SIEMENS

Data sheet 3RT1016-1AB01



CONTACTOR, AC-3 4 KW/400 V, 1 NO, AC 24 V, 50/60 HZ, 3-POLE, SIZE S00, SCREW CONNECTION

| product brand name | SIRIUS |
|--|-----------------|
| Product designation | power contactor |
| General technical data: | |
| Size of contactor | S00 |
| Degree of pollution | 3 |
| Mechanical service life (switching cycles) | |
| of the contactor typical | 30 000 000 |
| 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 | IP20 |
| of the terminal | IP20 |
| 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 |
| 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 |
|---|---------|
| Operating current | |
| • at AC-1 at 400 V | |
| — at ambient temperature 40 °C Rated value | 22 A |
| • at AC-1 up to 690 V | |
| — at ambient temperature 40 °C Rated value | 22 A |
| — at ambient temperature 60 °C Rated value | 20 A |
| • at AC-3 | |
| — at 400 V Rated value | 9 A |
| • at AC-4 at 400 V Rated value | 8.5 A |
| Operating current | |
| with 1 current path at DC-1 | |
| — at 24 V Rated value | 20 A |
| — at 110 V Rated value | 2.1 A |
| • with 2 current paths in series at DC-1 | |
| — at 24 V Rated value | 20 A |
| — at 110 V Rated value | 12 A |
| with 3 current paths in series at DC-1 | |
| — at 24 V Rated value | 20 A |
| — at 110 V Rated value | 20 A |
| Operating current | |
| with 1 current path at DC-3 at DC-5 | |
| — at 24 V Rated value | 20 A |
| — at 110 V Rated value | 0.15 A |
| • with 2 current paths in series at DC-3 at DC-5 | |
| — at 110 V Rated value | 0.35 A |
| — at 24 V Rated value | 20 A |
| • with 3 current paths in series at DC-3 at DC-5 | |
| — at 110 V Rated value | 20 A |
| — at 24 V Rated value | 20 A |
| Active power loss at AC-3 at 400 V for rated value of the operating current per conductor | 0.7 W |
| Control circuit/ Control: | |
| Type of voltage of the control supply voltage | AC |
| Control supply voltage with AC | |
| at 50 Hz Rated value | 24 V |
| at 60 Hz Rated value | 24 V |
| Rated value | 50 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 | 0.85 1.1 |
|---|----------|
| Apparent pick-up power of the magnet coil with AC | 27 V·A |
| Inductive power factor with closing power of the coil | 0.8 |
| Apparent holding power of the magnet coil with AC | 4.4 V·A |
| Inductive power factor with the holding power of the coil | 0.27 |

| Auxiliary circuit: | |
|---|---|
| Number of NC contacts | |
| for auxiliary contacts | |
| instantaneous contact | 0 |
| Number of NO contacts | |
| for auxiliary contacts | |
| instantaneous contact | 1 |
| 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 |
| Contact reliability of the auxiliary contacts | 1 faulty switching per 100 million (17 V, 1 mA) |

| Design of the fuse link |
|---------------------------------------|
| • for short circuit protection of the |

• for short-circuit protection of the main circuit fuse gL/gG: 35 A — with type of assignment 1 required — with type of assignment 2 required fuse gL/gG: 20 A

required

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

| Installation/ mounting/ dimensions: | | |
|---|--|--|
| Mounting type | screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022 | |
| Side-by-side mounting | Yes | |
| Height | 57.5 mm | |
| Width | 45 mm | |
| Depth | 72 mm | |

Required spacing

- for grounded parts
 - at the side

6 mm

Connections/ Terminals:

Type of electrical connection

- for main current circuit
- for auxiliary and control current circuit

Type of connectable conductor cross-section

- for main contacts
 - solid
 - single or multi-stranded
 - finely stranded with core end processing
- for AWG conductors for main contacts

Type of connectable conductor cross-section

- for auxiliary contacts
 - solid
 - finely stranded with core end processing
- for AWG conductors for auxiliary contacts

screw-type terminals

screw-type terminals

2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²), max. 2x (0.75 ... 4 mm²)

2x (0,5 ... 1,5 mm²), 2x (0,75 ... 2,5 mm²), max. 2x (0,75 ... 4 mm²)

2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)

2x (20 ... 16), 2x (18 ... 14), 1x 12

2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²), max. 2x (0.75 ... 4 mm²)

2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)

2x (20 ... 16), 2x (18 ... 14), 1x 12

Certificates/ approvals:

General Product Approval

Functional Safety/Safety of Machinery











Type Examination

Declaration of Conformity

Test Certificates

Shipping Approval



Special Test Certificate





other





GI

I RS

Shipping Approval







Environmental Confirmations

Confirmation

other

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=3RT10161AB01

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT10161AB01

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT10161AB01&lang=en



