



CONTACTOR, AC-3 45 KW/400 V, AC 480 V, 60 HZ, 3-POLE, SIZE S3, SCREW CONNECTION

Figure similar

| | |
|---|-----------------|
| product brand name | SIRIUS |
| Product designation | power contactor |
| General technical data: | |
| Size of contactor | S3 |
| Insulation voltage | |
| • Rated value | 1 000 V |
| Surge voltage resistance Rated value | 6 kV |
| Protection class IP | |
| • on the front | IP00 |
| • of the terminal | IP00 |
| Degree of pollution | 3 |
| Mechanical service life (switching cycles) | |
| • of the contactor typical | 10 000 000 |
| • of the contactor with added electronics-compatible auxiliary switch block typical | 5 000 000 |
| • 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 | |
| • during operation | -25 ... +60 °C |
| • during storage | -55 ... +80 °C |
| Main circuit: | |
| Number of NO contacts for main contacts | 3 |

| | |
|--|---|
| Number of NC contacts for main contacts | 0 |
| Operating current | |
| <ul style="list-style-type: none"> • at AC-1 at 400 V <ul style="list-style-type: none"> — at ambient temperature 40 °C Rated value | 120 A |
| <ul style="list-style-type: none"> • at AC-1 up to 690 V <ul style="list-style-type: none"> — at ambient temperature 40 °C Rated value — at ambient temperature 60 °C Rated value | 120 A 100 A |
| <ul style="list-style-type: none"> • at AC-3 <ul style="list-style-type: none"> — at 400 V Rated value — at 690 V Rated value | 95 A 58 A |
| Connectable conductor cross-section in main circuit at AC-1 | |
| <ul style="list-style-type: none"> • at 60 °C minimum permissible • at 40 °C minimum permissible | 35 mm ² 50 mm ² |
| Operating current for ≥ 200000 operating cycles at AC-4 | |
| <ul style="list-style-type: none"> • at 400 V Rated value • at 690 V Rated value | 42 A 27 A |
| Operating current | |
| <ul style="list-style-type: none"> • with 1 current path at DC-1 <ul style="list-style-type: none"> — at 24 V Rated value — at 110 V Rated value • with 2 current paths in series at DC-1 <ul style="list-style-type: none"> — at 24 V Rated value — at 110 V Rated value • with 3 current paths in series at DC-1 <ul style="list-style-type: none"> — at 24 V Rated value — at 110 V Rated value | 100 A 9 A 100 A 100 A 100 A 100 A |
| Operating current | |
| <ul style="list-style-type: none"> • with 1 current path at DC-3 at DC-5 <ul style="list-style-type: none"> — at 24 V Rated value — at 110 V Rated value • with 2 current paths in series at DC-3 at DC-5 <ul style="list-style-type: none"> — at 110 V Rated value — at 24 V Rated value • with 3 current paths in series at DC-3 at DC-5 <ul style="list-style-type: none"> — at 110 V Rated value — at 24 V Rated value | 40 A 2.5 A 100 A 100 A 100 A 100 A |
| Operating power | |
| <ul style="list-style-type: none"> • at AC-1 <ul style="list-style-type: none"> — at 230 V at 60 °C Rated value — at 400 V Rated value | 38 kW 66 kW |

| | |
|--|-----------|
| — at 690 V Rated value | 114 kW |
| — at 690 V at 60 °C Rated value | 114 kW |
| • at AC-2 at 400 V Rated value | 45 kW |
| • at AC-3 | |
| — at 230 V Rated value | 22 kW |
| — at 400 V Rated value | 45 kW |
| — at 500 V Rated value | 55 kW |
| — at 690 V Rated value | 55 kW |
| Operating power for ≥ 200000 operating cycles at AC-4 | |
| • at 400 V Rated value | 22 kW |
| • at 690 V Rated value | 25.4 kW |
| Thermal short-time current restricted to 10 s | 760 A |
| Active power loss at AC-3 at 400 V for rated value of the operating current per conductor | 10.8 W |
| No-load switching frequency | |
| • at AC | 5 000 1/h |
| Operating frequency | |
| • at AC-1 maximum | 900 1/h |
| • at AC-2 maximum | 350 1/h |
| • at AC-3 maximum | 850 1/h |
| • at AC-4 maximum | 250 1/h |

Control circuit/ Control:

| | |
|---|--------------|
| Type of voltage of the control supply voltage | AC |
| Control supply voltage at AC | |
| • at 60 Hz Rated value | 480 V |
| • Rated value | 60 Hz |
| Operating range factor control supply voltage rated value of the magnet coil at AC | |
| • at 60 Hz | 0.8 ... 1.1 |
| Apparent pick-up power of the magnet coil at AC | 300 V·A |
| Inductive power factor with closing power of the coil | 0.52 |
| Apparent holding power of the magnet coil at AC | 21 V·A |
| Inductive power factor with the holding power of the coil | 0.29 |
| Closing delay | |
| • at AC | 17 ... 90 ms |
| Opening delay | |
| • at AC | 10 ... 25 ms |
| Arcing time | 10 ... 15 ms |

Auxiliary circuit:

| | |
|------------------------------|--|
| Number of NC contacts | |
|------------------------------|--|

| | |
|--|---|
| <ul style="list-style-type: none"> for auxiliary contacts <ul style="list-style-type: none"> — instantaneous contact | 0 |
| Number of NO contacts | |
| <ul style="list-style-type: none"> for auxiliary contacts <ul style="list-style-type: none"> — instantaneous contact | 0 |
| Operating current at AC-12 maximum | 10 A |
| Operating current at AC-15 | |
| <ul style="list-style-type: none"> at 230 V Rated value at 400 V Rated value | 6 A 3 A |
| Operating current at DC-12 | |
| <ul style="list-style-type: none"> at 60 V Rated value at 110 V Rated value at 220 V Rated value | 6 A 3 A 1 A |
| Operating current at DC-13 | |
| <ul style="list-style-type: none"> at 24 V Rated value at 60 V Rated value at 110 V Rated value at 220 V Rated value | 10 A 2 A 1 A 0.3 A |
| Contact reliability of the auxiliary contacts | 1 faulty switching per 100 million (17 V, 1 mA) |

UL/CSA ratings:

| | |
|--|-------------|
| Contact rating of the auxiliary contacts acc. to UL | A600 / Q600 |
|--|-------------|

Short-circuit:

| | |
|---|--|
| Design of the fuse link | |
| <ul style="list-style-type: none"> for short-circuit protection of the main circuit <ul style="list-style-type: none"> — with type of assignment 1 required — with type of assignment 2 required for short-circuit protection of the auxiliary switch required | fuse gL/gG: 250 A fuse gL/gG: 160 A fuse gL/gG: 10 A |

Installation/ mounting/ dimensions:





| | |
|---|--|
| Mounting type | screw and snap-on mounting onto 35 mm and 75 mm standard mounting rail |
| <ul style="list-style-type: none"> Side-by-side mounting | Yes |
| Height | 146 mm |
| Width | 70 mm |
| Depth | 139 mm |
| Required spacing | |
| <ul style="list-style-type: none"> for grounded parts <ul style="list-style-type: none"> — at the side | 6 mm |

Connections/ Terminals:

| | |
|--|----------------------|
| Type of electrical connection | |
| <ul style="list-style-type: none"> for main current circuit | screw-type terminals |

| | |
|--|--|
| <ul style="list-style-type: none"> • for auxiliary and control current circuit | screw-type terminals |
| Type of connectable conductor cross-section <ul style="list-style-type: none"> • for main contacts <ul style="list-style-type: none"> — solid — stranded — single or multi-stranded — finely stranded with core end processing — finely stranded without core end processing • for AWG conductors for main contacts | 2x (2.5 ... 16 mm ²) 2x (10 ... 50 mm ²) 2x (2,5 ... 16 mm ²) 2x (2.5 ... 35 mm ²) 2x (10 ... 35 mm ²) 2x (10 ... 1/0) |
| Type of connectable conductor cross-section <ul style="list-style-type: none"> • for auxiliary contacts <ul style="list-style-type: none"> — solid — finely stranded with core end processing • for AWG conductors for auxiliary contacts | 2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²), max. 2x (0.75 ... 4 mm ²) 2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²) 2x (20 ... 16), 2x (18 ... 14), 1x 12 |

Certificates/ approvals:

| General Product Approval | | | Functional Safety/Safety of Machinery | Declaration of Conformity | Test Certificates |
|--|--|--|--|--|---|
|  |  |  | Baumusterbescheinigung |  EG-Konf. | spezielle Prüfbescheinigungen |

| Shipping Approval | | | | | other |
|---|---|---|---|---|-------------------------------|
|  |  |  |  |  | Bestätigungen |

| other |
|---|
| Umweltbestätigung sonstig |

Further information

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

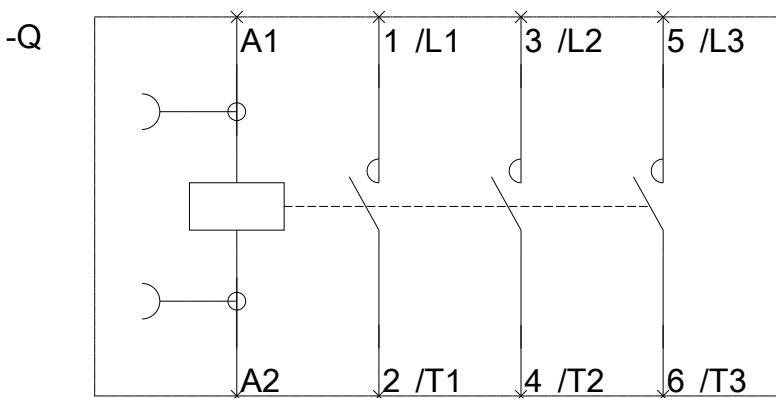
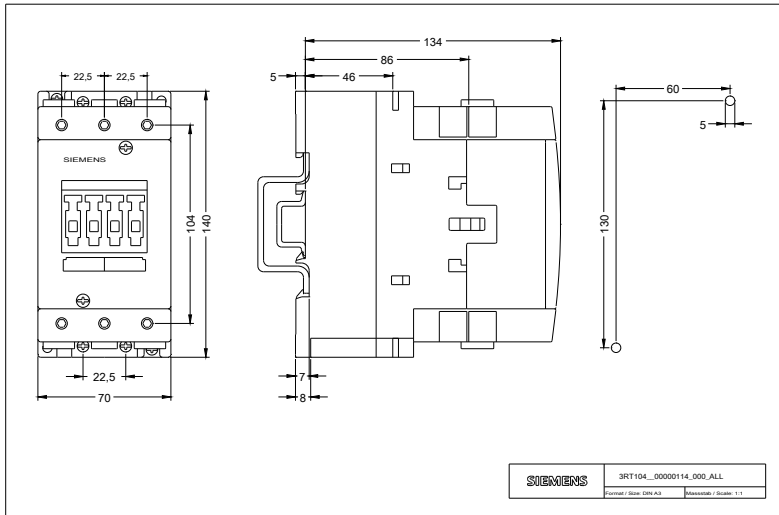
<http://www.siemens.com/industrial-controls/catalogs>

Industry Mall (Online ordering system)

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

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT10461AV60>



last modified:

29.06.2015