SIEMENS

Data sheet 3RT1016-1AU01

Power contactor, AC-3 9 A, 4 kW / 400 V 1 NO, 240 V AC, 50/60 Hz 3-pole, Size S00 Screw terminal !!! Phased-out product !!! Successor is SIRIUS 3RT2 Preferred successor type is >>3RT2016-1AU01<<



Figure similar

| Product brand name | SIRIUS |
|--|-----------------|
| Product designation | power contactor |
| General technical data | |
| Size of contactor | S00 |
| Degree of pollution | 3 |
| Protection class IP | |
| • on the front | IP20 |
| • of the terminal | IP20 |
| Mechanical service life (switching cycles) | |
| of 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 |
| Reference code acc. to DIN EN 81346-2 | Q |
| Ambient conditions | |

| 3RT1016-1AU01 | |
|---------------|--|
| | |

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 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 | 22 A |
| • at AC-1 | |
| up to 690 V at ambient temperature 40 °C rated value | 22 A |
| up to 690 V 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 | |
| • at 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 | |
| • at 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 24 V rated value | 20 A |
| — at 110 V rated value | 0.35 A |
| • with 3 current paths in series at DC-3 at DC-5 | |
| — at 24 V rated value | 20 A |
| — at 110 V rated value | 20 A |
| Operating power | |
| • at AC-1 | |
| — at 400 V rated value | 13 kW |

| • at AC-2 at 400 V rated value | 4 kW |
|--------------------------------|--------|
| • at AC-3 | |
| — at 400 V rated value | 4 kW |
| — at 500 V rated value | 4.5 kW |
| — at 690 V rated value | 5.5 kW |

| Control circuit/ Control | |
|---|----------|
| Type of voltage of the control supply voltage | AC |
| Control supply voltage at AC | |
| • at 50 Hz rated value | 240 V |
| • at 60 Hz rated value | 240 V |
| Control supply voltage frequency | |
| • 1 rated value | 50 Hz |
| 2 rated value | 60 Hz |
| Operating range factor control supply voltage rated | |
| value of magnet coil at AC | |
| ● at 50 Hz | 0.8 1.1 |
| ● at 60 Hz | 0.85 1.1 |
| Apparent pick-up power of magnet coil at AC | 27 V·A |
| Inductive power factor with closing power of the coil | 0.8 |
| Apparent holding power of magnet coil at 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 auxiliary contacts | 1 faulty switching per 100 million (17 V, 1 mA) |

Short-circuit protection

Design of the fuse link

• for short-circuit protection of the main circuit

— with type of coordination 1 required

- with type of assignment 2 required

• for short-circuit protection of the auxiliary switch required

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fuse gL/gG: 35 A fuse gL/gG: 20 A

fuse gL/gG: 10 A

| 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 |

Type of electrical connection

Connections/ Terminals

• for main current circuit screw-type terminals

for auxiliary and control current circuit
 screw-type terminals

Type of connectable conductor cross-sections

• for main contacts

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

— single or multi-stranded 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)

• at AWG conductors for main contacts 2x (20 ... 16), 2x (18 ... 14), 1x 12

Type of connectable conductor cross-sections

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)

• at AWG conductors for auxiliary contacts 2x (20 ... 16), 2x (18 ... 14), 1x 12

Certificates/ approvals

General Product Approval

EMC

Functional Safety/Safety of Machinery











Type Examination
Certificate

Declaration of Conformity

Test Certificates

Marine / Shipping



Miscellaneous

Special Test Certificate

Type Test Certificates/Test Report





Marine / Shipping











Confirmation

Miscellaneous

Railway

Special Test Certificate

Further information

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

www.siemens.com/ic10

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT1016-1AU01

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1016-1AU01

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT1016-1AU01

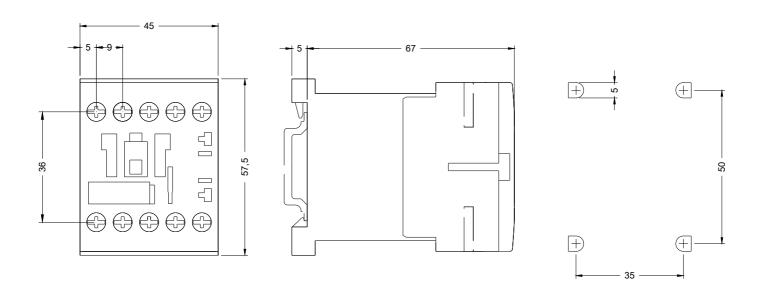
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1016-1AU01&lang=en

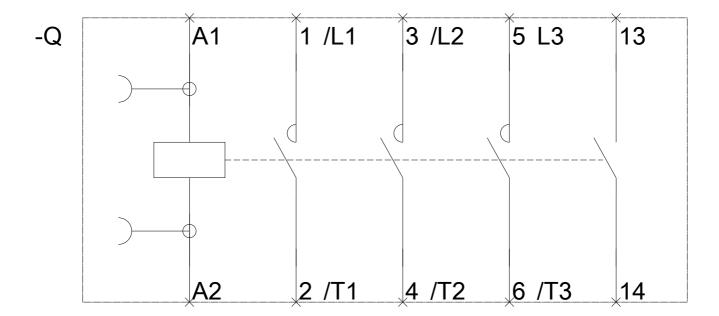
Characteristic: Tripping characteristics, I2t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RT1016-1AU01/char

Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT1016-1AU01&objecttype=14&gridview=view1





last modified: 01/16/2020