SIEMENS

Data sheet

3RT1016-1AP05-Z W97

CONTACTOR, AC-3 4KW/400V, AUX. SWITCH AT FRONT 3NO+2NC, 3-POLE, SIZE S00, SCREW CONNECTION, AC 230V 50/60 HZ MULTIUNIT PACKING PACKING = 27 ITEMS



| 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 | |

2 000 m

-25 ... +60 °C

SIRIUS

Ambient temperature

• during operation

maximum

Installation altitude at height above sea level

product brand name

| 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 |
| 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 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 |
| 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 |
|--|----------|
| Power loss [W] at AC-3 at 400 V for rated value of | 0.7 W |
| the operating current per conductor | |
| Control circuit/ Control | |
| Type of voltage of the control supply voltage | AC |
| Control supply voltage at AC | |
| ● at 50 Hz rated value | 230 V |
| • at 60 Hz rated value | 230 V |
| Control supply voltage frequency 1 rated value | 50 Hz |
| Control supply voltage frequency 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 | 2 |
| Number of NO contacts | |
| for auxiliary contacts | |
| instantaneous contact | 3 |
| 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 | |

| Short-circuit protection | |
|--------------------------|--|
| Design of the fuse link | |

10 A 2 A

1 A 0.3 A

• at 24 V rated value

at 60 V rated valueat 110 V rated value

• at 220 V rated value

Contact reliability of auxiliary contacts

1 faulty switching per 100 million (17 V, 1 mA)

• 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

fuse gL/gG: 35 A fuse gL/gG: 20 A fuse gL/gG: 10 A

| Installation/ mounting/ dimensions | |
|--|--|
| screw and snap-on mounting onto 35 mm standard mounting rail | |
| according to DIN EN 50022 | |
| Yes | |
| 57.5 mm | |
| 45 mm | |
| 114 mm | |
| | |
| | |
| 6 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-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 Functional Safety/Safety Onformity Certificates







Baumusterprüfbesc heinigung



<u>spezielle</u> Prüfbescheinigunge n

Shipping Approval





GL

Lloyd's Register





Umweltbestätigung

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Bestätigungen

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Further information

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

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

Industry Mall (Online ordering system)

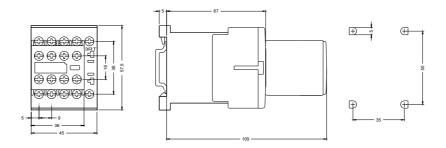
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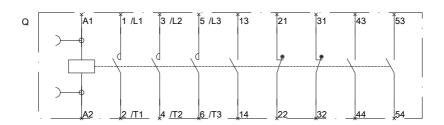
Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1016-1AP05-Z W97

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RT1016-1AP05-Z W97

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1016-1AP05-Z W97&lang=en





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