SIEMENS

## Data sheet 3RT1266-6AP36

Figure similar

VAC. CONTACTOR, 160KW/400V/AC-3 AC(40...60HZ)/DC OPERATION UC 220-240V AUXILIARY CONTACTS 2NO+2NC 3-POLE, SIZE S10 BAR CONNECTIONS CONVENT. OPERATING MECHANISM

| | |
|---|---|
| **product brand name** | SIRIUS |
| **Product designation** | power contactor |

| General technical data: | |
|---|---|
| **Size of contactor** | S10 |
| **Insulation voltage** | |
| • Rated value | 1 000 V |
| **Degree of pollution** | 3 |
| **Surge voltage resistance Rated value** | 8 kV |
| **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 |
| **Protection class IP** | |
| • on the front | IP00 |
| • of the terminal | IP00 |
| **Equipment marking** | |
| • acc. to DIN EN 61346-2 | Q |
| • acc. to DIN EN 81346-2 | Q |

| 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 poles for main current circuit** | 3 |
| **Number of NC contacts for main contacts** | 0 |
| **Number of NO contacts for main contacts** | 3 |
| **Connectable conductor cross-section in main circuit at AC-1** | |
| • at 60 °C minimum permissible | 185 mm² |
| • at 40 °C minimum permissible | 185 mm² |
| **Operating current** | |
| • at AC-1 at 400 V | |
| — at ambient temperature 40 °C Rated value | 330 A |
| • at AC-1 up to 690 V | |
| — at ambient temperature 40 °C Rated value | 330 A |
| — at ambient temperature 60 °C Rated value | 300 A |
| • at AC-3 | |
| — at 400 V Rated value | 300 A |
| — at 690 V Rated value | 300 A |
| • at AC-4 at 400 V Rated value | 280 A |
| **Operating current for ≥ 200000 operating cycles at AC-4** | |
| • at 400 V Rated value | 140 A |
| • at 690 V Rated value | 98 A |
| **Operating power** | |
| • at AC-1 | |
| — at 230 V at 60 °C Rated value | 113 kW |
| — at 690 V at 60 °C Rated value | 340 kW |
| **Operating power for ≥ 200000 operating cycles at AC-4** | |
| • at 400 V Rated value | 79 kW |
| • at 690 V Rated value | 138 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** | 14 W |
| **No-load switching frequency** | |
| • with AC | 2 000 1/h |
| • for 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 | 750 1/h |
| • at AC-4 maximum | 250 1/h |

| Control circuit/ Control: | |
|---|---|
| **Type of voltage of the control supply voltage** | AC/DC |
| **Control supply voltage with AC** | |
| • at 50 Hz Rated value | 220 ... 240 V |
| • at 60 Hz Rated value | 220 ... 240 V |
| **Control supply voltage for DC** | |
| • Rated value | 220 ... 240 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 with 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 for DC** | 0.8 ... 1.1 |
| **Design of the surge suppressor** | with varistor |
| **Apparent pick-up power of the magnet coil with AC** | 630 V·A |
| **Inductive power factor with closing power of the coil** | 0.9 |
| **Apparent holding power of the magnet coil with AC** | 7.4 V·A |
| **Inductive power factor with the holding power of the coil** | 0.9 |
| **Closing power of the magnet coil for DC** | 700 W |
| **Holding power of the magnet coil for DC** | 8.2 W |
| **Closing delay** | |
| • with AC | 30 ... 95 ms |
| • for DC | 30 ... 95 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:

| | |
|---|---|
| **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: 500 A |
| • for short-circuit protection of the auxiliary switch required | fuse gL/gG: 10 A |

## Installation/ mounting/ dimensions:

| | |
|---|---|
| **Mounting type** | screw fixing |
| • Side-by-side mounting | Yes |
| **Height** | 210 mm |
| **Width** | 145 mm |
| **Depth** | 206 mm |
| **Required spacing** | |
| • for grounded parts | |
| — at the side | 10 mm |

## Connections/ Terminals:

| | |
|---|---|
| **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 mm²), 2x (0.75 ... 2.5 mm²), max. 2x (0.75 ... 4 mm²) |
| — finely stranded with core end processing | 2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²) |
| • 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 | UL | EAC | Type Examination | EG-Konf. |

| Test Certificates | | Shipping Approval | | | |
|---|---|---|---|---|---|
| Special Test Certificate | Type Test Certificates/Test Report | ABS | DNV | GL | RMRS |

| other | | |
|---|---|---|
| Environmental Confirmations | other | Confirmation |

## Further information

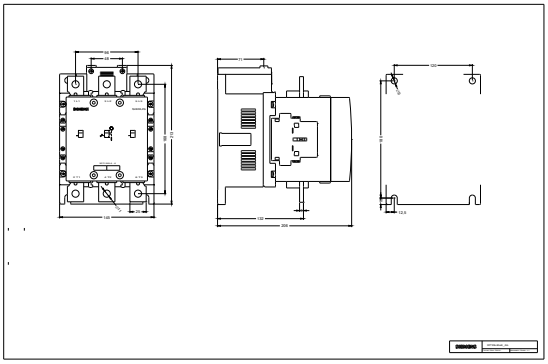
**Information- and Downloadcenter (Catalogs, Brochures,…)**
http://www.siemens.com/industrial-controls/catalogs

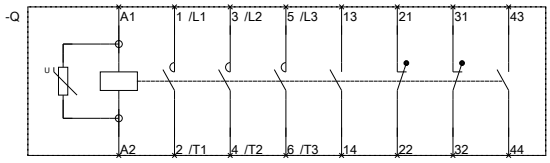
**Industry Mall (Online ordering system)**
http://www.siemens.com/industrymall

**Cax online generator**
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT12666AP36

**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**
https://support.industry.siemens.com/cs/ww/en/ps/3RT12666AP36

**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)**
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT12666AP36&lang=en



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