



CONTACTOR, AC-3, 3KW/400V, 1NC,
AC 230V, 50/60 HZ, 3-POLE,
SZ S00 SCREW TERMINAL VERTICAL MOUNTING
POSITION

General technical data:

| | | |
|---|----|----------------------------|
| product brand name | | SIRIUS |
| Size of the contactor | | S00 |
| Product extension / auxiliary switch | | Yes |
| Product extension / function module for communication | | No |
| Protection class IP / on the front | | IP20 |
| Protection against electrical shock | | finger-safe |
| Degree of pollution | | 3 |
| Installation altitude / at a height over sea level / maximum | m | 2,000 |
| Ambient temperature | | |
| • during storage | °C | -55 ... +80 |
| • during operating | °C | -25 ... +60 |
| Shock resistance | | |
| • at rectangular impulse | | |
| • at AC | | 6,7g / 5 ms, 4,2g / 10 ms |
| • at sine pulse | | |
| • at AC | | 10,5g / 5 ms, 6,6g / 10 ms |
| Impulse voltage resistance / rated value | kV | 6 |
| Insulation voltage / rated value | V | 690 |

| | | |
|---|----------------|------------|
| Maximum permissible voltage for protective separation / between coil and main contacts / in accordance with EN 60947-1 | V | 400 |
| Mechanical operating cycles as operating time | | |
| • of the contactor / typical | | 30,000,000 |
| • of the contactor with added auxiliary switch block / typical | | 10,000,000 |
| • of the contactor with added electronics-compatible auxiliary switch block / typical | | 5,000,000 |
| Main circuit: | | |
| Number of NC contacts / for main contacts | | 0 |
| Number of NO contacts / for main contacts | | 3 |
| Operating current / at AC-1 / at 400 V | | |
| • at 40 °C ambient temperature / rated value | A | 18 |
| • at 60 °C ambient temperature / rated value | A | 16 |
| Connectable conductor cross-section / in main circuit | | |
| • at AC-1 | | |
| • at 40 °C / minimum permissible | m ² | 2.5 |
| • at 60 °C / minimum permissible | m ² | 2.5 |
| Operational current | | |
| • at AC-2 / at 400 V / rated value | A | 7 |
| • at AC-3 | | |
| • at 400 V / rated value | A | 7 |
| • at 500 V / rated value | A | 6 |
| • at 690 V / rated value | A | 4.9 |
| • at AC-4 / at 400 V / rated value | A | 6.5 |
| Operational current | | |
| • with 1 current path / at DC-1 | | |
| • at 24 V / rated value | A | 15 |
| • at 110 V / rated value | A | 1.5 |
| • at 220 V / rated value | A | 0.6 |
| • at 440 V / rated value | A | 0.42 |
| • at 600 V / rated value | A | 0.42 |
| • with 2 current paths in series / at DC-1 | | |
| • at 24 V / rated value | A | 15 |
| • at 110 V / rated value | A | 8.4 |
| • at 220 V / rated value | A | 1.2 |
| • at 440 V / rated value | A | 0.6 |
| • at 600 V / rated value | A | 0.5 |
| • with 3 current paths in series / at DC-1 | | |
| • at 24 V / rated value | A | 15 |
| • at 110 V / rated value | A | 15 |

| | | |
|--|-----|--------|
| • at 220 V / rated value | A | 15 |
| • at 440 V / rated value | A | 0.9 |
| • at 600 V / rated value | A | 0.7 |
| Operational current | | |
| • with 1 current path / at DC-3 / at DC-5 | | |
| • at 24 V / rated value | A | 15 |
| • at 110 V / rated value | A | 0.1 |
| • with 2 current paths in series / at DC-3 / at DC-5 | | |
| • at 24 V / rated value | A | 15 |
| • at 110 V / rated value | A | 0.25 |
| • with 3 current paths in series / at DC-3 / at DC-5 | | |
| • at 24 V / rated value | A | 15 |
| • at 110 V / rated value | A | 15 |
| • at 220 V / rated value | A | 1.2 |
| • at 440 V / rated value | A | 0.14 |
| • at 600 V / rated value | A | 0.14 |
| Service power | | |
| • at AC-1 | | |
| • at 230 V / rated value | kW | 6.3 |
| • at 400 V / rated value | kW | 11 |
| • at 500 V / rated value | kW | 13.8 |
| • at 690 V / rated value | kW | 19 |
| • at AC-2 / at 400 V / rated value | kW | 3 |
| • at AC-3 | | |
| • at 230 V / rated value | kW | 1.5 |
| • at 400 V / rated value | kW | 3 |
| • at 690 V / rated value | kW | 4 |
| • at AC-4 / at 400 V / rated value | kW | 3 |
| Active power loss / at AC-3 / at 400 V / with rated operational current value / per conductor | W | 0.4 |
| Off-load operating frequency | | |
| • at AC | 1/h | 10,000 |
| • at DC | 1/h | 10,000 |
| Frequency of operation | | |
| • at AC-1 / according to IEC 60947-6-2 | 1/h | 1,000 |
| • at AC-2 / according to IEC 60947-6-2 | 1/h | 750 |
| • at AC-3 / according to IEC 60947-6-2 | 1/h | 750 |
| • at AC-4 / according to IEC 60947-6-2 | 1/h | 250 |

Control circuit:

| | | |
|---|-----|--------------|
| Type of voltage / of the controlled supply voltage | | AC |
| Control supply voltage | | |
| • at 50 Hz / at AC / rated value | V | 230 |
| • at 60 Hz / at AC / rated value | V | 230 |
| operating range factor control supply voltage rated value / of the magnet coil | | |
| • at 50 Hz / for AC | | 0.8 ... 1.1 |
| • at 60 Hz / for AC | | 0.85 ... 1.1 |
| Apparent pull-in power / of the solenoid / for AC | V·A | 27 |
| Apparent holding power / of the solenoid / for AC | V·A | 4.2 |
| Inductive power factor | | |
| • with the pull-in power of the coil | | 0.8 |
| • with the pull-in power of the coil | | 0.25 |
| Closing delay | | |
| • at AC | ms | 9 ... 35 |
| Opening delay | | |
| • at AC | ms | 3.5 ... 14 |
| Arcing time | ms | 10 ... 15 |
| Residual current / of electronics / for control with signal <0> | | |
| • at 230 V / with AC / maximum permissible | mA | 3 |
| • at 24 V / with DC / maximum permissible | mA | 10 |

Auxiliary circuit:

| | | |
|---|---|---|
| Contact reliability / of the auxiliary contacts | | 1 faulty switching per 100 million (17 V, 1 mA) |
| Number of NC contacts / for auxiliary contacts / instantaneous switching | | 1 |
| Number of NO contacts / for auxiliary contacts / instantaneous switching | | 0 |
| Operating current / of the auxiliary contacts | | |
| • [nicht versorgt: PMD_ABP551_001_000] | | |
| • | A | 2 |
| • at 690 V | A | 1 |

UL/CSA ratings:

| | | |
|--|----|------|
| yielded mechanical performance (hp) | | |
| • for single-phase squirrel cage motors | | |
| • at 110/120 V / rated value | hp | 0.25 |
| • at 230 V / rated value | hp | 0.75 |
| • for three-phase squirrel cage motors | | |
| • at 200/208 V / rated value | hp | 1.5 |
| • at 220/230 V / rated value | hp | 2 |

| | | |
|--|----|-------------|
| <ul style="list-style-type: none"> • at 460/480 V / rated value • at 575/600 V / rated value | hp | 3 |
| | hp | 5 |
| Operating current (FLA) / for three-phase squirrel cage motors | | |
| <ul style="list-style-type: none"> • at 480 V / rated value • at 600 V / rated value | A | 4.8 |
| | A | 6.1 |
| Contact rating designation / for auxiliary contacts / according to UL | | A600 / Q600 |

Short-circuit:

Design of the fuse link

- for short-circuit protection of the auxiliary switch / required
- for short-circuit protection of the main circuit
 - with type of assignment 1 / required
 - at type of coordination 2 / required

fuse gL/gG: 10 A

gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 35 A

gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 20A

Installation/mounting/dimensions:

| | | |
|---|----|--|
| mounting position | | standing, on horizontal mounting surface |
| Type of mounting | | screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022 |
| Type of fixing/fixation / series installation | | Yes |
| Width | mm | 45 |
| Height | mm | 57.5 |
| Depth | mm | 73 |
| Distance, to be maintained, to the ranks assembly / sideways | mm | 0 |

Connections:

Design of the electrical connection

- for main current circuit
- for auxiliary and control current circuit

screw-type terminals

screw-type terminals

Type of the connectable conductor cross-section

- for main contacts
 - solid
 - finely stranded
 - with conductor end processing
- for AWG conductors / for main contacts
- for auxiliary contacts
 - solid
 - finely stranded
 - with conductor end processing
- for AWG conductors / for auxiliary contacts

2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²), 2x 4 mm²

2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)

2x (20 ... 16), 2x (18 ... 14), 2x 12

2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²), 2x 4 mm²

2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)

2x (20 ... 16), 2x (18 ... 14), 2x 12

Sicherheitsrelevante Kenngrößen:

| | | |
|---|-----|-----------|
| B10 value / with high demand rate <ul style="list-style-type: none"> • according to SN 31920 | | 1,000,000 |
| T1 value / for proof test interval or service life <ul style="list-style-type: none"> • according to IEC 61508 | a | 20 |
| Proportion of dangerous failures <ul style="list-style-type: none"> • with low demand rate / according to SN 31920 • with high demand rate / according to SN 31920 | % | 40 |
| | % | 73 |
| Failure rate (FIT value) / with low demand rate <ul style="list-style-type: none"> • according to SN 31920 | FIT | 100 |
| Product function <ul style="list-style-type: none"> • mirror contact to IEC 60947-4-1 • positively driven operation to IEC 60947-5-1 | | Yes |
| | | No |

Certificates/approvals:

General Product Approval



CCC



CSA



GOST



UL

Functional Safety / Safety of Machinery

[Type Examination](#)



EG-Konf.

Shipping Approval



ABS



BUREAU
VERITAS



DNV



GL



LRS



PRS

Shipping Approval

other



RINA



RMRS



VDE

Further information:

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

<http://www.siemens.com/industrial-controls/catalogs>

Industry Mall (Online ordering system)

<http://www.siemens.com/industrial-controls/mall>

Cax online generator

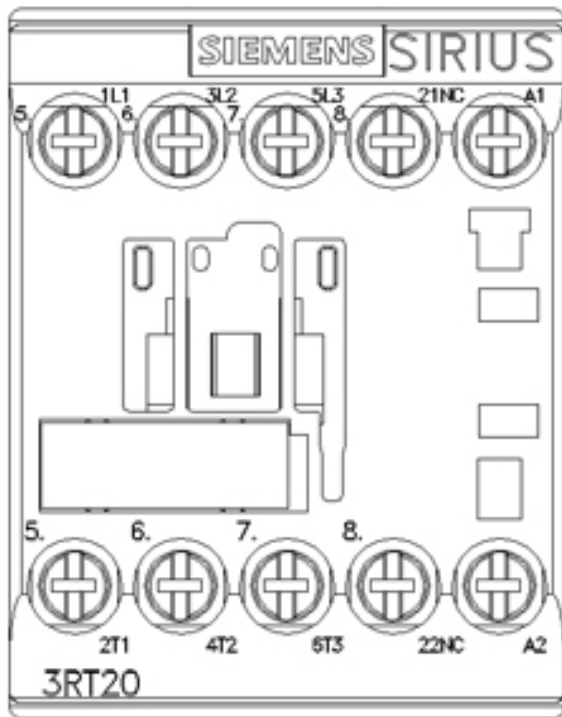
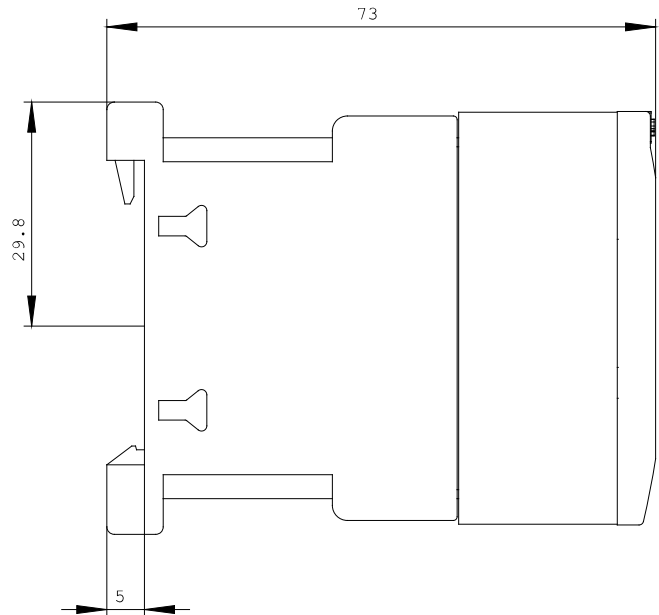
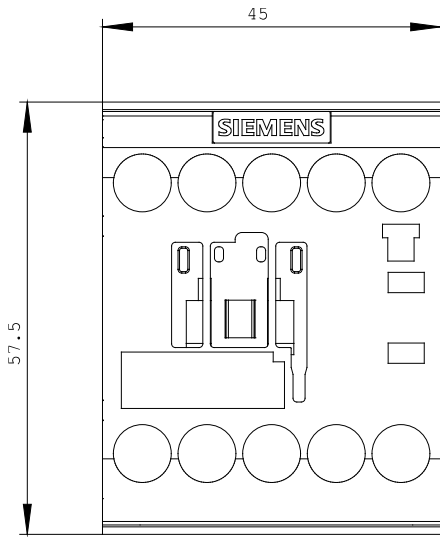
<http://www.siemens.com/cax>

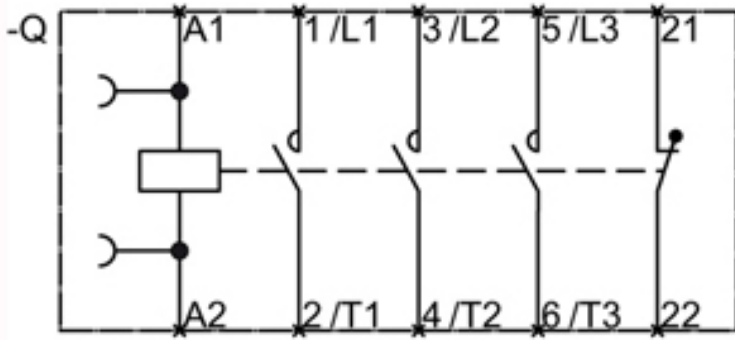
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<http://support.automation.siemens.com/WW/view/en/3RT2015-1AP02-1AA0/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RT2015-1AP02-1AA0





last change:

Feb 15, 2013