SIEMENS

## Product data sheet 3RT1056-6AP36

CONTACTOR, 90KW/400V/AC-3,
AC(40...60HZ)/DC OPERATION UC 220...240V AUXIL.
CONTACTS 2NO+2NC 3-POLE,
SIZE S6 BAR CONNECTIONS CONVENT. OPERATING
MECHANISM SCREW TERMINAL

| General technical data: | | |
|---|---|---|
| **product brand name** | | SIRIUS |
| **Size of the contactor** | | S6 |
| **Protection class IP / on the front** | | IP00 |
| **Degree of pollution** | | 3 |
| **Installation altitude / at a height over sea level / maximum** | m | 2,000 |
| **Ambient temperature / during operating** | °C | -25 … +60 |
| **Mechanical operating cycles as operating time** | | |
| • of the contactor / typical | | 10,000,000 |
| • 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 | 215 |
| • at 60 °C ambient temperature / rated value | A | 185 |
| • at AC-3 / at 400 V / rated value | A | 185 |


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| | | |
|---|---|---|
| • at AC-4 / at 400 V / rated value | A | 160 |
| • with 1 current path / at DC-1 | | |
| • at 24 V / rated value | A | 160 |
| • at 110 V / rated value | A | 18 |
| • with 2 current paths in series / at DC-1 | | |
| • at 24 V / rated value | A | 160 |
| • at 110 V / rated value | A | 160 |
| • with 3 current paths in series / at DC-1 | | |
| • at 24 V / rated value | A | 160 |
| • at 110 V / rated value | A | 160 |
| • with 1 current path / at DC-3 / at DC-5 | | |
| • at 24 V / rated value | A | 160 |
| • at 110 V / rated value | A | 2.5 |
| • with 2 current paths in series / at DC-3 / at DC-5 | | |
| • at 24 V / rated value | A | 160 |
| • at 110 V / rated value | A | 160 |
| • with 3 current paths in series / at DC-3 / at DC-5 | | |
| • at 24 V / rated value | A | 160 |
| • at 110 V / rated value | A | 160 |
| **Service power** | | |
| • at AC-2 / at 400 V / rated value | kW | 104 |
| • at AC-3 / at 400 V / rated value | kW | 104 |
| • at AC-4 / at 400 V / rated value | W | 90,000 |
| **Active power loss / per conductor / typical** | W | 13 |

| **Control circuit:** | | |
|---|---|---|
| **Design of the surge suppressor** | | with varistor |
| **Type of voltage / of the controlled supply voltage** | | AC/DC |
| **Control supply voltage / 1** | | |
| • for DC | | |
| • initial rated value | V | 220 |
| • final rated value | V | 240 |
| • at 50 Hz / for AC | | |
| • initial rated value | V | 220 |
| • final rated value | V | 240 |
| • at 60 Hz / for AC | | |
| • initial rated value | V | 220 |
| • final rated value | V | 240 |
| **Operating range factor control supply voltage rated value / of the magnet coil** | | |


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| | | |
|---|---|---|
| • at 50 Hz | | |
| • for AC | | 0.8 … 1.1 |
| • at 60 Hz | | |
| • for AC | | 0.8 … 1.1 |
| • for DC | | 0.8 … 1.1 |
| **Apparent pull-in power / of the solenoid / for AC** | V·A | 300 |
| **Apparent holding power / of the solenoid / for AC** | V·A | 5.8 |
| **Inductive power factor / with the pull-in power of the coil** | | 0.9 |
| **Inductive power factor / with the pull-in power of the coil** | | 0.8 |
| **Pull-in power / of the solenoid / for DC** | W | 360 |
| **Holding power / of the solenoid / for DC** | W | 5.2 |

| **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** | | 2 |
| **Number of NO contacts / for auxiliary contacts / instantaneous switching** | | 2 |
| **Operating current / of the auxiliary contacts** | | |
| • at AC-12 / maximum | A | 10 |
| • at AC-15 | | |
| • at 230 V | A | 6 |
| • at 400 V | A | 3 |
| • at DC-12 | | |
| • at 60 V | A | 6 |
| • at 110 V | A | 3 |
| • at 220 V | A | 1 |
| • at DC-13 | | |
| • at 24 V | A | 10 |
| • at 60 V | A | 2 |
| • at 110 V | A | 1 |
| • at 220 V | A | 0.3 |

| **Short-circuit:** | | |
|---|---|---|
| **Design of the fuse link** | | |
| • for short-circuit protection of the auxiliary switch / required | | fuse gL/gG: 10 A |
| • for short-circuit protection of the main circuit | | |
| • with type of assignment 1 / required | | fuse gL/gG: 355 A |
| • at type of coordination 2 / required | | fuse gL/gG: 315 A |

| **Installation/mounting/dimensions:** | | |
|---|---|---|
| **Type of mounting** | | screw fixing |


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| | | |
|---|---|---|
| **series installation** | | Yes |
| **Width** | mm | 120 |
| **Height** | mm | 172 |
| **Depth** | mm | 180 |
| **Distance, to be maintained, to earthed part / sidewards** | mm | 10 |

## Connection type:

| | | |
|---|---|---|
| **Design of the electrical connection** | | |
| • for main current circuit | | screw-type terminals |
| • for auxiliary and control current circuit | | screw-type terminals |
| **Type of the connectable conductor cross-section** | | |
| • for AWG conductors / for main contacts | | 4 ... 250 kcmil |
| • 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 conductor 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 | GOST | UL | Type Examination | EG-Konf. |
| **Test Certificates** | | **Shipping Approval** | | | |
| other | Special Test Certificate | ABS | DNV | GL | RMRS |
| **other** | | | | | |
| Confirmation | other | Environmental Confirmations | | | |

## 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/3RT1056-6AP36/all


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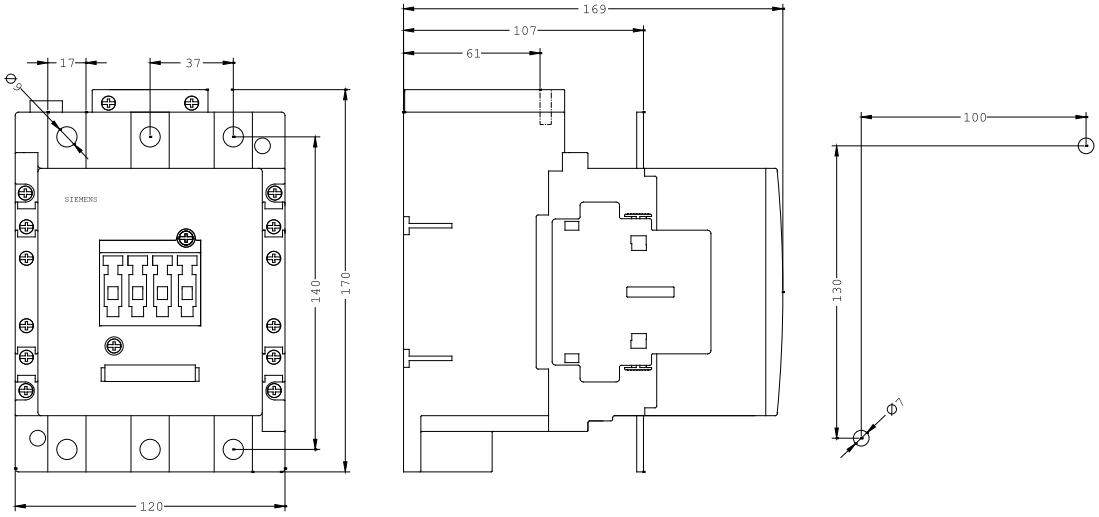
**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)**
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RT1056-6AP36





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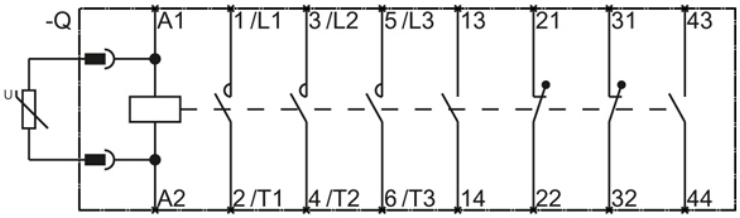


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