

Power contactor, AC-3 50 A, 22 kW / 400 V 42 V DC, 3-pole, Size S2, Spring-type terminal !!! Phased-out product !!! Successor is SIRIUS 3RT2



Figure similar

| | |
|---|------------------------|
| Product brand name | SIRIUS |
| Product designation | power contactor |
| General technical data | |
| Size of contactor | S2 |
| Insulation voltage | |
| • rated value | 690 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 | 400 V |
| Protection class IP | |
| • on the front | IP20 |
| • of the terminal | IP00 |
| Shock resistance at rectangular impulse | |
| • at DC | 10g / 5 ms, 5g / 10 ms |
| Shock resistance with sine pulse | |

| | |
|---|------------------------|
| • at DC | 15g / 5 ms, 8g / 10 ms |
| Mechanical service life (switching cycles) | |
| • of contactor typical | 10 000 000 |
| • 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

| | |
|--|----------------|
| Installation altitude at height above sea level | |
| • maximum | 2 000 m |
| Ambient temperature | |
| • during operation | -25 ... +60 °C |
| • during storage | -55 ... +80 °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 | 60 A |
| • at AC-1 | |
| — up to 690 V at ambient temperature 40 °C rated value | 60 A |
| — up to 690 V at ambient temperature 60 °C rated value | 55 A |
| • at AC-3 | |
| — at 400 V rated value | 50 A |
| — at 690 V rated value | 24 A |
| • at AC-4 at 400 V rated value | 41 A |
| Connectable conductor cross-section in main circuit at AC-1 | |
| • at 60 °C minimum permissible | 16 mm ² |
| • at 40 °C minimum permissible | 16 mm ² |
| Operating current for approx. 200000 operating cycles at AC-4 | |
| • at 400 V rated value | 24 A |
| • at 690 V rated value | 12.6 A |
| Operating current | |
| • at 1 current path at DC-1 | |
| — at 24 V rated value | 55 A |
| — at 110 V rated value | 4.5 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 — at 110 V rated value • with 3 current paths in series at DC-1 <ul style="list-style-type: none"> — at 24 V rated value — at 110 V rated value | <p>55 A</p> <p>25 A</p> <p>55 A</p> <p>55 A</p> |
| 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 — at 110 V rated value • 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 | <p>35 A</p> <p>2.5 A</p> <p>55 A</p> <p>25 A</p> <p>55 A</p> <p>55 A</p> |
| 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 — at 690 V rated value — at 690 V at 60 °C rated value • at AC-2 at 400 V rated value • at AC-3 <ul style="list-style-type: none"> — at 230 V rated value — at 400 V rated value — at 500 V rated value — at 690 V rated value | <p>22 kW</p> <p>38 kW</p> <p>66 kW</p> <p>66 kW</p> <p>22 kW</p> <p>15 kW</p> <p>22 kW</p> <p>30 kW</p> <p>22 kW</p> |
| Operating power for approx. 200000 operating cycles at AC-4 | |
| <ul style="list-style-type: none"> • at 400 V rated value • at 690 V rated value | <p>12.6 kW</p> <p>11.4 kW</p> |
| Thermal short-time current limited to 10 s | 400 A |
| Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor | 5 W |
| No-load switching frequency | |
| <ul style="list-style-type: none"> • at DC | 1 500 1/h |
| Operating frequency | |
| <ul style="list-style-type: none"> • at AC-1 maximum • at AC-2 maximum • at AC-3 maximum • at AC-4 maximum | <p>1 000 1/h</p> <p>400 1/h</p> <p>800 1/h</p> <p>300 1/h</p> |

| Control circuit/ Control | |
|--|---------------|
| Type of voltage of the control supply voltage | DC |
| Control supply voltage at DC <ul style="list-style-type: none"> rated value | 42 V |
| Operating range factor control supply voltage rated value of magnet coil at DC <ul style="list-style-type: none"> initial value Full-scale value | 0.8 1.1 |
| Closing power of magnet coil at DC | 13.3 W |
| Holding power of magnet coil at DC | 13.3 W |
| Closing delay <ul style="list-style-type: none"> at DC | 60 ... 100 ms |
| Opening delay <ul style="list-style-type: none"> at DC | 20 ... 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 at 400 V rated value | 6 A 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 | fuse gL/gG: 160 A fuse gL/gG: 80 A |

- for short-circuit protection of the auxiliary switch required

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 |
| <ul style="list-style-type: none"> • Side-by-side mounting | Yes |
| Height | 112 mm |
| Width | 55 mm |
| Depth | 130 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

| | |
|--|---|
| Type of electrical connection | |
| <ul style="list-style-type: none"> • for main current circuit • for auxiliary and control current circuit | <p>screw-type terminals</p> <p>spring-loaded terminals</p> |
| 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 — finely stranded without core end processing • at AWG conductors for main contacts | <p>2x (0.75 ... 16 mm²)</p> <p>2x (0.75 ... 25 mm²)</p> <p>2x (0,75 ... 16 mm²)</p> <p>2x (0.75 ... 16 mm²)</p> <p>2x (0.75 ... 16 mm²)</p> <p>2x (18 ... 2)</p> |
| Type of connectable conductor cross-sections | |
| <ul style="list-style-type: none"> • for auxiliary contacts <ul style="list-style-type: none"> — solid — finely stranded with core end processing — finely stranded without core end processing • at AWG conductors for auxiliary contacts | <p>2x (0.25 ... 2.5 mm²)</p> <p>2x (0.25 ... 1.5 mm²)</p> <p>2x (0.25 ... 2.5 mm²)</p> <p>2x (24 ... 14)</p> |

Certificates/approvals

| | | |
|--------------------------|---------------------------------------|---------------------------|
| General Product Approval | Functional Safety/Safety of Machinery | Declaration of Conformity |
|--------------------------|---------------------------------------|---------------------------|



[Type Examination Certificate](#)



| | |
|-------------------|-------------------|
| Test Certificates | Marine / Shipping |
|-------------------|-------------------|

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)

[Miscellaneous](#)



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



[Miscellaneous](#)

[Confirmation](#)

Further information

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

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

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT1036-3BD40>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1036-3BD40>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RT1036-3BD40>

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

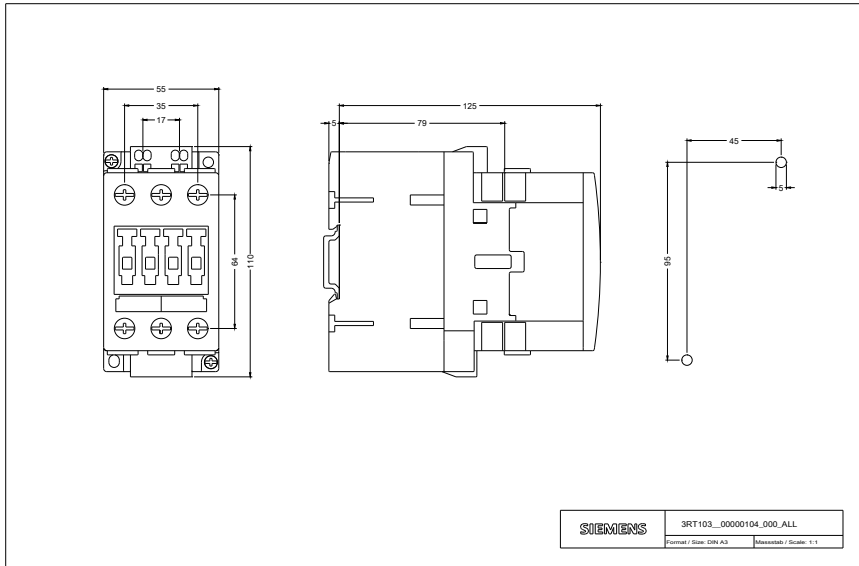
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1036-3BD40&lang=en

Characteristic: Tripping characteristics, I_t, Let-through current

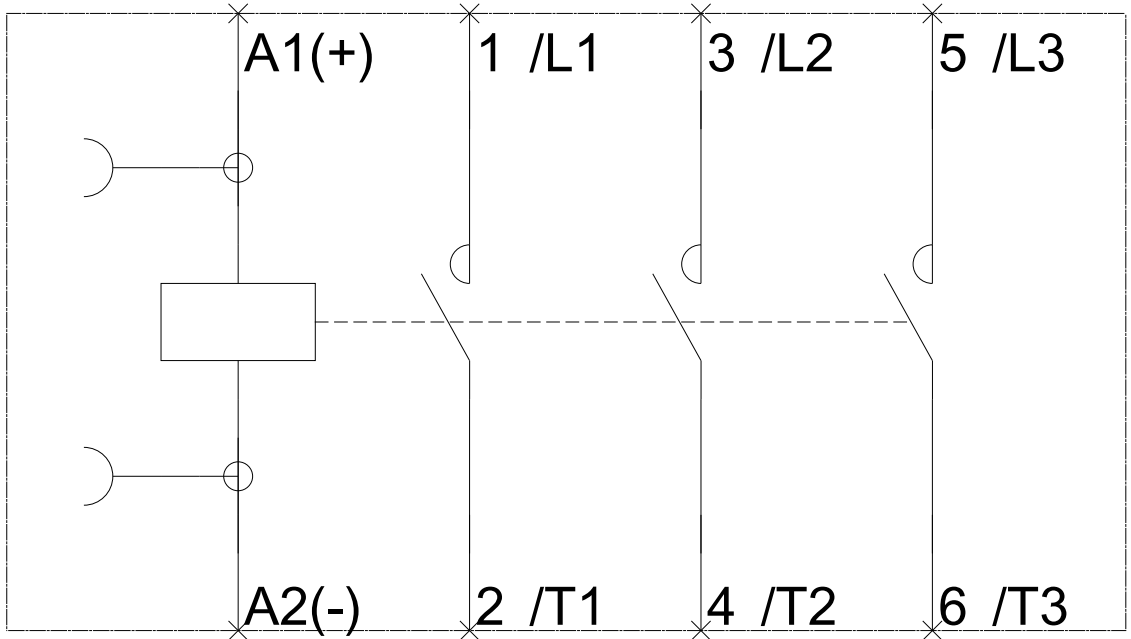
<https://support.industry.siemens.com/cs/ww/en/ps/3RT1036-3BD40/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT1036-3BD40&objecttype=14&gridview=view1>



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