



Figure similar

CONTACTOR, 160KW/400V/AC-3 AC(40...60HZ)/DC OPERATION
UC 21-27.3V AUXILIARY CONTACTS 2NO+2NC 3-POLE, SIZE S10
BAR CONNECTIONS ELECTRONIC OPERATING MECHANISM
WITH 24V DC PLC INTERFACE SCREW TERMINAL

| | |
|---|-----------------|
| product brand name | SIRIUS |
| Product designation | power contactor |
| General technical data: | |
| Size of contactor | S10 |
| Insulation voltage | |
| • Rated value | 1 000 V |
| Surge voltage resistance Rated value | 8 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 | 330 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 | 330 A 300 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 | 300 A 280 A |
| Connectable conductor cross-section in main circuit at AC-1 | |
| <ul style="list-style-type: none"> • at 60 °C minimum permissible | 185 mm ² |
| <ul style="list-style-type: none"> • at 40 °C minimum permissible | 185 mm ² |
| Operating current for ≥ 200000 operating cycles at AC-4 | |
| <ul style="list-style-type: none"> • at 400 V Rated value | 125 A |
| <ul style="list-style-type: none"> • at 690 V Rated value | 115 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 | 300 A 33 A |
| <ul style="list-style-type: none"> • 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 | 300 A 300 A |
| <ul style="list-style-type: none"> • 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 | 300 A 300 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 | 300 A 3 A |
| <ul style="list-style-type: none"> • 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 | 300 A 300 A |
| <ul style="list-style-type: none"> • 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 | 300 A 300 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 | 113 kW 197 kW |

| | |
|--|---------------|
| — at 690 V Rated value | 340 kW |
| — at 690 V at 60 °C Rated value | 340 kW |
| • at AC-2 at 400 V Rated value | 171 kW |
| • at AC-3 | |
| — at 230 V Rated value | 97 kW |
| — at 400 V Rated value | 171 kW |
| — at 500 V Rated value | 215 kW |
| — at 690 V Rated value | 280 kW |
| Operating power for ≥ 200000 operating cycles at AC-4 | |
| • at 400 V Rated value | 71 kW |
| • at 690 V Rated value | 112 kW |
| Thermal short-time current restricted to 10 s | 2 400 A |
| Active power loss at AC-3 at 400 V for rated value of the operating current per conductor | 22 W |
| No-load switching frequency | |
| • at AC | 2 000 1/h |
| • at DC | 2 000 1/h |
| Operating frequency | |
| • at AC-1 maximum | 750 1/h |
| • at AC-2 maximum | 250 1/h |
| • at AC-3 maximum | 500 1/h |
| • at AC-4 maximum | 130 1/h |
| Control circuit/ Control: | |
| Type of voltage of the control supply voltage | AC/DC |
| Control supply voltage at AC | |
| • at 50 Hz Rated value | 21 ... 27.3 V |
| • at 60 Hz Rated value | 21 ... 27.3 V |
| Control supply voltage at DC | |
| • Rated value | 21 ... 27.3 V |
| • Rated value | 40 Hz |
| Control supply voltage frequency 2 Rated value | 60 Hz |
| Operating range factor control supply voltage rated value of the magnet coil at AC | |
| • at 50 Hz | 0.8 ... 1.1 |
| • at 60 Hz | 0.8 ... 1.1 |
| Operating range factor control supply voltage rated value of the magnet coil at DC | 0.8 ... 1.1 |
| Design of the surge suppressor | with varistor |
| Apparent pick-up power of the magnet coil at AC | 530 V·A |
| Inductive power factor with closing power of the coil | 0.8 |
| Apparent holding power of the magnet coil at AC | 5 V·A |

| | |
|---|---------------|
| Inductive power factor with the holding power of the coil | 0.4 |
| Closing power of the magnet coil at DC | 580 W |
| Holding power of the magnet coil for DC | 3.8 W |
| Closing delay | |
| • at AC | 45 ... 80 ms |
| • at DC | 45 ... 80 ms |
| Opening delay | |
| • at AC | 80 ... 100 ms |
| • at DC | 80 ... 100 ms |
| Arcing time | 10 ... 15 ms |

Auxiliary circuit:

| | |
|------------------------------------|-------|
| Number of NC contacts | |
| • for auxiliary contacts | |
| — instantaneous contact | 2 |
| Number of NO contacts | |
| • for auxiliary contacts | |
| — instantaneous contact | 2 |
| Operating current at AC-12 maximum | 10 A |
| Operating current at AC-15 | |
| • at 230 V Rated value | 6 A |
| • at 400 V Rated value | 3 A |
| Operating current at DC-12 | |
| • at 60 V Rated value | 6 A |
| • at 110 V Rated value | 3 A |
| • at 220 V Rated value | 1 A |
| Operating current at DC-13 | |
| • at 24 V Rated value | 10 A |
| • at 60 V Rated value | 2 A |
| • at 110 V Rated value | 1 A |
| • at 220 V Rated value | 0.3 A |

UL/CSA ratings:

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

Short-circuit:

| | |
|---|-------------------|
| Design of the fuse link | |
| • for short-circuit protection of the main circuit | |
| — with type of assignment 1 required | fuse gL/gG: 500 A |
| — with type of assignment 2 required | fuse gL/gG: 400 A |
| • for short-circuit protection of the auxiliary switch required | fuse gL/gG: 10 A |


Installation/ mounting/ dimensions:





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|---------------------------------------|--------------|
| Mounting type | screw fixing |
| • Side-by-side mounting | Yes |
| Height | 210 mm |
| Width | 145 mm |
| Depth | 202 mm |
| Required spacing | |
| • for grounded parts — at the side | 10 mm |

Connections/ Terminals:

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|--|--|
| Type of electrical connection | |
| • for main current circuit | screw-type terminals |
| • for auxiliary and control current circuit | screw-type terminals |
| Type of connectable conductor cross-section | |
| • for AWG conductors for main contacts | 2/0 ... 500 kcmil |
| Type of connectable conductor cross-section | |
| • for auxiliary contacts | |
| — solid | 2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²), max. 2x (0.75 ... 4 mm ²) |
| — finely stranded with core end processing | 2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²) |
| • for AWG conductors for auxiliary contacts | 2x (20 ... 16), 2x (18 ... 14), 1x 12 |

Certificates/ approvals:

| | | |
|--|--|---|
| General Product Approval | Functional Safety/Safety of Machinery | Declaration of Conformity |
|  CCC |  CSA |  EAC |
|  UL | Baumusterbescheinigung |  EG-Konf. |

| | |
|---|---|
| Test Certificates | Shipping Approval |
| Typprüfbescheinigung/Werkszeugnis |  ABS |
| spezielle Prüfbescheinigungen |  DNV |
|  GL |  RMRS |

| |
|-----------------------------------|
| other |
| Bestätigungen |
| 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

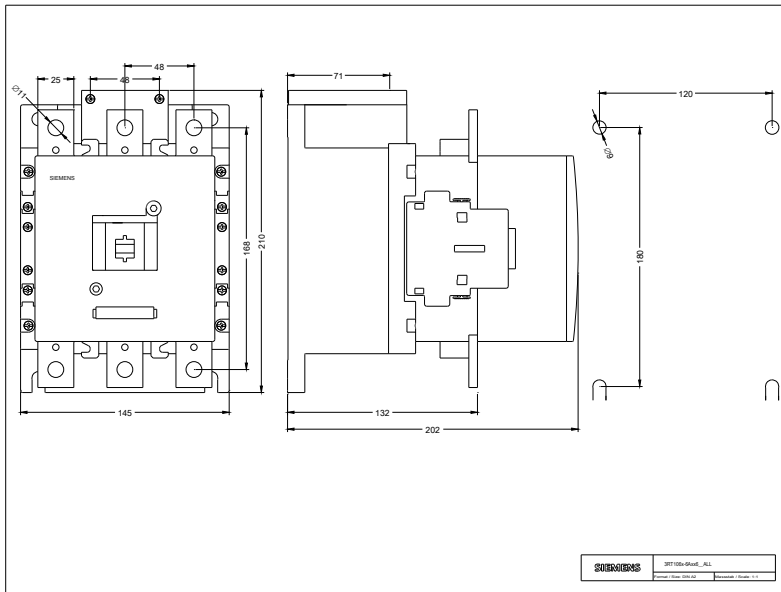
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mfb=3RT10666NB36>

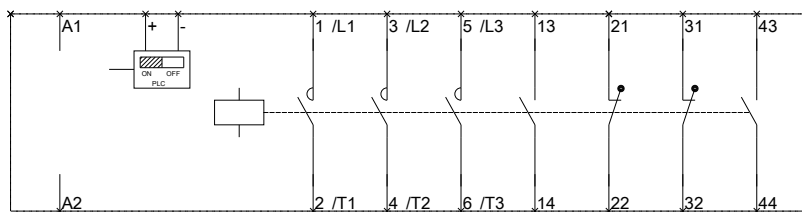
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RT10666NB36>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mfb=3RT10666NB36&lang=en





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