

Contactor, AC-1, 140 A, 400 V AC, 50 Hz, 4-pole, Size S3, Screw terminal !!! Phased-out product !!! Successor is SIRIUS 3RT2 Preferred successor type is >>3RT2346-1AV00<<



Figure similar

| | |
|---|---|
| product brand name | SIRIUS |
| Product designation | power contactor |
| General technical data | |
| Size of contactor | S3 |
| • Insulation voltage rated value | 1 000 V |
| Degree of pollution | 3 |
| Surge voltage resistance rated value | 6 kV |
| maximum permissible voltage for safe isolation | |
| • between coil and main contacts acc. to EN 60947-1 | 690 V |
| • protection class IP on the front | IP20; IP20 on the front with cover / box terminal |
| • Protection class IP of the terminal | IP00 |
| Shock resistance at rectangular impulse | |
| • at AC | 6,8g / 5 ms, 4g / 10 ms |
| Shock resistance with sine pulse | |
| • at AC | 10,6g / 5 ms, 6,2g / 10 ms |
| Mechanical service life (switching cycles) | |

| | |
|---|------------|
| <ul style="list-style-type: none"> • of contactor typical | 10 000 000 |
| <ul style="list-style-type: none"> • of the contactor with added electronics-compatible auxiliary switch block typical | 5 000 000 |
| <ul style="list-style-type: none"> • of the contactor with added auxiliary switch block typical | 10 000 000 |
| Reference code acc. to DIN EN 81346-2 | Q |

| Ambient conditions | |
|--|----------------|
| Installation altitude at height above sea level | |
| <ul style="list-style-type: none"> • maximum | 2 000 m |
| Ambient temperature | |
| <ul style="list-style-type: none"> • during operation | -25 ... +60 °C |
| <ul style="list-style-type: none"> • during storage | -55 ... +80 °C |

| Main circuit | |
|---|--------------------|
| Number of poles for main current circuit | 4 |
| Number of NO contacts for main contacts | 4 |
| Number of NC contacts for main contacts | 0 |
| Operating current | |
| <ul style="list-style-type: none"> • at AC-1 at 400 V <ul style="list-style-type: none"> — at ambient temperature 40 °C rated value | 140 A |
| <ul style="list-style-type: none"> • at AC-1 <ul style="list-style-type: none"> — up to 690 V at ambient temperature 40 °C rated value | 140 A |
| <ul style="list-style-type: none"> — up to 690 V at ambient temperature 60 °C rated value | 120 A |
| Connectable conductor cross-section in main circuit at AC-1 | |
| <ul style="list-style-type: none"> • at 60 °C minimum permissible | 35 mm ² |
| <ul style="list-style-type: none"> • at 40 °C minimum permissible | 50 mm ² |
| Operating current | |
| <ul style="list-style-type: none"> • at 1 current path at DC-1 <ul style="list-style-type: none"> — at 24 V rated value | 80 A |
| <ul style="list-style-type: none"> — at 110 V rated value | 9 A |
| <ul style="list-style-type: none"> • with 2 current paths in series at DC-1 <ul style="list-style-type: none"> — at 24 V rated value | 80 A |
| <ul style="list-style-type: none"> — at 110 V rated value | 80 A |
| <ul style="list-style-type: none"> • with 3 current paths in series at DC-1 <ul style="list-style-type: none"> — at 24 V rated value | 80 A |
| <ul style="list-style-type: none"> — at 110 V rated value | 80 A |
| Operating current | |
| <ul style="list-style-type: none"> • at 1 current path at DC-3 at DC-5 <ul style="list-style-type: none"> — at 24 V rated value | 20 A |
| <ul style="list-style-type: none"> — at 110 V rated value | 2.5 A |

| | |
|--|------------------------------|
| <ul style="list-style-type: none"> with 2 current paths in series at DC-3 at DC-5 <ul style="list-style-type: none"> at 24 V rated value at 110 V rated value with 3 current paths in series at DC-3 at DC-5 <ul style="list-style-type: none"> at 24 V rated value at 110 V rated value | 80 A 80 A 80 A 80 A |
| Operating power | |
| <ul style="list-style-type: none"> at AC-1 <ul style="list-style-type: none"> at 230 V at 60 °C rated value at 400 V rated value | 53 kW 92 kW |
| Thermal short-time current limited to 10 s | 600 A |
| No-load switching frequency | |
| <ul style="list-style-type: none"> at AC | 5 000 1/h |
| Operating frequency | |
| <ul style="list-style-type: none"> at AC-1 maximum | 1 000 1/h |

Control circuit/ Control

| | |
|---|--------------|
| Type of voltage of the control supply voltage | AC |
| Control supply voltage at AC | |
| <ul style="list-style-type: none"> at 50 Hz rated value | 400 V |
| control supply voltage frequency | |
| <ul style="list-style-type: none"> 1 rated value | 50 Hz |
| Operating range factor control supply voltage rated value of magnet coil at AC | |
| <ul style="list-style-type: none"> at 50 Hz | 0.8 ... 1.1 |
| Apparent pick-up power of magnet coil at AC | 270 V·A |
| Inductive power factor with closing power of the coil | 0.68 |
| Apparent holding power of magnet coil at AC | 22 V·A |
| Inductive power factor with the holding power of the coil | 0.27 |
| Closing delay | |
| <ul style="list-style-type: none"> at AC | 20 ... 50 ms |
| Opening delay | |
| <ul style="list-style-type: none"> at AC | 10 ... 25 ms |
| Arcing time | 10 ... 15 ms |

Auxiliary circuit

| | |
|---|------|
| Number of NC contacts for auxiliary contacts | |
| <ul style="list-style-type: none"> instantaneous contact | 0 |
| Number of NO contacts for auxiliary contacts | |
| <ul style="list-style-type: none"> instantaneous contact | 0 |
| Operating current at AC-12 maximum | 10 A |
| Operating current at AC-15 | |
| <ul style="list-style-type: none"> at 230 V rated value | 6 A |

| | |
|--|---|
| <ul style="list-style-type: none"> • at 400 V rated value | 3 A |
| Operating current at DC-12 | |
| <ul style="list-style-type: none"> • at 60 V rated value • at 110 V rated value • at 220 V rated value | 6 A 3 A 1 A |
| Operating current at DC-13 | |
| <ul style="list-style-type: none"> • at 24 V rated value • at 60 V rated value • at 110 V rated value • at 220 V rated value | 10 A 2 A 1 A 0.3 A |
| contact reliability of auxiliary contacts | 1 faulty switching per 100 million (17 V, 1 mA) |

| | |
|---|-------------|
| UL/CSA ratings | |
| Contact rating of auxiliary contacts according to UL | A600 / Q600 |

| | |
|---|--|
| Short-circuit protection | |
| Design of the fuse link | |
| <ul style="list-style-type: none"> • for short-circuit protection of the main circuit <ul style="list-style-type: none"> — with type of coordination 1 required — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required | fuse gL/gG: 250 A fuse gL/gG: 160 A fuse gL/gG: 10 A |

| | |
|---|--|
| Installation/ mounting/ dimensions | |
| Mounting type | screw and snap-on mounting onto 35 mm and 75 mm standard mounting rail |
| <ul style="list-style-type: none"> • Side-by-side mounting | Yes |
| Height | 146 mm |
| Width | 93 mm |
| Depth | 139 mm |
| Required spacing | |
| <ul style="list-style-type: none"> • for grounded parts <ul style="list-style-type: none"> — at the side | 6 mm |

| | |
|--|---|
| Connections/ Terminals | |
| <ul style="list-style-type: none"> • Type of electrical connection for main current circuit • Type of electrical connection for auxiliary and control current circuit | screw-type terminals screw-type terminals |
| Type of connectable conductor cross-sections | |
| <ul style="list-style-type: none"> • for main contacts <ul style="list-style-type: none"> — solid — stranded — single or multi-stranded — finely stranded with core end processing | 2x (2.5 ... 16 mm ²) 2x (10 ... 50 mm ²) 2x (2,5 ... 16 mm ²) 2x (2.5 ... 35 mm ²) |

— finely stranded without core end processing

2x (10 ... 35 mm²)

- at AWG conductors for main contacts

2x (10 ... 1/0)

Type of connectable conductor cross-sections

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

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 | EMC | Functional Safety/Safety of Machinery |
|---------------------------------|------------|--|



[Type Examination Certificate](#)

| | | |
|----------------------------------|--------------------------|--------------------------|
| Declaration of Conformity | Test Certificates | Marine / Shipping |
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[Miscellaneous](#)

[Special Test Certificate](#)



| | | |
|--------------------------|--------------|----------------|
| Marine / Shipping | other | Railway |
|--------------------------|--------------|----------------|



[Confirmation](#)

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Further information

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

<https://www.siemens.com/ic10>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT1346-1AV00>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1346-1AV00>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RT1346-1AV00>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

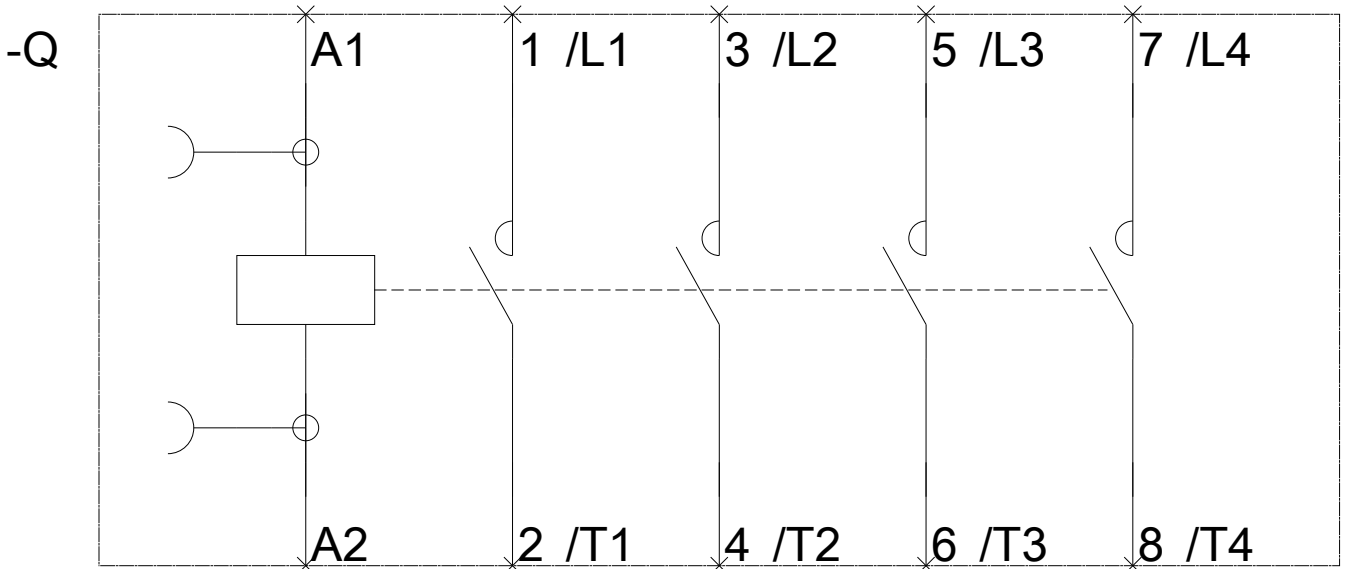
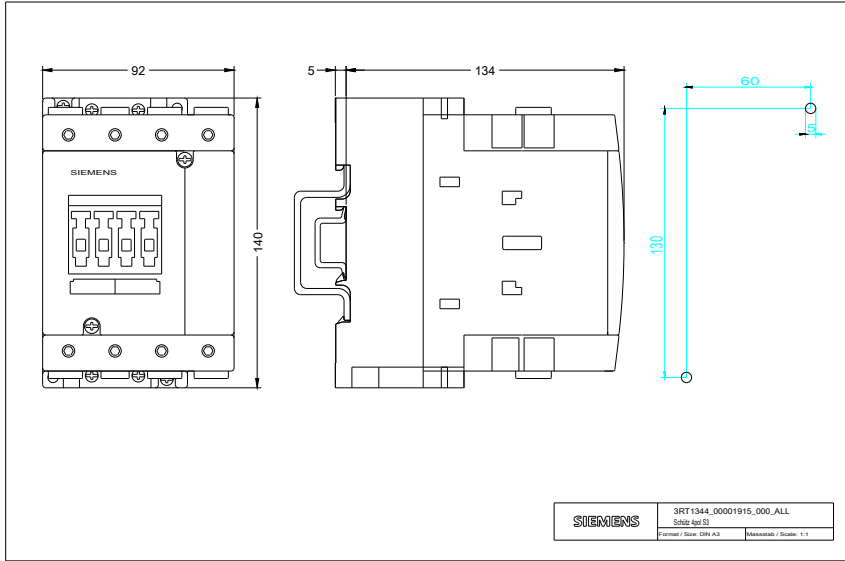
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1346-1AV00&lang=en

Characteristic: Tripping characteristics, I²t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RT1346-1AV00/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT1346-1AV00&objecttype=14&gridview=view1>



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