SIEMENS

Data sheet 3RT2027-1AF04



power contactor, AC-3e/AC-3, 32 A, 15 kW / 400 V, 3-pole, 110 V AC, 50 Hz, auxiliary contacts: 2 NO + 2 NC, screw terminal, removable auxiliary switch

| size of contactor product extension • function module for communication • auxiliary switch • auxiliary switch • at AC in hot operating state • at AC in hot operating state per pole • during the size of auxiliary circuit with degree of pollution 3 rated value • of main circuit with degree of pollution 3 rated value • of main circuit with degree of pollution 3 rated value • of auxiliary circuit with degree of pollution 3 rated value • of auxiliary circuit with degree of pollution 3 rated value • of auxiliary circuit with degree of pollution 3 rated value • of auxiliary circuit rated value • of auxiliary switch 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 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 aux | product brand name | SIRIUS |
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| size of contactor product extension • function module for communication • suixiliary switch • auxiliary switch • at AC in hot operating state • at AC in hot operating state per pole • without load current share typical • of main circuit with degree of pollution 3 rated value • of auxiliary circuit with degree of pollution 3 rated value • of auxiliary circuit with degree of pollution 3 rated value • of auxiliary circuit with degree of pollution 3 rated value • of auxiliary circuit with degree of pollution 3 rated value • of auxiliary circuit rated value • of auxiliary ci | product designation | Power contactor |
| size of contactor product extension • function module for communication • auxiliary switch • auxiliary switch • at AC in hot operating state • at AC in hot operating state per pole • during the size of auxiliary circuit with degree of pollution 3 rated value • of main circuit with degree of pollution 3 rated value • of main circuit with degree of pollution 3 rated value • of auxiliary circuit with degree of pollution 3 rated value • of auxiliary circuit with degree of pollution 3 rated value • of auxiliary circuit with degree of pollution 3 rated value • of auxiliary circuit rated value • of auxiliary switch 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 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 aux | product type designation | 3RT2 |
| product extension • function module for communication • auxiliary switch • at AC in hot operating state can in the current • at AC in hot operating state pole • without load current share typical • of main circuit with degree of pollution 3 rated value • of auxiliary circuit with degree of pollution 3 rated value • of auxiliary circuit with degree of pollution 3 rated value • of amin circuit with degree of pollution 3 rated value • of amin circuit with degree of pollution 3 rated value • of auxiliary circuit rated value • at AC • of contactor with sine pulse • at AC • of contactor with added electronically optimized • of the contactor with added electronically optimized • 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 | General technical data | |
| • function module for communication • auxillary switch power loss [W] for rated value of the current • at AC in hot operating state per pole • without load current share typical • of main circuit with degree of pollution 3 rated value • of auxillary circuit with degree of pollution 3 rated value • of auxillary circuit with degree of pollution 3 rated value • of auxillary circuit rated value • of auxillary switch block typical • of the contactor with added electronically optimized auxillary switch block typical • of the contactor with added electronically optimized auxillary switch block typical • of the contactor with added auxillary switch block typical • of the contactor with added electronically optimized auxillary switch block typical • of the contactor with added electronically optimized auxillary switch | size of contactor | S0 |
| auxiliary switch power loss [W] for rated value of the current | product extension | |
| power loss [W] for rated value of the current at AC in hot operating state at AC in hot operating state per pole without load current share typical of auxiliary circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value of auxiliary circuit rated value of auxiliary sinch bioc value 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 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) Outol/2009 Ambient conditions installation altitude at height above sea level maximum ambient temperature outring operation outring operation outring storage -55 +80 °C elative humidity minimum relative humidity minimum 10 % 95 % | function module for communication | No |
| at AC in hot operating state at AC in hot operating state per pole without load current share typical insulation voltage of main circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value value surge voltage resistance of main circuit rated value of auxiliary circuit rated value expectation of main contacts according to EN 60947-1 shock resistance at rectangular impulse ot AC shock resistance with sine pulse ot 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 of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical steference code according to IEC 81346-2 Questance Prohibitance (Date) Arbient conditions installation altitude at height above sea level maximum ambient temperature during operation of uring storage relative humidity minimum relative humidity minimum relative humidity at 55 °C according to IEC 60068-2-30 maximum | auxiliary switch | No |
| at AC in hot operating state per pole without load current share typical insulation voltage of main circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value of an auxiliary circuit with degree of pollution 3 rated value of main circuit rated value of auxiliary circuit rated value maximum permissible voltage for safe isolation between coil and main contacts according to EN 60947-1 shock resistance at rectangular impulse of at AC shock resistance with sine pulse of contactor 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 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 of the contactor with added electronically optimized auxiliary | power loss [W] for rated value of the current | |
| without load current share typical insulation voltage of main circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value of main circuit rated value of auxiliary sain contactor with auxiliary sain passed auxiliary | at AC in hot operating state | 6.3 W |
| insulation voltage of main circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value surge voltage resistance of main circuit rated value of auxiliary circuit rated value maximum permissible voltage for safe isolation between coil and main contacts according to EN 60947-1 shock resistance at rectangular impulse of at AC shock resistance with sine pulse of the Contactor with sine pulse of the contactor typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary swit | at AC in hot operating state per pole | 2.3 W |
| of main circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value surge voltage resistance of main circuit rated value of auxiliary circuit rated value of auxiliary circuit rated value of auxiliary circuit rated value aximum permissible voltage for safe isolation between coil and main contacts according to EN 60947-1 shock resistance at rectangular impulse of at AC at AC at AC at AC at AC at AC according to EN 60947-1 shock resistance with sine pulse of contactor with sine pulse 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 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 auxiliary switch block typical | without load current share typical | 9.8 W |
| of auxillary circuit with degree of pollution 3 rated value surge voltage resistance of main circuit rated value of auxillary circuit rated value aximum permissible voltage for safe isolation between coil and main contacts according to EN 60947-1 shock resistance at rectangular impulse of the Contactor with sine pulse of contactor typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with adde | insulation voltage | |
| value surge voltage resistance • of main circuit rated value • of auxiliary circuit rated value maximum permissible voltage for safe isolation between coil and main contacts according to EN 60947-1 shock resistance at rectangular impulse • at AC shock resistance with sine pulse • at AC at AC mechanical service life (operating 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 conta | of main circuit with degree of pollution 3 rated value | 690 V |
| of main circuit rated value of auxiliary circuit rated value of auxiliary circuit rated value of auxiliary circuit rated value aximum permissible voltage for safe isolation between coil and main contacts according to EN 60947-1 shock resistance at rectangular impulse o at AC shock resistance with sine pulse ot AC shock resistance with sine pulse ot 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 blo | , , | 690 V |
| of auxiliary circuit rated value maximum permissible voltage for safe isolation between coil and main contacts according to EN 60947-1 shock resistance at rectangular impulse | surge voltage resistance | |
| maximum permissible voltage for safe isolation between coil and main contacts according to EN 60947-1 shock resistance at rectangular impulse • at AC shock resistance with sine pulse • at AC 13,5g / 5 ms, 8,3g / 10 ms mechanical service life (operating 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 according to IEC 81346-2 Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage relative humidity minimum relative humidity minimum relative humidity at 55 °C according to IEC 60068-2-30 maximum | of main circuit rated value | 6 kV |
| coil and main contacts according to EN 60947-1 shock resistance at rectangular impulse • at AC shock resistance with sine pulse • at AC according 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 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 • 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 • 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 • of the contactor with added electronically optimized auxiliary switch block typical • of the contactor with added electronically optimized auxiliary | of auxiliary circuit rated value | 6 kV |
| • at AC shock resistance with sine pulse • at AC at AC mechanical service life (operating 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 reference code according to IEC 81346-2 Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage relative humidity minimum relative humidity at 55 °C according to IEC 60068-2-30 maximum 8,3g / 5 ms, 5,3g / 10 ms 10,000 000 10,00 | | 400 V |
| shock resistance with sine pulse • at AC mechanical service life (operating 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 reference code according to IEC 81346-2 Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage relative humidity minimum relative humidity at 55 °C according to IEC 60068-2-30 maximum | shock resistance at rectangular impulse | |
| at AC mechanical service life (operating 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 according to IEC 81346-2 Substance Prohibitance (Date) 10/01/2009 Ambient conditions installation altitude at height above sea level maximum ambient temperature during operation during storage relative humidity minimum relative humidity at 55 °C according to IEC 60068-2-30 maximum | • at AC | 8,3g / 5 ms, 5,3g / 10 ms |
| mechanical service life (operating 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 according to IEC 81346-2 Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature of during operation of during storage relative humidity minimum relative humidity at 55 °C according to IEC 60068-2-30 maximum | 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 according to IEC 81346-2 Substance Prohibitance (Date) 10/01/2009 Ambient conditions installation altitude at height above sea level maximum ambient temperature during operation during storage relative humidity minimum relative humidity at 55 °C according to IEC 60068-2-30 maximum | • at AC | 13,5g / 5 ms, 8,3g / 10 ms |
| of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical reference code according to IEC 81346-2 Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature o during operation o during storage relative humidity minimum relative humidity at 55 °C according to IEC 60068-2-30 maximum 5 000 000 10 000 000 10 000 000 10 000 00 | mechanical service life (operating cycles) | |
| auxiliary switch block typical of the contactor with added auxiliary switch block typical reference code according to IEC 81346-2 Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature of during operation of during storage relative humidity minimum relative humidity at 55 °C according to IEC 60068-2-30 maximum 10 000 000 10 000 000 10 000 000 10 000 00 | of contactor typical | 10 000 000 |
| typical reference code according to IEC 81346-2 Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage relative humidity minimum relative humidity at 55 °C according to IEC 60068-2-30 maximum Output Description 10/01/2009 2 000 m 3 000 m 4 000 °C 5 000 °C | | 5 000 000 |
| Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage relative humidity minimum relative humidity at 55 °C according to IEC 60068-2-30 maximum 10/01/2009 2 000 m -25 +60 °C -55 +80 °C 10 % 95 % | • | 10 000 000 |
| installation altitude at height above sea level maximum ambient temperature • during operation • during storage relative humidity minimum relative humidity at 55 °C according to IEC 60068-2-30 maximum 2 000 m -25 +60 °C -55 +80 °C 10 % 95 % | reference code according to IEC 81346-2 | Q |
| installation altitude at height above sea level maximum ambient temperature • during operation • during storage relative humidity minimum relative humidity at 55 °C according to IEC 60068-2-30 maximum 2 000 m -25 +60 °C -55 +80 °C 10 % 95 % | Substance Prohibitance (Date) | 10/01/2009 |
| ambient temperature • during operation • during storage • during storage -55 +80 °C relative humidity minimum relative humidity at 55 °C according to IEC 60068-2-30 maximum | Ambient conditions | |
| ◆ during operation ◆ during storage ◆ during storage relative humidity minimum relative humidity at 55 °C according to IEC 60068-2-30 maximum relative humidity at 55 °C according to IEC 60068-2-30 relative humidity at 55 °C according to IEC 60068-2-30 | installation altitude at height above sea level maximum | 2 000 m |
| ◆ during storage −55 +80 °C relative humidity minimum relative humidity at 55 °C according to IEC 60068-2-30 maximum −55 +80 °C 10 % 95 % | ambient temperature | |
| relative humidity minimum 10 % relative humidity at 55 °C according to IEC 60068-2-30 maximum 10 % 95 % | during operation | -25 +60 °C |
| relative humidity at 55 °C according to IEC 60068-2-30 95 % maximum | during storage | -55 +80 °C |
| maximum | relative humidity minimum | 10 % |
| Main circuit | | 95 % |
| | Main circuit | |

| number of poles for main current circuit | 3 |
|---|--------|
| number of NO contacts for main contacts | 3 |
| operating voltage | 000 \ |
| at AC-3 rated value maximum | 690 V |
| at AC-3e rated value maximum | 690 V |
| operational current | |
| at AC-1 at 400 V at ambient temperature 40 °C rated value | 50 A |
| ● at AC-1 | |
| — up to 690 V at ambient temperature 40 °C rated value | 50 A |
| up to 690 V at ambient temperature 60 °C rated value | 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 AC-3e | |
| — at 400 V rated value | 32 A |
| — at 500 V rated value | 32 A |
| — at 690 V rated value | 21 A |
| at AC-4 at 400 V rated value | 22 A |
| • at AC-5a up to 690 V rated value | 44 A |
| at AC-5b up to 400 V rated value at AC-5b up to 400 V rated value | 26.5 A |
| • at AC-6a | |
| up to 230 V for current peak value n=20 rated value | 30.8 A |
| — up to 400 V for current peak value n=20 rated value | 30.8 A |
| — up to 500 V for current peak value n=20 rated value | 27 A |
| — up to 690 V for current peak value n=20 rated value | 21 A |
| at AC-6a up to 230 V for current peak value n=30 rated | 20.5 A |
| value — up to 400 V for current peak value n=30 rated value | 20.5 A |
| up to 500 V for current peak value n=30 rated value | 18 A |
| — up to 690 V for current peak value n=30 rated value | 18 A |
| minimum cross-section in main circuit at maximum AC-1 rated value | 10 mm² |
| operational current for approx. 200000 operating | |
| cycles at AC-4 | |
| at 400 V rated value | 12 A |
| at 690 V rated value | 12 A |
| operational current | |
| • at 1 current path at DC-1 | |
| — at 24 V rated value | 35 A |
| — at 60 V rated value | 20 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 60 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 |
| with 3 current paths in series at DC-1 | |
| — at 24 V rated value | 35 A |
| — at 60 V rated value | 35 A |
| and a second region of | |

| — 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 60 V rated value | 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 60 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 60 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 | 7.5.100/ |
| — at 230 V rated value | 7.5 kW |
| — at 400 V rated value | 15 kW |
| — at 500 V rated value — at 690 V rated value | 15 kW 18.5 kW |
| operating power for approx. 200000 operating cycles | 10.3 KVV |
| 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 | 341 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 | 199 A; Use minimum cross-section acc. to AC-1 rated value |
| limited to 60 s switching at zero current maximum | 162 A; Use minimum cross-section acc. to AC-1 rated value |
| no-load switching frequency | 5 000 A/L |
| • at AC | 5 000 1/h |
| operating frequency | 4 000 4/5 |
| • at AC-1 maximum | 1 000 1/h |
| • at AC-2 maximum | 750 1/h |
| at AC-3 maximumat AC-3e maximum | 750 1/h |
| | 750 1/h |
| at AC-4 maximum | 250 1/h |

| type of voltage of the control supply voltage control supply voltage at AC • at 50 Hz rated value operating range factor control supply voltage rated value of magnet coil at AC • at 50 Hz apparent pick-up power of magnet coil at AC • at 50 Hz inductive power factor with closing power of the coil • at 50 Hz inductive power factor with the holding power of the coil • at 50 Hz inductive power factor with the holding power of the coil • at 50 Hz inductive power factor with the holding power of the coil • at 50 Hz inductive power factor with the holding power of the coil • at 50 Hz inductive power factor with the holding power of the coil • at 50 Hz inductive power factor with the holding power of the coil • at 50 Hz inductive power factor with the holding power of the coil • at 50 Hz inductive power factor with the holding power of the coil • at 50 Hz inductive power factor with the holding power of the coil • at 50 Hz inductive power factor with the holding power of the coil • at 50 Hz inductive power factor with the holding power of the coil • at 50 Hz inductive power factor with the holding power of the coil • at 50 Hz inductive power factor with the holding power of the coil • at 50 Hz inductive power factor with the holding power of the coil • at 50 Hz inductive power factor with the holding power of the coil • at 50 Hz inductive power factor with closing power of the coil • at 50 Hz inductive power factor with closing power of the coil • at 50 Hz inductive power factor with closing power of the coil • at 50 Hz inductive power factor with closing power of the coil • at 50 Hz inductive power factor with closing power of the coil • at 50 Hz inductive power factor with closing power of the coil • at 50 Hz inductive power factor with closing power of the coil • at 50 Hz inductive power factor with closing power of the coil • at 50 Hz inductive power factor with closing power of the coil • at 50 Hz inductive power factor with closing power of the coil • at 50 Hz inductive power factor with closing power of the coi | |
|--|--|
| control supply voltage at AC • at 50 Hz rated value operating range factor control supply voltage rated value of magnet coil at AC • at 50 Hz apparent pick-up power of magnet coil at AC • at 50 Hz inductive power factor with closing power of the coil • at 50 Hz apparent holding power of magnet coil at AC • at 50 Hz apparent holding power of magnet coil at AC • at 50 Hz inductive power factor with the holding power of the coil • at 50 Hz closing delay • at AC opening delay • at AC arcing time control version of the switch operating mechanism 110 V 0.8 1.1 110 V 0.8 1.1 77 VA 0.82 9.8 VA 0.25 10.25 10.25 10.25 10.25 10.25 10.25 10.30 | |
| at 50 Hz rated value operating range factor control supply voltage rated value of magnet coil at AC at 50 Hz apparent pick-up power of magnet coil at AC at 50 Hz inductive power factor with closing power of the coil at 50 Hz apparent holding power of magnet coil at AC at 50 Hz apparent holding power of magnet coil at AC at 50 Hz inductive power factor with the holding power of the coil at 50 Hz closing delay at AC at AC oet AC at AC oet AC at AC oet AC at AC oet AC oet AC oet SO Hz closing delay at AC oet AC oet AC oet AC oet SO Hz closing delay at AC oet AC self A | |
| operating range factor control supply voltage rated value of magnet coil at AC • at 50 Hz apparent pick-up power of magnet coil at AC • at 50 Hz inductive power factor with closing power of the coil • at 50 Hz apparent holding power of magnet coil at AC • at 50 Hz apparent holding power of magnet coil at AC • at 50 Hz inductive power factor with the holding power of the coil • at 50 Hz closing delay • at AC opening delay • at AC arcing time control version of the switch operating mechanism O.8 1.1 77 VA 0.8 40 0.82 9.8 VA 0.25 closing delay • at AC 4 16 ms 10 10 ms Standard A1 - A2 | |
| value of magnet coil at AC • at 50 Hz apparent pick-up power of magnet coil at AC • at 50 Hz inductive power factor with closing power of the coil • at 50 Hz apparent holding power of magnet coil at AC • at 50 Hz inductive power factor with the holding power of the coil • at 50 Hz inductive power factor with the holding power of the coil • at 50 Hz closing delay • at AC opening delay • at AC arcing time control version of the switch operating mechanism O.8 1.1 77 VA 0.82 9.8 VA 0.25 closing delay • at AC 4 16 ms 10 10 ms Standard A1 - A2 | |
| apparent pick-up power of magnet coil at AC • at 50 Hz inductive power factor with closing power of the coil • at 50 Hz apparent holding power of magnet coil at AC • at 50 Hz inductive power factor with the holding power of the coil • at 50 Hz inductive power factor with the holding power of the coil • at 50 Hz closing delay • at AC opening delay • at AC arcing time control version of the switch operating mechanism Auxiliary circuit 77 VA 77 VA 77 VA 0.82 9.8 VA 9.8 VA 4 16 ms 10 10 ms Standard A1 - A2 | |
| at 50 Hz inductive power factor with closing power of the coil at 50 Hz apparent holding power of magnet coil at AC at 50 Hz at 50 Hz inductive power factor with the holding power of the coil at 50 Hz closing delay at AC a | |
| inductive power factor with closing power of the coil • at 50 Hz apparent holding power of magnet coil at AC • at 50 Hz inductive power factor with the holding power of the coil • at 50 Hz closing delay • at AC • at AC o at AC o at AC standard A1 - A2 Auxiliary circuit | |
| at 50 Hz apparent holding power of magnet coil at AC at 50 Hz at 50 Hz inductive power factor with the holding power of the coil at 50 Hz at 50 Hz closing delay at AC opening delay at AC opening delay at AC at | |
| apparent holding power of magnet coil at AC • at 50 Hz inductive power factor with the holding power of the coil • at 50 Hz closing delay • at AC opening delay • at AC arcing time control version of the switch operating mechanism Auxiliary circuit 9.8 VA 9.8 VA 9.8 VA 9.8 VA 4 16 ms 5 40 ms 6 40 ms 7 16 ms 10 10 ms 8 40 ms 9.8 VA Standard A1 - A2 | |
| at 50 Hz inductive power factor with the holding power of the coil at 50 Hz at 50 Hz closing delay at AC opening delay at AC at AC arcing time control version of the switch operating mechanism 9.8 VA 9.8 VA | |
| inductive power factor with the holding power of the coil • at 50 Hz closing delay • at AC opening delay • at AC arcing time control version of the switch operating mechanism O.25 8 40 ms 4 16 ms 10 10 ms Standard A1 - A2 Auxiliary circuit | |
| coil • at 50 Hz closing delay • at AC opening delay • at AC arcing time control version of the switch operating mechanism one of the switch operating mechanism Output Outpu | |
| at 50 Hz closing delay at AC opening delay at AC at AC arcing time control version of the switch operating mechanism Auxiliary circuit 0.25 8 40 ms 4 16 ms 10 10 ms Standard A1 - A2 Auxiliary circuit | |
| closing delay | |
| ◆ at AC opening delay ◆ at AC arcing time control version of the switch operating mechanism Auxiliary circuit 8 40 ms 4 16 ms 10 10 ms Standard A1 - A2 | |
| opening delay | |
| ● at AC arcing time control version of the switch operating mechanism Auxiliary circuit 4 16 ms 10 10 ms Standard A1 - A2 | |
| arcing time 10 10 ms control version of the switch operating mechanism Standard A1 - A2 Auxiliary circuit | |
| control version of the switch operating mechanism Standard A1 - A2 Auxiliary circuit | |
| Auxiliary circuit | |
| | |
| number of NC contacts for auxiliary contacts 2 | |
| instantaneous contact | |
| number of NO contacts for auxiliary contacts instantaneous contact 2 | |
| operational current at AC-12 maximum 10 A | |
| operational current at AC-15 | |
| • at 230 V rated value 6 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 at 220 V rated value 1 A | |
| • at 600 V rated value • at 600 V rated value 0.15 A | |
| operational current at DC-13 | |
| • at 24 V rated value 6 A | |
| • at 48 V rated value 2 A | |
| • at 60 V rated value 2 A | |
| • at 110 V rated value 2 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 / Q600 | |

Short-circuit protection design of the fuse link • for short-circuit protection of the main circuit gG: 125A (690V,100kA), aM: 50A (690V,100kA), BS88: 125A with type of coordination 1 required (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 gG: 10 A (500 V, 1 kA) required Installation/ mounting/ dimensions mounting position +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface fastening method screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 Yes • side-by-side mounting 85 mm height width 45 mm depth 141 mm required spacing • with side-by-side mounting 10 mm forwards 10 mm - upwards - downwards 10 mm - at the side 0 mm • for grounded parts 10 mm — forwards 10 mm - upwards - 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 2x (1 ... 2.5 mm²), 2x (2.5 ... 10 mm²) solid or stranded 2x (1 ... 2.5 mm²), 2x (2.5 ... 10 mm²) • finely stranded with core end processing 2x (1 ... 2.5 mm²), 2x (2.5 ... 6 mm²), 1x 10 mm² connectable conductor cross-section for main contacts solid 1 ... 10 mm² 1 ... 10 mm² • finely stranded with core end processing 1 ... 10 mm² connectable conductor cross-section for auxiliary contacts 0.5 ... 2.5 mm² solid or stranded • finely stranded with core end processing 0.5 ... 2.5 mm² 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 cross section • for main contacts 16 ... 8 · for auxiliary contacts 20 ... 14 Safety related data product function

• mirror contact according to IEC 60947-4-1

 positively driven operation according to IEC 60947-5-1

B10 value with high demand rate according to SN 31920 proportion of dangerous failures

• with low demand rate according to SN 31920

• with high demand rate according to SN 31920

failure rate [FIT] with low demand rate according to SN 31920

T1 value for proof test interval or service life according to IEC 61508

protection class IP on the front according to IEC 60529

touch protection on the front according to IEC 60529 suitability for use

· safety-related switching OFF

Yes

No

450 000

40 %

73 % 100 FIT

....

20 a

IP20

finger-safe, for vertical contact from the front

Yes

Certificates/ approvals

General Product Approval



Confirmation





<u>KC</u>



EMC

Functional Safety/Safety of Machinery

Declaration of Conformity

Test Certificates



Type Examination
Certificate





Type Test Certificates/Test Report

Special Test Certificate

Marine / Shipping













other

Railway

Confirmation



Confirmation

Vibration and Shock

Further information

Siemens has decided to exit the Russian market (see here).

https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

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=3RT2027-1AF04

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2027-1AF04

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

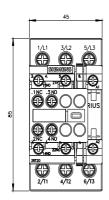
https://support.industry.siemens.com/cs/ww/en/ps/3RT2027-1AF04

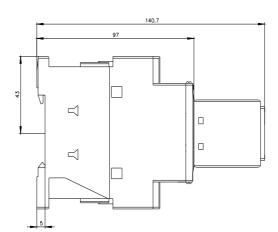
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2027-1AF04&lang=en

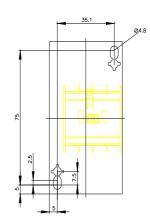
Characteristic: Tripping characteristics, I2t, Let-through current

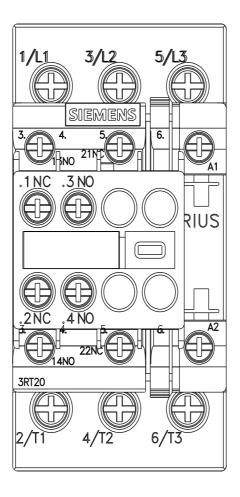
https://support.industry.siemens.com/cs/ww/en/ps/3RT2027-1AF04/char

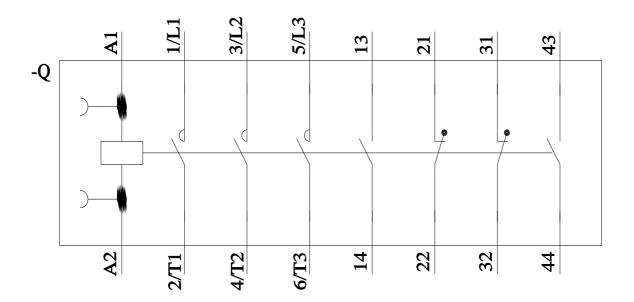
Further characteristics (e.g. electrical endurance, switching frequency)
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2027-1AF04&objecttype=14&gridview=view1











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