

Vacuum contactor, AC-3 265 A, 132 kW / 400 V AC (50-60 Hz) / DC operation 440-480 V UC Auxiliary contacts 2 NO + 2 NC 3-pole, Size S10 Busbar connections Drive: conventional



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|--|------------------|
| product brand name | SIRIUS |
| Product designation | Vacuum contactor |
| Product type designation | 3RT12 |
| General technical data | |
| Size of contactor | S10 |
| Product extension | |
| • function module for communication | No |
| • Auxiliary switch | Yes |
| Power loss [W] for rated value of the current | |
| • at AC in hot operating state | 36 W |
| • at AC in hot operating state per pole | 12 W |
| Power loss [W] for rated value of the current without load current share typical | 8.2 W |
| Surge voltage resistance | |
| • of main circuit rated value | 8 kV |
| • of auxiliary circuit rated value | 6 kV |
| maximum permissible voltage for safe isolation | |
| • between coil and main contacts acc. to EN 60947-1 | 690 V |

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| <ul style="list-style-type: none"> • protection class IP on the front • Protection class IP of the terminal | IP00; IP20 on the front with cover / box terminal IP00 |
| Shock resistance at rectangular impulse <ul style="list-style-type: none"> • at AC • at DC | 8,5g / 5 ms, 4,2g / 10 ms 8,5g / 5 ms, 4,2g / 10 ms |
| Shock resistance with sine pulse <ul style="list-style-type: none"> • at AC • at DC | 13,4g / 5 ms, 6,5g / 10 ms 13,4g / 5 ms, 6,5g / 10 ms |
| Mechanical service life (switching cycles) <ul style="list-style-type: none"> • of contactor typical • of the contactor with added electronics-compatible auxiliary switch block typical • of the contactor with added auxiliary switch block typical | 10 000 000 5 000 000 10 000 000 |
| Reference code acc. to DIN EN 81346-2 | Q |

Ambient conditions

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| 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 • during storage | -25 ... +60 °C -55 ... +80 °C |

Main circuit

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| Number of poles for main current circuit | 3 |
| Number of NO contacts for main contacts | 3 |
| Operating voltage <ul style="list-style-type: none"> • at AC-3 rated value maximum | 1 000 V |
| 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 • at AC-1 <ul style="list-style-type: none"> — up to 690 V at ambient temperature 40 °C rated value — up to 690 V at ambient temperature 60 °C rated value — up to 1000 V at ambient temperature 40 °C rated value — up to 1000 V at ambient temperature 60 °C rated value • at AC-2 at 400 V rated value • at AC-3 <ul style="list-style-type: none"> — at 400 V rated value — at 500 V rated value | 330 A 330 A 300 A 330 A 300 A 265 A 265 A 265 A |

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| — at 690 V rated value | 265 A |
| — at 1000 V rated value | 265 A |
| • at AC-4 at 400 V rated value | 230 A |
| • at AC-6a | |
| — up to 230 V for current peak value n=20 rated value | 265 A |
| — up to 400 V for current peak value n=20 rated value | 265 A |
| — up to 500 V for current peak value n=20 rated value | 265 A |
| — up to 690 V for current peak value n=20 rated value | 265 A |
| — up to 1000 V for current peak value n=20 rated value | 265 A |
| • at AC-6a | |
| — up to 230 V for current peak value n=30 rated value | 209 A |
| — up to 400 V for current peak value n=30 rated value | 209 A |
| — up to 500 V for current peak value n=30 rated value | 209 A |
| — up to 690 V for current peak value n=30 rated value | 209 A |
| — up to 1000 V for current peak value n=30 rated value | 209 A |
| Minimum cross-section in main circuit | |
| • at maximum AC-1 rated value | 185 mm ² |
| Operating current for approx. 200000 operating cycles at AC-4 | |
| • at 400 V rated value | 115 A |
| • at 690 V rated value | 81 A |
| Operating power | |
| • at AC-2 at 400 V rated value | 132 kW |
| • at AC-3 | |
| — at 230 V rated value | 75 kW |
| — at 400 V rated value | 132 kW |
| — at 500 V rated value | 160 kW |
| — at 690 V rated value | 250 kW |
| — at 1000 V rated value | 355 kW |
| Operating power for approx. 200000 operating cycles at AC-4 | |
| • at 400 V rated value | 65 kW |
| • at 690 V rated value | 112 kW |
| Operating apparent output at AC-6a | |

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| <ul style="list-style-type: none"> • up to 230 V for current peak value n=20 rated value | 100 000 kV·A |
| <ul style="list-style-type: none"> • up to 400 V for current peak value n=20 rated value | 180 000 V·A |
| <ul style="list-style-type: none"> • up to 500 V for current peak value n=20 rated value | 220 000 V·A |
| <ul style="list-style-type: none"> • up to 690 V for current peak value n=20 rated value | 310 000 V·A |
| <ul style="list-style-type: none"> • up to 1000 V for current peak value n=20 rated value | 450 000 V·A |
| Operating apparent output at AC-6a | |
| <ul style="list-style-type: none"> • up to 230 V for current peak value n=30 rated value | 80 000 V·A |
| <ul style="list-style-type: none"> • up to 400 V for current peak value n=30 rated value | 140 000 V·A |
| <ul style="list-style-type: none"> • up to 500 V for current peak value n=30 rated value | 180 000 V·A |
| <ul style="list-style-type: none"> • up to 690 V for current peak value n=30 rated value | 250 000 V·A |
| <ul style="list-style-type: none"> • up to 1000 V for current peak value n=30 rated value | 360 000 V·A |
| No-load switching frequency | |
| <ul style="list-style-type: none"> • at AC | 2 000 1/h |
| <ul style="list-style-type: none"> • at DC | 2 000 1/h |
| Operating frequency | |
| <ul style="list-style-type: none"> • at AC-1 maximum | 750 1/h |
| <ul style="list-style-type: none"> • at AC-2 maximum | 250 1/h |
| <ul style="list-style-type: none"> • at AC-3 maximum | 750 1/h |
| <ul style="list-style-type: none"> • at AC-4 maximum | 250 1/h |

| Control circuit/ Control | |
|---|---------------|
| Type of voltage of the control supply voltage | AC/DC |
| Control supply voltage at AC | |
| <ul style="list-style-type: none"> • at 50 Hz rated value | 440 ... 480 V |
| <ul style="list-style-type: none"> • at 60 Hz rated value | 440 ... 480 V |
| Control supply voltage at DC | |
| <ul style="list-style-type: none"> • rated value | 440 ... 480 V |
| Operating range factor control supply voltage rated value of magnet coil at DC | |
| <ul style="list-style-type: none"> • initial value | 0.8 |
| <ul style="list-style-type: none"> • Full-scale value | 1.1 |
| 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 |

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| • at 60 Hz | 0.8 ... 1.1 |
| Design of the surge suppressor | with varistor |
| Apparent pick-up power of magnet coil at AC | |
| • at 50 Hz | 590 V·A |
| Inductive power factor with closing power of the coil | |
| • at 50 Hz | 0.9 |
| Apparent holding power of magnet coil at AC | |
| • at 50 Hz | 6.1 V·A |
| Inductive power factor with the holding power of the coil | |
| • at 50 Hz | 0.9 |
| Closing power of magnet coil at DC | 700 W |
| Holding power of magnet coil at DC | 8.2 W |
| Closing delay | |
| • at AC | 30 ... 95 ms |
| • at DC | 30 ... 95 ms |
| Opening delay | |
| • at AC | 40 ... 80 ms |
| • at DC | 40 ... 80 ms |
| Arcing time | 10 ... 15 ms |
| Control version of the switch operating mechanism | Standard A1 - A2 |

Auxiliary circuit

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|---|--------|
| Number of NC contacts for auxiliary contacts | |
| • instantaneous contact | 2 |
| Number of NO contacts for auxiliary contacts | |
| • instantaneous contact | 2 |
| 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 |
| • at 500 V rated value | 2 A |
| • at 690 V rated value | 1 A |
| Operating current at DC-12 | |
| • at 24 V rated value | 10 A |
| • at 48 V rated value | 6 A |
| • at 60 V rated value | 6 A |
| • at 110 V rated value | 3 A |
| • at 125 V rated value | 2 A |
| • at 220 V rated value | 1 A |
| • at 600 V rated value | 0.15 A |
| Operating current at DC-13 | |
| • at 24 V rated value | 10 A |

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| <ul style="list-style-type: none"> • at 48 V rated value • at 60 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 600 V rated value | <p>2 A</p> <p>2 A</p> <p>1 A</p> <p>0.9 A</p> <p>0.3 A</p> <p>0.1 A</p> |
| contact reliability of auxiliary contacts | 1 faulty switching per 100 million (17 V, 1 mA) |

UL/CSA ratings

| | |
|--|--|
| Full-load current (FLA) for three-phase AC motor | |
| <ul style="list-style-type: none"> • at 480 V rated value • at 600 V rated value | <p>240 A</p> <p>242 A</p> |
| Yielded mechanical performance [hp] | |
| <ul style="list-style-type: none"> • for three-phase AC motor <ul style="list-style-type: none"> — at 200/208 V rated value — at 220/230 V rated value — at 460/480 V rated value — at 575/600 V rated value | <p>75 hp</p> <p>100 hp</p> <p>200 hp</p> <p>250 hp</p> |
| 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 | <p>gG: 500 A (690 V, 100 kA)</p> <p>gG: 500 A (690 V, 100 kA), aM: 400 A (690 V, 50 kA), BS88: 450 A (415 V, 50 kA)</p> <p>gG: 10 A (500 V, 1 kA)</p> |

Installation/ mounting/ dimensions

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|---|---|
| <ul style="list-style-type: none"> • mounting position | +/-22,5° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; standing, on horizontal mounting surface |
| Mounting type | screw fixing |
| <ul style="list-style-type: none"> • Side-by-side mounting | Yes |
| Height | 210 mm |
| Width | 145 mm |
| Depth | 206 mm |
| Required spacing | |
| <ul style="list-style-type: none"> • with side-by-side mounting <ul style="list-style-type: none"> — forwards — upwards — downwards — at the side | <p>20 mm</p> <p>10 mm</p> <p>10 mm</p> <p>0 mm</p> |

| | |
|----------------------|-------|
| • for grounded parts | |
| — forwards | 20 mm |
| — upwards | 10 mm |
| — at the side | 10 mm |
| — downwards | 10 mm |
| • for live parts | |
| — forwards | 20 mm |
| — upwards | 10 mm |
| — downwards | 10 mm |
| — at the side | 10 mm |

Connections/ Terminals

| | |
|--|---|
| Width of connection bar | 25 mm |
| Thickness of connection bar | 6 mm |
| Diameter of holes | 11 mm |
| Number of holes | 1 |
| <ul style="list-style-type: none"> • Type of electrical connection for main current circuit • Type of electrical connection for auxiliary and control current circuit • Type of electrical connection at contactor for auxiliary contacts • Type of electrical connection of magnet coil | <p>Connection bar</p> <p>screw-type terminals</p> <p>Screw-type terminals</p> <p>Screw-type terminals</p> |
| Type of connectable conductor cross-sections | |
| <ul style="list-style-type: none"> • at AWG conductors for main contacts | 2/0 ... 500 kcmil |
| Connectable conductor cross-section for main contacts | |
| <ul style="list-style-type: none"> • stranded | 70 ... 240 mm ² |
| Connectable conductor cross-section for auxiliary contacts | |
| <ul style="list-style-type: none"> • single or multi-stranded • finely stranded with core end processing | <p>0.5 ... 4 mm²</p> <p>0.5 ... 2.5 mm²</p> |
| Type of connectable conductor cross-sections | |
| <ul style="list-style-type: none"> • for auxiliary contacts <ul style="list-style-type: none"> — solid — single or multi-stranded — finely stranded with core end processing • at AWG conductors for auxiliary contacts | <p>2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²), max. 2x (0.75 ... 4 mm²)</p> <p>2x (0,5 ... 1,5 mm²), 2x (0,75 ... 2,5 mm²), max. 2x (0,75 ... 4 mm²)</p> <p>2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)</p> <p>2x (20 ... 16), 2x (18 ... 14), 1x 12</p> |
| AWG number as coded connectable conductor cross section | |
| <ul style="list-style-type: none"> • for auxiliary contacts | 18 ... 14 |

Safety related data

Product function

| | |
|---|--|
| • Mirror contact acc. to IEC 60947-4-1 | Yes |
| • positively driven operation acc. to IEC 60947-5-1 | No |
| Protection against electrical shock | finger-safe when touched vertically from front acc. to IEC 60529 |
| Suitability for use safety-related switching OFF | Yes |

Certificates/ approvals

| | | |
|---------------------------------|------------|--|
| General Product Approval | EMC | Functional Safety/Safety of Machinery |
|---------------------------------|------------|--|



[Type Examination Certificate](#)

| | | |
|----------------------------------|--------------------------|--------------------------|
| Declaration of Conformity | Test Certificates | Marine / Shipping |
|----------------------------------|--------------------------|--------------------------|



[Miscellaneous](#)

[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



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



[Confirmation](#)

[Miscellaneous](#)

[Special Test Certificate](#)

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=3RT1265-6AR36>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1265-6AR36>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RT1265-6AR36>

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

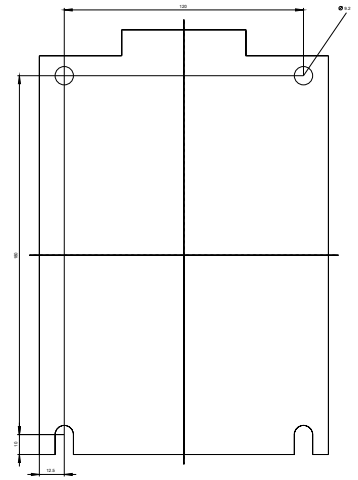
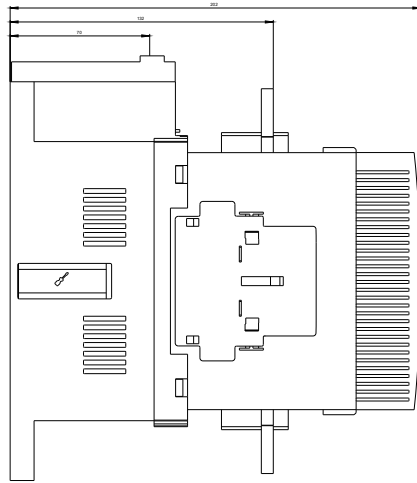
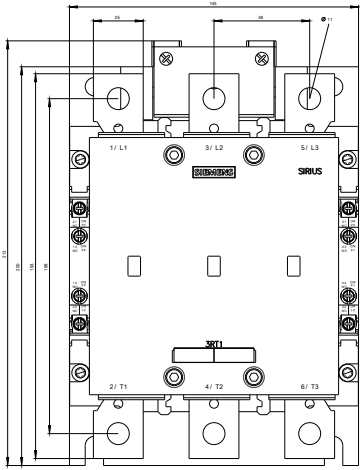
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1265-6AR36&lang=en

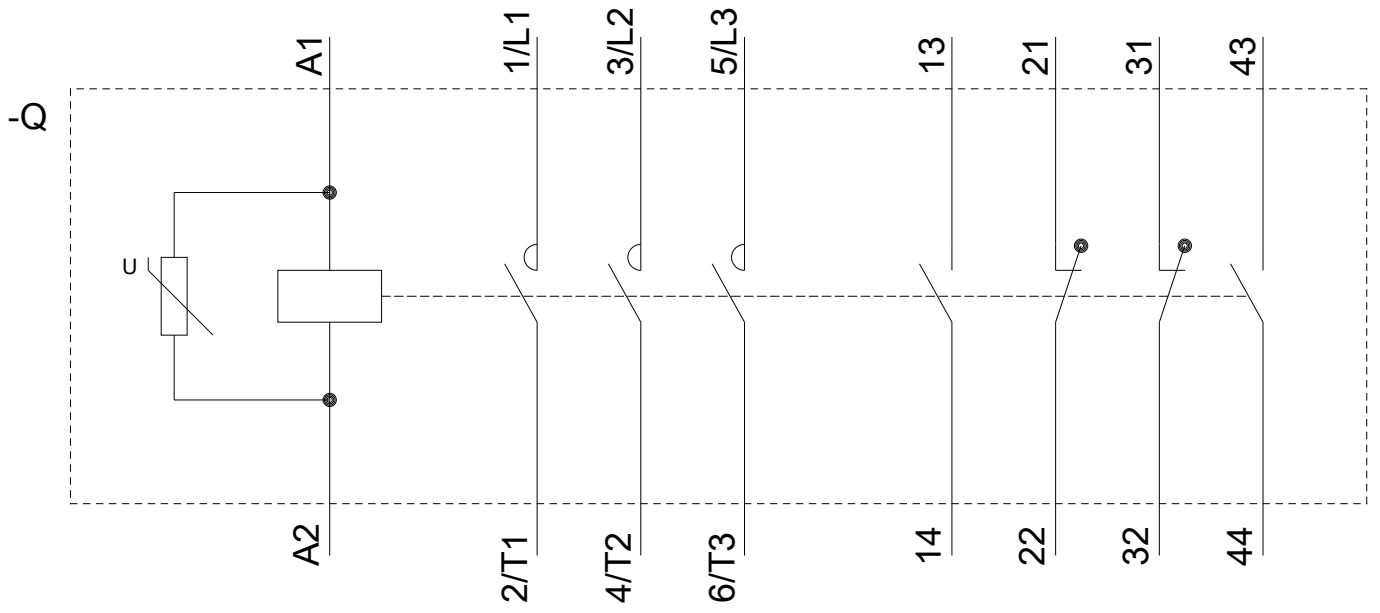
Characteristic: Tripping characteristics, I²t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RT1265-6AR36/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT1265-6AR36&objecttype=14&gridview=view1>





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