximum -25 +60 °C 3 690 V | Ambient conditions | |
| ■ ambient temperature during storage -55 +80 °C Main circuit number of poles for main current circuit 3 number of NO contacts for main contacts 3 ● operating voltage at AC-3 rated value maximum 690 V | installation altitude at height above sea level maximum | 2 000 m |
| Main circuit number of poles for main current circuit number of NO contacts for main contacts • operating voltage at AC-3 rated value maximum 690 V | ambient temperature during operation | -25 +60 °C |
| number of poles for main current circuit number of NO contacts for main contacts operating voltage at AC-3 rated value maximum 690 V | ambient temperature during storage | -55 +80 °C |
| number of NO contacts for main contacts ● operating voltage at AC-3 rated value maximum 690 V | Main circuit | |
| operating voltage at AC-3 rated value maximum 690 V | number of poles for main current circuit | 3 |
| 1,000 | number of NO contacts for main contacts | 3 |
| | operating voltage at AC-3 rated value maximum | 690 V |
| | | |

| at AC-1 at 400 V at ambient temperature 40 °C rated value at AC-1 | 60 A |
|---|---|
| — up to 690 V at ambient temperature 40 °C rated value | 60 A |
| — up to 690 V at ambient temperature 60 °C rated value | 55 A |
| • at AC-3 | |
| — at 400 V rated value | 41 A |
| — at 500 V rated value | 41 A |
| — at 690 V rated value | 24 A |
| • at AC-4 at 400 V rated value | 35 A |
| • at AC-5a up to 690 V rated value | 52.8 A |
| at AC-5b up to 400 V rated value | 33.2 A |
| • at AC-6a | |
| up to 230 V for current peak value n=20 rated value | 36.5 A |
| up to 400 V for current peak value n=20 rated value | 36.5 A |
| up to 500 V for current peak value n=20 rated value | 36.5 A |
| — up to 690 V for current peak value n=20 rated value ◆ at AC-6a | 24 A |
| up to 230 V for current peak value n=30 rated value | 24.2 A |
| up to 400 V for current peak value n=30 rated value | 24.2 A |
| up to 500 V for current peak value n=30 rated value | 24.2 A |
| — up to 690 V for current peak value n=30 rated value | 24 A |
| | |
| minimum cross-section in main circuit at maximum AC-1 rated value | 16 mm ² |
| rated value operational current for approx. 200000 operating cycles at AC-4 | |
| operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value | 22 A |
| rated value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value | |
| rated value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current | 22 A |
| rated value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current • at 1 current path at DC-1 | 22 A 18.5 A |
| rated value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current • at 1 current path at DC-1 — at 24 V rated value | 22 A 18.5 A |
| rated value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current • at 1 current path at DC-1 — at 24 V rated value — at 110 V rated value | 22 A 18.5 A 55 A 4.5 A |
| rated value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current • at 1 current path at DC-1 — at 24 V rated value — at 110 V rated value — at 220 V rated value | 22 A 18.5 A 55 A 4.5 A 1 A |
| rated value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current • at 1 current path at DC-1 — at 24 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value | 22 A 18.5 A 55 A 4.5 A 1 A 0.4 A |
| rated value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current • at 1 current path at DC-1 — at 24 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value — at 600 V rated value — at 600 V rated value | 22 A 18.5 A 55 A 4.5 A 1 A |
| rated value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current • at 1 current path at DC-1 — at 24 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value — at 600 V rated value • with 2 current paths in series at DC-1 | 22 A 18.5 A 55 A 4.5 A 1 A 0.4 A 0.25 A |
| rated value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current • at 1 current path at DC-1 — at 24 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value — at 600 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value | 22 A 18.5 A 55 A 4.5 A 1 A 0.4 A 0.25 A |
| rated value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current • at 1 current path at DC-1 — at 24 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value — at 600 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value • at 24 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 110 V rated value | 22 A 18.5 A 55 A 4.5 A 1 A 0.4 A 0.25 A 55 A 45 A |
| rated value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current • at 1 current path at DC-1 — at 24 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value — at 600 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 110 V rated value — at 110 V rated value — at 220 V rated value — at 220 V rated value — at 220 V rated value | 22 A 18.5 A 55 A 4.5 A 1 A 0.4 A 0.25 A 55 A 45 A 5 A |
| rated value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current • at 1 current path at DC-1 — at 24 V rated value — at 110 V rated value — at 440 V rated value — at 600 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 110 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 110 V rated value — at 120 V rated value — at 440 V rated value — at 440 V rated value — at 440 V rated value | 22 A 18.5 A 55 A 4.5 A 1 A 0.4 A 0.25 A 55 A 45 A 5 A 1 A |
| rated value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current • at 1 current path at DC-1 — at 24 V rated value — at 110 V rated value — at 220 V rated value — at 600 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 110 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 110 V rated value — at 440 V rated value — at 440 V rated value — at 440 V rated value — at 600 V rated value — at 600 V rated value — at 600 V rated value | 22 A 18.5 A 55 A 4.5 A 1 A 0.4 A 0.25 A 55 A 45 A 5 A |
| rated value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current • at 1 current path at DC-1 — at 24 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value — at 600 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 110 V rated value — at 24 V rated value — at 440 V rated value — at 440 V rated value — at 600 V rated value | 22 A 18.5 A 55 A 4.5 A 1 A 0.4 A 0.25 A 55 A 45 A 5 A 1 A 0.8 A |
| rated value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current • at 1 current path at DC-1 — at 24 V rated value — at 110 V rated value — at 220 V rated value — at 600 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 110 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 110 V rated value — at 440 V rated value — at 440 V rated value — at 440 V rated value — at 600 V rated value — at 600 V rated value — at 600 V rated value | 22 A 18.5 A 55 A 4.5 A 1 A 0.4 A 0.25 A 55 A 45 A 5 A 1 A |
| rated value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current • at 1 current path at DC-1 — at 24 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value — at 600 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 110 V rated value — at 110 V rated value — at 440 V rated value — at 440 V rated value — at 600 V rated value — at 440 V rated value — at 440 V rated value — at 600 V rated value — at 600 V rated value • with 3 current paths in series at DC-1 — at 24 V rated value | 22 A 18.5 A 55 A 4.5 A 1 A 0.4 A 0.25 A 55 A 45 A 5 A 1 A 0.8 A |
| rated value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current • at 1 current path at DC-1 — at 24 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value — at 600 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 110 V rated value — at 110 V rated value — at 220 V rated value — at 24 V rated value — at 24 V rated value — at 24 V rated value — at 440 V rated value — at 440 V rated value — at 440 V rated value — at 24 V rated value — at 24 V rated value — at 24 V rated value • with 3 current paths in series at DC-1 — at 24 V rated value • at 110 V rated value — at 110 V rated value | 22 A 18.5 A 55 A 4.5 A 1 A 0.4 A 0.25 A 55 A 45 A 5 A 1 A 0.8 A |
| rated value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current • at 1 current path at DC-1 — at 24 V rated value — at 110 V rated value — at 440 V rated value — at 600 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 110 V rated value — at 110 V rated value — at 220 V rated value — at 220 V rated value — at 220 V rated value — at 24 V rated value — at 24 V rated value — at 440 V rated value — at 440 V rated value — at 24 V rated value — at 24 V rated value • with 3 current paths in series at DC-1 — at 24 V rated value • at 110 V rated value — at 220 V rated value — at 220 V rated value — at 220 V rated value | 22 A 18.5 A 55 A 4.5 A 1 A 0.4 A 0.25 A 55 A 45 A 5 A 1 A 0.8 A |
| rated value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current • at 1 current path at DC-1 — at 24 V rated value — at 110 V rated value — at 440 V rated value — at 600 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 110 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value — at 440 V rated value — at 440 V rated value — at 600 V rated value — at 600 V rated value — at 24 V rated value — at 110 V rated value — at 24 V rated value — at 24 V rated value — at 440 V rated value — at 440 V rated value — at 440 V rated value | 22 A 18.5 A 55 A 4.5 A 1 A 0.4 A 0.25 A 55 A 45 A 5 A 1 A 0.8 A 55 A 55 A 2.9 A |
| rated value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current • at 1 current path at DC-1 — at 24 V rated value — at 110 V rated value — at 440 V rated value — at 600 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 110 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value — at 440 V rated value — at 440 V rated value — at 600 V rated value — at 24 V rated value — at 220 V rated value — at 440 V rated value — at 24 V rated value — at 24 V rated value — at 24 V rated value — at 440 V rated value | 22 A 18.5 A 55 A 4.5 A 1 A 0.4 A 0.25 A 55 A 45 A 5 A 1 A 0.8 A 55 A 55 A 2.9 A |
| rated value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current • at 1 current path at DC-1 — at 24 V rated value — at 110 V rated value — at 220 V rated value — at 600 V rated value — at 600 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 110 V rated value — at 110 V rated value — at 440 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 24 V rated value — at 440 V rated value — at 600 V rated value | 22 A 18.5 A 55 A 4.5 A 1 A 0.4 A 0.25 A 55 A 45 A 5 A 1 A 0.8 A 55 A 55 A 2.9 A |

| — at 220 V rated value | 1 A |
|--|---|
| — at 440 V rated value | 0.1 A |
| — at 600 V rated value | 0.06 A |
| with 2 current paths in series at DC-3 at DC-5 | |
| — at 24 V rated value | 55 A |
| — at 110 V rated value | 25 A |
| — at 220 V rated value | 5 A |
| — at 440 V rated value | 0.27 A |
| — at 600 V rated value | 0.16 A |
| with 3 current paths in series at DC-3 at DC-5 | |
| — at 24 V rated value | 55 A |
| — at 110 V rated value | 55 A |
| — at 220 V rated value | 25 A |
| — at 440 V rated value | 0.6 A |
| — at 600 V rated value | 0.35 A |
| operating power | |
| at AC-2 at 400 V rated value | 18.5 kW |
| • at AC-3 | |
| — at 230 V rated value | 11 kW |
| — at 400 V rated value | 18.5 kW |
| — at 500 V rated value | 22 kW |
| — at 690 V rated value | 22 kW |
| operating power for approx. 200000 operating cycles | ZZ NVV |
| at AC-4 | |
| at 400 V rated value | 11.6 kW |
| at 690 V rated value | 16.8 kW |
| operating apparent power at AC-6a | |
| up to 230 V for current peak value n=20 rated value | 14.5 kV·A |
| up to 400 V for current peak value n=20 rated value | 25.2 kV·A |
| up to 500 V for current peak value n=20 rated value | 31.6 kV·A |
| • up to 690 V for current peak value n=20 rated value | 28.6 kV·A |
| operating apparent power at AC-6a | |
| up to 230 V for current peak value n=30 rated value | 9.6 kV·A |
| up to 400 V for current peak value n=30 rated value | 16.8 kV·A |
| • up to 500 V for current peak value n=30 rated value | 21 kV·A |
| up to 690 V for current peak value n=30 rated value | 28.6 kV·A |
| short-time withstand current in cold operating state | |
| up to 40 °C | |
| limited to 1 s switching at zero current maximum | 843 A; Use minimum cross-section acc. to AC-1 rated value |
| limited to 5 s switching at zero current maximum | 596 A; Use minimum cross-section acc. to AC-1 rated value |
| limited to 10 s switching at zero current maximum | 400 A; Use minimum cross-section acc. to AC-1 rated value |
| limited to 30 s switching at zero current maximum | 241 A; Use minimum cross-section acc. to AC-1 rated value |
| Iimited to 60 s switching at zero current maximum | 196 A; Use minimum cross-section acc. to AC-1 rated value |
| no-load switching frequency | |
| • at AC | 5 000 1/h |
| operating frequency | |
| • at AC-1 maximum | 1 200 1/h |
| • at AC-2 maximum | 750 1/h |
| • at AC-3 maximum | 1 000 1/h |
| • at AC-4 maximum | 300 1/h |
| Control circuit/ Control | |
| type of voltage of the control supply voltage | AC |
| control supply voltage at AC | |
| • at 50 Hz rated value | 110 V |
| at 60 Hz rated value | 120 V |
| operating range factor control supply voltage rated value of magnet coil at AC | |
| ● at 50 Hz | 0.8 1.1 |
| ● at 60 Hz | 0.8 1.1 |
| | |

| apparent pick-up power of magnet coil at AC | |
|---|---|
| ● at 50 Hz | 212 V·A |
| ● at 60 Hz | 188 V·A |
| inductive power factor with closing power of the coil | |
| ● at 50 Hz | 0.69 |
| ● at 60 Hz | 0.65 |
| apparent holding power of magnet coil at AC | |
| ● at 50 Hz | 18.5 V·A |
| ● at 60 Hz | 16.5 V·A |
| inductive power factor with the holding power of the coil | |
| ● at 50 Hz | 0.36 |
| ● at 60 Hz | 0.39 |
| closing delay | |
| • at AC | 10 80 ms |
| opening delay | |
| • at AC | 10 18 ms |
| arcing time | 10 20 ms |
| control version of the switch operating mechanism | Standard A1 - A2 |
| Auxiliary circuit | |
| number of NC contacts for auxiliary contacts instantaneous contact | 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 | 40 A |
| • at 600 V rated value | 41 A |
| yielded mechanical performance [hp] | |
| for single-phase AC motor | |
| — at 110/120 V rated value | 3 hp |
| — at 230 V rated value | 7.5 hp |
| • for 3-phase AC motor | |
| — at 200/208 V rated value | 10 hp |
| | |
| at 220/230 V rated value | 15 hp |
| — at 220/230 V rated value— at 460/480 V rated value | 15 hp 30 hp |

| — at 575/600 V rated value | 40 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: 160 A (690 V, 100 kA), aM: 80 A (690 V, 100 kA), BS88: 125 A (415 V, 80 kA) |
| — with type of assignment 2 required | gG: 80A (690V,100kA), aM: 50A (690V,100kA), BS88: 63A (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 | 114 mm |
| width | 55 mm |
| depth | 130 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 | screw-type terminals |
| for auxiliary and control circuit | screw-type terminals |
| at contactor for auxiliary contacts | Screw-type terminals |
| of magnet coil | Screw-type terminals |
| type of connectable conductor cross-sections | |
| • for main contacts | |
| — solid or stranded | 2x (1 35 mm²), 1x (1 50 mm²) |
| finely stranded with core end processing | 2x (1 25 mm²), 1x (1 35 mm²) |
| at AWG cables for main contacts | 2x (18 2), 1x (18 1) |
| connectable conductor cross-section for main contacts | |
| finely stranded with core end processing | 1 35 mm² |
| connectable conductor cross-section for auxiliary | |
| contacts | |
| solid or stranded | 0.5 2.5 mm ² |
| finely stranded with core end processing | 0.5 2.5 mm ² |
| type of connectable conductor cross-sections | |
| for auxiliary contacts | |
| — solid or stranded | 2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²) |
| finely stranded with core end processing | 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) |
| at AWG cables for auxiliary contacts | 2x (20 16), 2x (18 14) |
| AWG number as coded connectable conductor | 18 1 |

AWG number as coded connectable conductor cross section for auxiliary contacts

 ty related data

O value with high demand rate acc. to SN 31920

1 000 00

| Safety related data | |
|---|--|
| B10 value with high demand rate acc. to SN 31920 | 1 000 000 |
| proportion of dangerous failures | |
| with low demand rate acc. to SN 31920 | 40 % |
| with high demand rate acc. to SN 31920 | 73 % |
| failure rate [FIT] with low demand rate acc. to SN 31920 | 100 FIT |
| product function | |
| mirror contact acc. to IEC 60947-4-1 | Yes |
| positively driven operation acc. to IEC 60947-5-1 | No |
| T1 value for proof test interval or service life acc. to IEC 61508 | 20 y |
| protection class IP on the front acc. to IEC 60529 | IP20 |
| touch protection on the front acc. to IEC 60529 | finger-safe, for vertical contact from the front |
| suitability for use safety-related switching OFF | Yes |

Certificates/ approvals

General Product Approval















Declaration of Conformity

Test Certificates

Marine / Shipping



Miscellaneous

Special Test Certificate Type Test
Certificates/Test
Report





Marine / Shipping



LRS









Confirmation

other

other

Confirmation

Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT2035-1AK60

Cax online generator

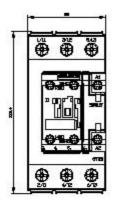
 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RT2035-1AK60}}$

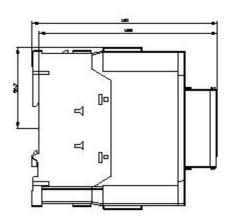
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

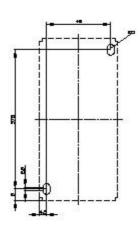
https://support.industry.siemens.com/cs/ww/en/ps/3RT2035-1AK60

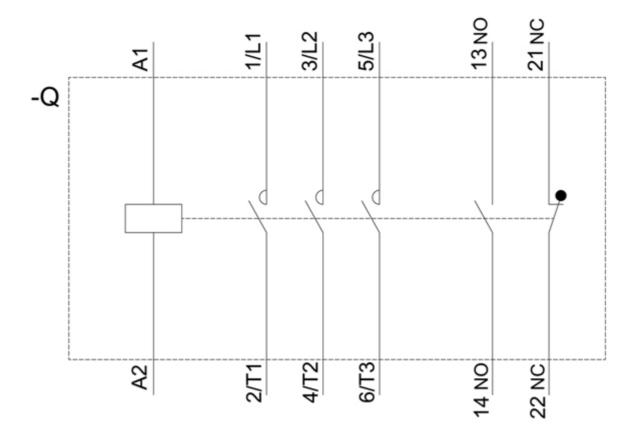
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2035-1AK60&lang=en

Further characteristics (e.g. electrical endurance, switching frequency)
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2035-1AK60&objecttype=14&gridview=view1









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