

CONTACTOR, 90KW/400V/AC-3 AC(40...60HZ)/DC OPERATION
UC 110-127V AUXILIARY CONTACTS 2NO+2NC 3-POLE, SIZE S6
BAR CONNECTIONS CONVENT. OPERATING MECHANISM
CAGE CLAMP TERMINAL



Figure similar

| | |
|---|---------------------------|
| product brandname | SIRIUS |
| Product designation | Power contactor |
| General technical data | |
| Size of contactor | S6 |
| Insulation voltage | |
| • rated value | 1 000 V |
| Degree of pollution | 3 |
| Surge voltage resistance rated value | 8 kV |
| maximum permissible voltage for safe isolation | |
| • between coil and main contacts acc. to EN 60947-1 | 690 V |
| Protection class IP | |
| • on the front | IP00 |
| • of the terminal | IP00 |
| Shock resistance at rectangular impulse | |
| • at AC | 8,5g / 5 ms, 4,2g / 10 ms |
| • at DC | 8,5g / 5 ms, 4,2g / 10 ms |

| | |
|---|----------------------------|
| Shock resistance with sine pulse | |
| • at AC | 13,4g / 5 ms, 6,5g / 10 ms |
| • at DC | 13,4g / 5 ms, 6,5g / 10 ms |
| Mechanical service life (switching cycles) | |
| • of 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 | |
| Ambient temperature | |
| • during operation | -25 ... +60 °C |
| • during storage | -55 ... +80 °C |
| Main circuit | |
| Number of poles for main current circuit | 3 |
| Number of NO contacts for main contacts | 3 |
| Number of NC contacts for main contacts | 0 |
| Operating current | |
| • at AC-1 at 400 V | |
| — at ambient temperature 40 °C rated value | 215 A |
| • at AC-1 | |
| — up to 690 V at ambient temperature 40 °C rated value | 215 A |
| — up to 690 V at ambient temperature 60 °C rated value | 185 A |
| — up to 1000 V at ambient temperature 40 °C rated value | 100 A |
| — up to 1000 V at ambient temperature 60 °C rated value | 100 A |
| • at AC-3 | |
| — at 400 V rated value | 185 A |
| — at 690 V rated value | 170 A |
| — at 1000 V rated value | 65 A |
| Connectable conductor cross-section in main circuit at AC-1 | |
| • at 60 °C minimum permissible | 95 mm² |
| • at 40 °C minimum permissible | 95 mm² |
| Operating current for approx. 200000 operating cycles at AC-4 | |
| • at 400 V rated value | 81 A |
| • at 690 V rated value | 65 A |
| Operating current | |

| | |
|--|---|
| <ul style="list-style-type: none"> • at 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 | 160 A 18 A 160 A 160 A 160 A 160 A |
| Operating current <ul style="list-style-type: none"> • at 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 | 160 A 2.5 A 160 A 160 A 160 A 160 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 — at 690 V rated value — at 690 V at 60 °C rated value — at 1000 V at 60 °C rated value • at AC-2 at 400 V rated value • at AC-3 <ul style="list-style-type: none"> — at 230 V rated value — at 400 V rated value — at 500 V rated value — at 690 V rated value — at 1000 V rated value | 70 kW 121 kW 210 kW 210 kW 165 W 104 kW 61 kW 104 kW 132 kW 167 kW 90 W |
| Operating power for approx. 200000 operating cycles at AC-4 <ul style="list-style-type: none"> • at 400 V rated value • at 690 V rated value | 45 kW 65 kW |
| Thermal short-time current limited to 10 s | 1 480 A |
| Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor | 13 W |
| No-load switching frequency <ul style="list-style-type: none"> • at AC | 2 000 1/h |

| | |
|----------------------------|-----------|
| • at DC | 2 000 1/h |
| Operating frequency | |
| • at AC-1 maximum | 800 1/h |
| • at AC-2 maximum | 300 1/h |
| • at AC-3 maximum | 750 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 | 110 ... 127 V |
| • at 60 Hz rated value | 110 ... 127 V |
| Control supply voltage at DC | |
| • rated value | 110 ... 127 V |
| Operating range factor control supply voltage rated value of magnet coil at AC | |
| • at 50 Hz | 0.8 ... 1.1 |
| • at 60 Hz | 0.8 ... 1.1 |
| Design of the surge suppressor | with varistor |
| Closing power of magnet coil at DC | 360 W |
| Holding power of magnet coil at DC | 5.2 W |
| Closing delay | |
| • at AC | 20 ... 95 ms |
| • at DC | 20 ... 95 ms |
| Opening delay | |
| • at AC | 40 ... 60 ms |
| • at DC | 40 ... 60 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 |

| | |
|--|-------|
| <ul style="list-style-type: none"> • at 220 V rated value | 1 A |
| Operating current at DC-13 | |
| <ul style="list-style-type: none"> • at 24 V rated value | 10 A |
| <ul style="list-style-type: none"> • at 60 V rated value | 2 A |
| <ul style="list-style-type: none"> • at 110 V rated value | 1 A |
| <ul style="list-style-type: none"> • at 220 V rated value | 0.3 A |

UL/CSA ratings

| | |
|---|-------------|
| Contact rating of auxiliary contacts according to UL | A600 / Q600 |
|---|-------------|

Short-circuit protection

| | |
|---|--|
| 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 coordination 1 required — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required | fuse gL/gG: 355 A fuse gL/gG: 315 A fuse gL/gG: 10 A |

Installation/ mounting/ dimensions




| | |
|---|--------------|
| Mounting type | screw fixing |
| <ul style="list-style-type: none"> • Side-by-side mounting | Yes |
| Height | 172 mm |
| Width | 120 mm |
| Depth | 170 mm |
| Required spacing | |
| <ul style="list-style-type: none"> • for grounded parts <ul style="list-style-type: none"> — at the side | 10 mm |

Connections/Terminals

| | |
|--|--|
| Type of electrical connection | |
| <ul style="list-style-type: none"> • for main current circuit • for auxiliary and control current circuit | spring-loaded terminals spring-loaded terminals |
| Type of connectable conductor cross-sections | |
| <ul style="list-style-type: none"> • at AWG conductors for main contacts | 4 ... 250 kcmil |
| Type of connectable conductor cross-sections | |
| <ul style="list-style-type: none"> • for auxiliary contacts <ul style="list-style-type: none"> — solid — finely stranded with core end processing — finely stranded without core end processing • at AWG conductors for auxiliary contacts | 2x (0.25 ... 2.5 mm ²) 2x (0.25 ... 1.5 mm ²) 2x (0.25 ... 2.5 mm ²) 2x (24 ... 14) |

Certificates/approvals

| General Product Approval | | | | Declaration of Conformity | Test Certificates |
|--|--|---|---|---|---|
|  CCC |  CSA |  UL |  |  EG-Konf. | spezielle Prüfbescheinigung n |

| Shipping Approval | | | other | | |
|--|---|---|-------------------------------|-------------------------|-----------------------------------|
|  ABS |  GL |  RMRS | Bestätigungen | sonstig | Umweltbestätigung |

Further information

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

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

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT1056-2AF36>

Cax online generator

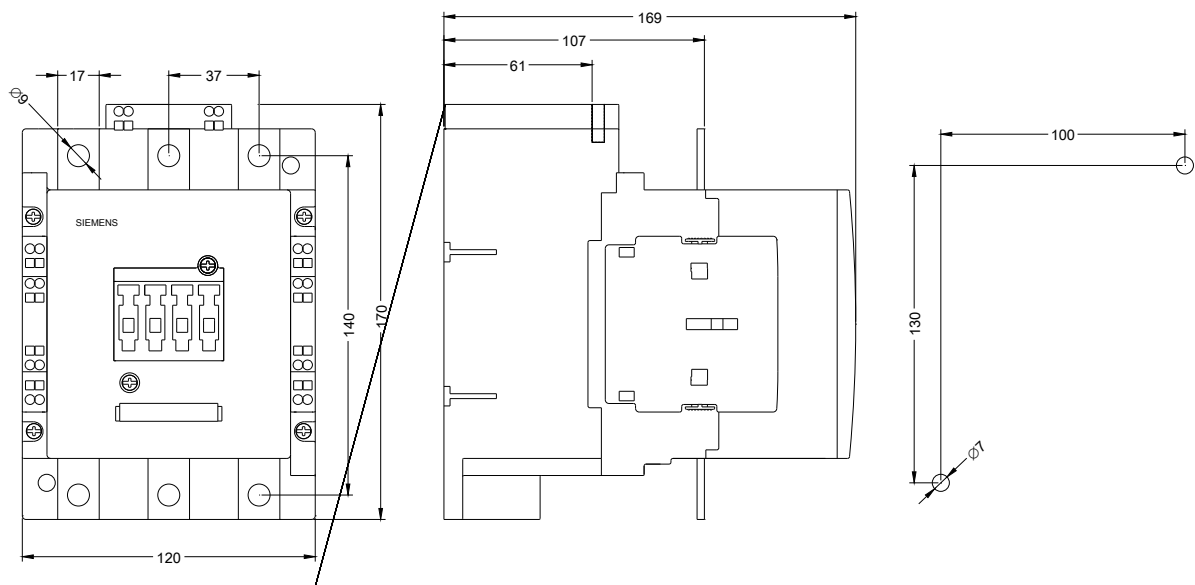
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1056-2AF36>

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

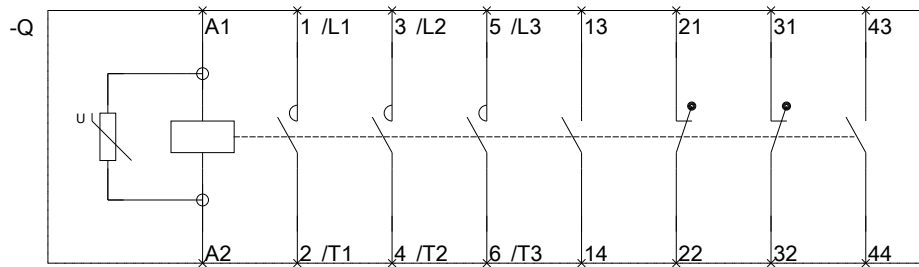
<https://support.industry.siemens.com/cs/ww/en/ps/3RT1056-2AF36>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1056-2AF36&lang=en



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