SIEMENS

Data sheet

3RT2023-1AC20



power contactor, AC-3e/AC-3, 9 A, 4 kW / 400 V, 3-pole, 24 V AC, 50/60 Hz, auxiliary contacts: 1 NO + 1 NC, screw terminal, size: S0

| product brand name SIRUS product brand designation Power contactor product type designation SRT2 Canazi technical data So size of contactor So product stension No • function module for communication No • auxiliary switch Yes power loss [VI] for rated value of the current 0.6 W • at AC in hot operating state 0.6 W • at AC in hot operating state per pole 0.2 W • without load current share typical 2 W • of main circult with degree of pollution 3 rated value 680 V • of auxiliary circuit with degree of pollution 3 rated value 680 V • of auxiliary circuit rated value 6 kV • of auxiliary circuit rated value 10 V • of auxiliary circuit rated value 6 kV • of auxiliary circuit rated value 10 00 V • | | |
|--|---|----------------------------|
| product type designation 3RT2 Caneral technical data | product brand name | SIRIUS |
| General technical data S0 size of contactor S0 product extension • function module for communication No • auxiliary switch Yes power loss [W] for rated value of the current • at AC in hot operating state 0.6 W • at AC in hot operating state proje 0.2 W • without load current share typical 0.9 V • of main circuit with degree of pollution 3 rated value 680 V • of main circuit with degree of pollution 3 rated value 690 V • of auxiliary circuit with degree of pollution 3 rated value 64V • of auxiliary circuit rated value 64V • at AC 7.5g / 5 ms, 4.7g / 10 ms mechanical service life (operating cycles) 10 000 000 • of the contactor with added auxiliary switch block typical 500 000 • of the contactor with added auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary | product designation | Power contactor |
| size of contactor S0 product extension No • function module for communication No • auxiliary switch Yes power loss [W] for rated value of the current 0.6 W • at AC in hot operating state per pole 0.2 W • without load current share typical 2 W Insulation voltage 680 V • of main circuit with degree of pollution 3 rated value 690 V • of main circuit with degree of pollution 3 rated value 690 V • of auxiliary circuit rated value 64V • of auxiliary siture biologies 7,5g / 5 ms, 4,7g / 10 ms shock resistance at rectangular impulse 11.8g / 5 ms, 7,4g / 10 ms mechanical service life (operating cycles) 10 000 000 • of the contactor with added electronically optimized 10 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 reference code according to EC 81346-2 Q </th <th>product type designation</th> <th>3RT2</th> | product type designation | 3RT2 |
| product extension No • function module for communication No • auxiliary switch Yes power loss [W] for rated value of the current 0.6 W • at AC in hot operating state 0.6 W • at AC in hot operating state per pole 0.2 W • without load current share typical 2 W insulation voltage 690 V • of main circuit with degree of pollution 3 rated value 690 V • of an in circuit rated value 690 V • of main is circuit rated value 64V • of main is circuit rated value 64V • of main is cruit rated value 64V • of an in circuit rated value 64V • of main is cruit rated value 64V • of an in circuit rated value 64V • of an AC 7,5g / 5 ms, 4,7g / 10 ms shock resistance at rectangular impulse 7,5g / 5 ms, 7,4g / 10 ms • at AC 11.8g / 5 ms, 7,4g / 10 ms mechanical service life (operating cycles) 10 000 000 • of the contactor with added electronically optimized 5000 000 awiliary switch block typical 10 000 000 • of | General technical data | |
| • function module for communication No • auxiliary switch Yes power loss [W] for rated value of the current - • at AC in hot operating state 0.6 W • at AC in hot operating state per pole 0.2 W • without load current share typical 2 W Insulation voitage 690 V • of main circuit with degree of pollution 3 rated value 690 V • of main circuit with degree of pollution 3 rated value 690 V • of main circuit atter dvalue 6 kV • of main circuit atter dvalue 6 kV • of main circuit rated value 6 kV • of main circuit rated value 6 kV • of auxiliary circuit go te N 004P7-1 400 V shock resistance at rectangular impulse 7,5g / 5 ms, 4,7g / 10 ms • at AC 11.8g / 5 ms, 7,4g / 10 ms shock resistance with sine pulse 10 000 000 • at AC 10 000 000 • of the contactor with added electronically optimized auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 • of the contactor with added electronically optimized auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 reference code according to IEC 81346-2 | size of contactor | S0 |
| • auxiliary switch Yes power loss [W] for rated value of the current 0.6 W • at AC in hot operating state per pole 0.2 W • without load current share typical 2 W insulation voltage 690 V • of main circuit with degree of pollution 3 rated value 690 V • of main circuit rated value 690 V • of main circuit rated value 690 V • of main circuit rated value 64 V • of main circuit rated value 6 kV • of main circuit rated value 6 kV • of main circuit rated value 6 kV • of auxiliary circuit with degree of poletive separation between col and main contacts according to EN 60947-1 400 V shock resistance at rectangular impulse - • at AC 7.5g / 5 ms, 4,7g / 10 ms shock resistance at rectangular impulse 10 000 000 • of contactor typical 10 000 000 • of the contactor with added electronically optimized auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block | product extension | |
| power loss [W] for rated value of the current 0.6 W e at AC in hot operating state per pole 0.2 W e without load current share typical 2W Insulation voltage 690 V e of main circuit with degree of pollution 3 rated value 690 V e of auxiliary circuit with degree of pollution 3 rated value 690 V surge voltage resistance 64 V e of main circuit with degree of pollution 3 rated value 64 V e of auxiliary circuit rated value 6 kV e at AC 7.5g / 5 ms, 4.7g / 10 ms shock resistance with sine pulse 10 000 000 e at AC 11.8g / 5 ms, 7.4g / 10 ms mechanical service life (operating cycles) 10 000 000 e of the contactor with added auxiliary switch block typical 10 000 000 e of the contactor with added auxiliary switch block typical< | function module for communication | No |
| • at AC in hot operating state 0.6 W • at AC in hot operating state price 0.2 W • without load current share typical 2 W insultation voltage 690 V • of main circuit with degree of pollution 3 rated value 690 V • of auxiliary circuit with degree of pollution 3 rated value 690 V • of main circuit rated value 690 V • of auxiliary circuit rated value 6 kV • of auxiliary site block to 80947-1 400 V shock resistance at rectangular inpulse 400 V • at AC 11.8g / 5 ms, 7.4g / 10 ms mechanical service life (operating cycles) 10 000 000 • of the contactor with added electronically optimized 5 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary swither block typ | auxiliary switch | Yes |
| • at AC in hot operating state per pole 0.2 W • without bad current share typical 2 W insulation voltage 6 • of main circuit with degree of pollution 3 rated value 690 V • of auxiliary circuit with degree of pollution 3 rated value 690 V • of auxiliary circuit rated value 6 kV • at AC 7,5g / 5 ms, 4,7g / 10 ms shock resistance at rectangular impulse 11,8g / 5 ms, 7,4g / 10 ms • at AC 11,8g / 5 ms, 7,4g / 10 ms mechanical service life (operating cycles) 5 000 000 • of contactor typical 10 000 000 • of the contactor with added electronically optimized auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical < | power loss [W] for rated value of the current | |
| • without load current share typical 2 W insulation voltage 600 V • of main circuit with degree of pollution 3 rated value 690 V • of auxiliary circuit with degree of pollution 3 rated value 690 V • surge voltage resistance 6 kV • of main circuit rated value 6 kV • of auxiliary circuit rated value 6 kV • at AC 7,5g / 5 ms, 4,7g / 10 ms • at AC 11,8g / 5 ms, 7,4g / 10 ms • at AC 10 000 000 • of the contactor with added electronically optimized auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 1001/2009 Ambient conditions -25 +60 °C • during storage -25 +60 °C <td< th=""><th> at AC in hot operating state </th><th>0.6 W</th></td<> | at AC in hot operating state | 0.6 W |
| Insulation voltage 690 V • of main circuit with degree of pollution 3 rated value 690 V • of auxiliary circuit with degree of pollution 3 rated value 690 V surge voltage resistance 680 V • of main circuit rated value 6 kV • of auxiliary circuit rated value 6 kV • of auxiliary circuit rated value 6 kV • of auxiliary circuit rated value 6 kV maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1 400 V shock resistance at rectangular impulse + at AC • at AC 7,5g / 5 ms, 4,7g / 10 ms shock resistance with sine pulse 11.8g / 5 ms, 7,4g / 10 ms • at AC 11.8g / 5 ms, 7,4g / 10 ms mechanical service life (operating cycles) 10 000 000 • of the contactor with added electronically optimized auxiliary switch block typical 10 000 000 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 10/01/2009 Ambient temperature - 400 °C • during storage - 25 +60 °C • during storage - 25 +60 °C • during storage - 25 +60 °C | at AC in hot operating state per pole | 0.2 W |
| • of main circuit with degree of pollution 3 rated value 690 V • of auxiliary circuit with degree of pollution 3 rated value 690 V surge voltage resistance 680 V • of main circuit rated value 6 kV • of auxiliary circuit rated value 6 kV maximum permissible voltage for protective separation between 400 V coil and main contacts according to EN 60947-1 400 V shock resistance at rectangular impulse 7.5g / 5 ms, 4.7g / 10 ms • at AC 7.5g / 5 ms, 7.4g / 10 ms shock resistance with sine pulse 10 000 000 • at AC 11.8g / 5 ms, 7.4g / 10 ms mechanical service life (operating cycles) 10 000 000 • of the contactor with added electronically optimized auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 10/01/2009 Ambient conditions -25 +60 °C • during operation -25 +60 °C • during storage -55 +60 °C • during storag | without load current share typical | 2 W |
| • of auxillary circuit with degree of pollution 3 rated value 690 V surge voltage resistance 6 kV • of main circuit rated value 6 kV • of auxillary circuit rated value 6 kV • of auxillary circuit rated value 6 kV • of auxillary circuit rated value 6 kV • at AC 400 V • at AC 7,5g / 5 ms, 4,7g / 10 ms • at AC 11.8g / 5 ms, 7,4g / 10 ms • of contactor typical 10 000 000 • of the contactor with added electronically optimized auxiliary witch block typical 10 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 10/01/2009 Ambient conditions 2 000 m installation altitude at height above sea level maximum 2 000 m ambient temperature -25 +60 °C • during storage -25 +60 °C | insulation voltage | |
| surge voltage resistance 6 kV • of main circuit rated value 6 kV • of auxiliary circuit rated value 6 kV maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1 400 V shock resistance at rectangular impulse 400 V • at AC 7,5g / 5 ms, 4,7g / 10 ms shock resistance with sine pulse 11,8g / 5 ms, 7,4g / 10 ms • of the contactor with added electronically optimized auxiliary switch block typical 10 000 000 • of the contactor with added electronically optimized auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical 10/001/2009 Ambient conditions 10/01/2009 installation altitude at height above sea level maximum 2 000 m ambient temperature -55 +60 °C • during operation -25 +60 °C • during storage -55 +80 °C relative humidity at 55 °C according to IEC 60068-2-30 maximum 95 % | of main circuit with degree of pollution 3 rated value | 690 V |
| • of main circuit rated value 6 kV • of auxiliary circuit rated value 6 kV • ad AC 400 V • at AC 7,5g / 5 ms, 4,7g / 10 ms • at AC 11.8g / 5 ms, 7,4g / 10 ms • at AC 11.8g / 5 ms, 7,4g / 10 ms • at AC 10 000 000 • of the contactor typical 10 000 000 • of the contactor with added electronically optimized auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical 0 000 n ambient conditions | of auxiliary circuit with degree of pollution 3 rated value | 690 V |
| • of auxiliary circuit rated value 6 kV maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1 400 V shock resistance at rectangular impulse 400 V • at AC 7,5g / 5 ms, 4,7g / 10 ms shock resistance with sine pulse - • at AC 11,8g / 5 ms, 7,4g / 10 ms mechanical service life (operating cycles) - • of contactor typical 10 000 000 • of the contactor with added electronically optimized auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 10/01/2009 Amblent conditions 2 000 m ambient temperature -25 +60 °C • during storage -55 +60 °C • during storage -55 +60 °C • during storage 55 % #10 % 95 % | surge voltage resistance | |
| maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1 400 V shock resistance at rectangular impulse at AC at AC at AC at AC at AC itag / 5 ms, 4,7g / 10 ms mechanical service life (operating cycles) of contactor typical 10 000 000 of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical of othe contactor with added auxiliary switch block typical of othe contactor with added auxiliary switch block typical 10 000 000 10 000 000 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 10/01/2009 Ambient conditions 2 000 m installation altitude at height above sea level maximum 2 000 m ambient temperature during operation -25 +60 °C etative humidity minimum 10 % 95 % | of main circuit rated value | 6 kV |
| coil and main contacts according to EN 60947-1 shock resistance at rectangular impulse • at AC 7,5g / 5 ms, 4,7g / 10 ms shock resistance with sine pulse • at AC 11,8g / 5 ms, 7,4g / 10 ms mechanical service life (operating cycles) 0 000 000 • of contactor typical 10 000 000 • of the contactor with added electronically optimized auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 10/01/2009 Ambient conditions 2000 m ambient temperature -25 +60 °C • during operation -25 +60 °C • during storage -55 +80 °C relative humidity minimum 10 % relative humidity at 55 °C according to IEC 60068-2-30 95 % Main circuit | of auxiliary circuit rated value | 6 kV |
| • at AC7,5g / 5 ms, 4,7g / 10 msshock resistance with sine pulse11,8g / 5 ms, 7,4g / 10 ms• at AC11,8g / 5 ms, 7,4g / 10 msmechanical service life (operating cycles)000 000• of contactor typical10 000 000• of the contactor with added electronically optimized auxiliary switch block typical10 000 000• of the contactor with added auxiliary switch block typical0000 000• of the contactor with added auxiliary switch block typical10 000 000reference code according to IEC 81346-2QSubstance Prohibitance (Date)10/01/2009Ambient conditions2 000 minstallation altitude at height above sea level maximum2 000 mambient temperature • during operation-25 +60 °C• during storage-55 +80 °Crelative humidity minimum10 %relative humidity at 55 °C according to IEC 60068-2-30 maximum95 % | | 400 V |
| shock resistance with sine pulse if is the isstance with sine pulse • at AC 11,8g / 5 ms, 7,4g / 10 ms mechanical service life (operating cycles) i • 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 • of the contactor with added auxiliary switch block typical 10 000 000 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 10/01/2009 Ambient conditions 2 000 m installation altitude at height above sea level maximum 2 000 m ambient temperature -25 +60 °C • during operation -25 +60 °C • during storage -55 +80 °C relative humidity minimum 10 % relative humidity at 55 °C according to IEC 60068-2-30 95 % Main circuit | shock resistance at rectangular impulse | |
| • at AC11,8g / 5 ms, 7,4g / 10 msmechanical service life (operating cycles)0• of contactor typical10 000 000• of the contactor with added electronically optimized auxiliary switch block typical5 000 000• of the contactor with added auxiliary switch block typical10 000 000• of the contactor with added auxiliary switch block typical10 000 000• of the contactor with added auxiliary switch block typical10 000 000reference code according to IEC 81346-2QSubstance Prohibitance (Date)10/01/2009Ambient conditions2 000 minstallation altitude at height above sea level maximum2 000 mambient temperature-25 +60 °C• during operation-25 +60 °C• during storage-55 +80 °Crelative humidity minimum10 %maximum95 % | • at AC | 7,5g / 5 ms, 4,7g / 10 ms |
| mechanical service life (operating cycles) in 000000 • 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 • of the contactor with added auxiliary switch block typical 10 000 000 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 10/01/2009 Ambient conditions 2 000 m installation altitude at height above sea level maximum 2 000 m ambient temperature -25 +60 °C • during operation -25 +80 °C relative humidity minimum 10 % relative humidity at 55 °C according to IEC 60068-2-30 95 % Main circuit | shock resistance with sine pulse | |
| • of contactor typical10 000 000• of the contactor with added electronically optimized auxiliary switch block typical5 000 000• of the contactor with added auxiliary switch block typical10 000 000• of the contactor with added auxiliary switch block typical10 000 000reference code according to IEC 81346-2QSubstance Prohibitance (Date)10/01/2009Ambient conditions2 000 minstallation altitude at height above sea level maximum2 000 mambient temperature • during operation • during storage-25 +60 °C• during storage-55 +80 °Crelative humidity minimum10 %relative humidity at 55 °C according to IEC 60068-2-30 maximum95 % | • at AC | 11,8g / 5 ms, 7,4g / 10 ms |
| 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 installation attice (Date) 10/01/2009 Ambient conditions installation altitude at height above sea level maximum 2 000 m ambient temperature during operation -25 +60 °C relative humidity minimum 10 % relative humidity at 55 °C according to IEC 60068-2-30 maximum Main circuit | mechanical service life (operating cycles) | |
| auxiliary switch block typical 10 000 000 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 10/01/2009 Ambient conditions 2 000 m installation altitude at height above sea level maximum 2 000 m ambient temperature -25 +60 °C • during operation -25 +60 °C • during storage -55 +80 °C relative humidity minimum 10 % Main circuit 95 % | of contactor typical | 10 000 000 |
| reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 10/01/2009 Ambient conditions 2 000 m installation altitude at height above sea level maximum 2 000 m ambient temperature -25 +60 °C • during operation -25 +60 °C • during storage -55 +80 °C relative humidity minimum 10 % Main circuit 95 % | | 5 000 000 |
| Substance Prohibitance (Date) 10/01/2009 Ambient conditions installation altitude at height above sea level maximum installation altitude at height above sea level maximum 2 000 m ambient temperature -25 +60 °C • during operation -25 +60 °C • during storage -55 +80 °C relative humidity minimum 10 % relative humidity at 55 °C according to IEC 60068-2-30 maximum 95 % Main circuit | of the contactor with added auxiliary switch block typical | 10 000 000 |
| Ambient conditions installation altitude at height above sea level maximum 2 000 m ambient temperature -25 +60 °C • during operation -25 +60 °C • during storage -55 +80 °C relative humidity minimum 10 % relative humidity at 55 °C according to IEC 60068-2-30 maximum 95 % Main circuit | reference code according to IEC 81346-2 | Q |
| installation altitude at height above sea level maximum 2 000 m ambient temperature during operation -25 +60 °C during storage -55 +80 °C relative humidity minimum 10 % relative humidity at 55 °C according to IEC 60068-2-30 maximum 95 % Main circuit 4 | Substance Prohibitance (Date) | 10/01/2009 |
| ambient temperature -25 +60 °C • during operation -25 +60 °C • during storage -55 +80 °C relative humidity minimum 10 % relative humidity at 55 °C according to IEC 60068-2-30 maximum 95 % Main circuit | Ambient conditions | |
| • during operation -25 +60 °C • during storage -55 +80 °C relative humidity minimum 10 % relative humidity at 55 °C according to IEC 60068-2-30 maximum 95 % Main circuit | installation altitude at height above sea level maximum | 2 000 m |
| • during storage -55 +80 °C relative humidity minimum 10 % relative humidity at 55 °C according to IEC 60068-2-30 maximum 95 % Main circuit | ambient temperature | |
| relative humidity minimum 10 % relative humidity at 55 °C according to IEC 60068-2-30 maximum 95 % Main circuit 40 % | during operation | -25 +60 °C |
| relative humidity at 55 °C according to IEC 60068-2-30 95 % Main circuit 95 % | during storage | -55 +80 °C |
| Main circuit | relative humidity minimum | 10 % |
| | | 95 % |
| number of poles for main current circuit 3 | Main circuit | |
| | number of poles for main current circuit | 3 |

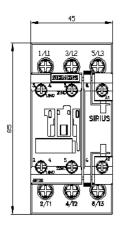
| number of NO contacts for main contacts | 3 |
|--|--------------------|
| operating voltage | |
| at AC-3 rated value maximum | 690 V |
| at AC-3e rated value maximum | 690 V |
| operational current | |
| • at AC-1 at 400 V at ambient temperature 40 °C rated | 40 A |
| value | |
| • at AC-1 | |
| — up to 690 V at ambient temperature 40 °C rated value | 40 A |
| — up to 690 V at ambient temperature 60 °C rated | 35 A |
| value | |
| • at AC-3 | |
| — at 400 V rated value | 9 A |
| — at 500 V rated value | 9 A |
| — at 690 V rated value | 9 A |
| • at AC-3e | |
| — at 400 V rated value | 9 A |
| — at 500 V rated value | 9 A |
| — at 690 V rated value | 9 A 0 5 A |
| at AC-4 at 400 V rated value | 8.5 A |
| at AC-5a up to 690 V rated value | 35.2 A |
| • at AC-5b up to 400 V rated value | 7.4 A |
| • at AC-6a | 44.4.4 |
| — up to 230 V for current peak value n=20 rated value | 11.4 A |
| — up to 400 V for current peak value n=20 rated value — up to 500 V for current peak value n=20 rated value | 11.4 A 9.1 A |
| — up to 500 V for current peak value n=20 rated value | 9A |
| • at AC-6a | SA . |
| up to 230 V for current peak value n=30 rated value | 7.6 A |
| — up to 200 V for current peak value n=30 rated value | 7.6 A |
| — up to 500 V for current peak value n=30 rated value | 6.1 A |
| — up to 690 V for current peak value n=30 rated value | 6.1 A |
| minimum cross-section in main circuit at maximum AC-1 rated | 10 mm ² |
| value | |
| operational current for approx. 200000 operating cycles at AC-4 | |
| at 400 V rated value | 4.1 A |
| at 690 V rated value | 3.3 A |
| operational current | |
| at 1 current path at DC-1 | |
| — at 24 V 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 |
| — 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 | |

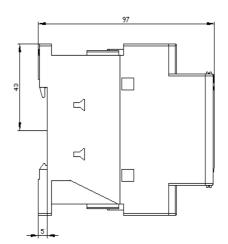
| — at 24 V rated value | 20 A |
|---|---|
| — at 60 V rated value | 5 A |
| — at 220 V rated value | 1 A |
| — at 440 V rated value | 0.09 A |
| — at 600 V rated value | 0.06 A |
| with 2 current paths in series at DC-3 at DC-5 | |
| — at 24 V rated value | 35 A |
| — at 60 V rated value | 35 A |
| — 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 | 2.2 kW |
| — at 400 V rated value | 4 kW |
| — at 500 V rated value | 4 kW |
| — at 690 V rated value | 7.5 kW |
| • at AC-3e | |
| — at 230 V rated value | 2.2 kW |
| — at 400 V rated value | 4 kW |
| — at 500 V rated value | 4 kW |
| — at 690 V rated value | 7.5 kW |
| operating power for approx. 200000 operating cycles at AC- | |
| 4 ● at 400 V rated value | 2 kW |
| at 400 V rated value at 690 V rated value | 2.5 kW |
| operating apparent power at AC-6a | 2.5 KW |
| up to 230 V for current peak value n=20 rated value | 4.5 kVA |
| • up to 400 V for current peak value n=20 rated value | 7.8 kVA |
| • up to 500 V for current peak value n=20 rated value | 7.8 KVA |
| • up to 690 V for current peak value n=20 rated value | 10.7 kVA |
| operating apparent power at AC-6a | |
| up to 230 V for current peak value n=30 rated value | 3 kVA |
| • up to 400 V for current peak value n=30 rated value | 5.2 kVA |
| • up to 500 V for current peak value n=30 rated value | 5.2 KVA |
| • up to 690 V for current peak value n=30 rated value | 7.2 KVA |
| short-time withstand current in cold operating state up to | |
| 40 °C | |
| limited to 1 s switching at zero current maximum | 170 A; Use minimum cross-section acc. to AC-1 rated value |
| limited to 5 s switching at zero current maximum | 170 A; Use minimum cross-section acc. to AC-1 rated value |
| limited to 10 s switching at zero current maximum | 140 A; Use minimum cross-section acc. to AC-1 rated value |
| limited to 30 s switching at zero current maximum | 104 A; Use minimum cross-section acc. to AC-1 rated value |
| limited to 60 s switching at zero current maximum | 88 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 | 1 000 1/h |
| • at AC-2 maximum | 1 000 1/h |
| • at AC-3 maximum | 1 000 1/h |
| • at AC-3e maximum | 1 000 1/h |
| • at AC-4 maximum | 300 1/h |
| Control circuit/ Control | |
| type of voltage of the control supply voltage | AC |
| - • • • • | |

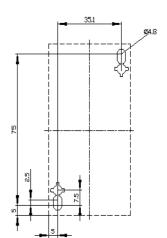
| control supply voltage at AC | |
|---|---|
| • at 50 Hz rated value | 24 V |
| at 60 Hz rated value | 24 V |
| operating range factor control supply voltage rated value of magnet coil at AC | |
| ● at 50 Hz | 0.8 1.1 |
| • at 60 Hz | 0.85 1.1 |
| apparent pick-up power of magnet coil at AC | |
| ● at 50 Hz | 68 VA |
| • at 60 Hz | 67 VA |
| inductive power factor with closing power of the coil | |
| • at 50 Hz | 0.72 |
| • at 60 Hz | 0.74 |
| apparent holding power of magnet coil at AC | |
| • at 50 Hz | 7.9 VA |
| • at 60 Hz | 6.5 VA |
| inductive power factor with the holding power of the coil | |
| • at 50 Hz | 0.25 |
| • at 60 Hz | 0.28 |
| closing delay | |
| • at AC | 8 40 ms |
| opening delay | |
| • at AC | 4 16 ms |
| arcing time | 10 10 ms |
| control version of the switch operating mechanism | Standard A1 - A2 |
| Auxiliary circuit | |
| number of NC contacts for auxiliary contacts instantaneous contact | 1 |
| number of NO contacts for auxiliary contacts instantaneous contact | 1 |
| operational current at AC-12 maximum | 10 A |
| operational current at AC-15 | |
| at 230 V rated value | 10 A |
| • at 400 V rated value | 3 A |
| at 500 V rated value | 2 A |
| • at 690 V rated value | 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 125 V rated value | 2 A |
| at 220 V rated value | 1A |
| at 600 V rated value | 0.15 A |
| operational current at DC-13 | |
| • at 24 V rated value | 10 A |
| at 24 V rated value at 48 V rated value | 2 A |
| at 40 V rated value at 60 V rated value | 2 A 2 A |
| at 60 V rated value at 110 V rated value | 1 A |
| at 110 V rated value at 125 V rated value | 0.9 A |
| at 125 V rated value at 220 V rated value | 0.3 A |
| | 0.3 A 0.1 A |
| at 600 V rated value | |
| contact reliability of auxiliary contacts UL/CSA ratings | 1 faulty switching per 100 million (17 V, 1 mA) |
| | |
| full-load current (FLA) for 3-phase AC motor | 7.0.4 |
| at 480 V rated value | 7.6 A |
| | |
| at 600 V rated value | 9 A |
| yielded mechanical performance [hp] | SA |
| yielded mechanical performance [hp] • for single-phase AC motor | |
| yielded mechanical performance [hp] | 1 hp 1 hp |

| • for 3-phase AC motor | |
|---|---|
| — at 200/208 V rated value | 2 hp |
| — at 220/230 V rated value | 3 hp |
| — at 460/480 V rated value | 5 hp |
| — at 575/600 V rated value | 7.5 hp |
| contact rating of auxiliary contacts according to UL | A600 / P600 |
| Short-circuit protection | |
| design of the fuse link | |
| for short-circuit protection of the main circuit | |
| - with type of coordination 1 required | gG: 63A (690V,100kA), aM: 32A (690V,100kA), BS88: 63A (415V,80kA) |
| — with type of assignment 2 required | gG: 25A (690V,100kA), aM: 20A (690V,100kA), BS88: 25A (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 DIN rail according to DIN EN 60715 |
| side-by-side mounting | Yes |
| height | 85 mm |
| width | 45 mm |
| depth | 97 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 |
| | 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 |
| • stranded | 1 10 mm² |
| finely stranded with core end processing | 1 10 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 mm² |
| type of connectable conductor cross-sections | |
| for auxiliary contacts | $2 \times (0.5 - 1.5 \text{ mm}^2) \cdot 2 \times (0.75 - 2.5 \text{ mm}^2)$ |
| — solid or stranded finely stranded with core and processing | 2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²) |
| finely stranded with core end processing for AWG cables for auxiliary contacts | 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (20 16), 2x (18 14) |
| AWG number as coded connectable conductor cross | 2A (20 10), 2A (10 14) |
| section | |
| for main contacts | 16 8 |
| | |

| for auxiliary cor | ntacts | 20 | 14 | | |
|---|--|--|---|---|---|
| afety related data | | | | | |
| product function | | | | | |
| | according to IEC 60947-4-1 | Yes | | | |
| • | ety-related switching OFF | Yes | | | |
| | lemand rate according to SN | 31920 450 | 000 | | |
| proportion of dange | | | , | | |
| | nd rate according to SN 3192 | | | | |
| | and rate according to SN 319 | | | | |
| | low demand rate according t | | | | |
| T1 value for proof tes 61508 | t interval or service life accor | rding to IEC 20 a | 1 | | |
| | on the front according to IE | EC 60529 |) | | |
| | the front according to IEC | | er-safe, for vertical contact | from the front | |
| ertificates/ approval | - | | | | |
| General Product Ap | | | | | |
| | - | Confirmation | • | KC | |
| (SF) | | Commation | Ű | | EHC |
| EMC | Functional Safety/Safety of Ma- chinery | Declaration of Confo | ormity | Test Certificates | |
| RCM | Type Examination Cer- tificate | UK CA | C C EG-Konf. | <u>Special Test Certific-</u> <u>ate</u> | Type Test Certific- ates/Test Report |
| | | | | | |
| Marine / Shipping | | | | | |
| Marine / Shipping | BUREAU VERITAS | | Llovds Register urs | RINA | RMRS |
| Marine / Shipping | BUREAU VERITAS | ČŠ DNV DNV | Liks Railway | Environment | EXAMPLE |
| ABS | U REAU VERITAS | Confirmation | Liks Railway Vibration and Shock | Environmental Con- firmations | KMRS |
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