



contactor AC-1, 22 A, 400 V / 40 °C, 4-pole, 110 V AC, 50 Hz / 120 V, 60 Hz, spring-loaded terminal, size: S00

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|---|------------------------------|
| product brand name | SIRIUS |
| product designation | Contacteur |
| product type designation | 3RT23 |
| General technical data | |
| size of contactor | S00 |
| 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 | 6.4 W |
| • at AC in hot operating state per pole | 1.6 W |
| • without load current share typical | 1.4 W |
| type of calculation of power loss current-dependent | quadratic |
| insulation voltage | |
| • of main circuit with degree of pollution 3 rated value | 690 V |
| • of the auxiliary and control circuit with degree of pollution 3 rated value | 690 V |
| surge voltage resistance | |
| • of main circuit rated value | 6 kV |
| • of auxiliary circuit rated value | 6 kV |
| shock resistance at rectangular impulse | |
| • at AC | 7,3 g / 5 ms, 4,7 g / 10 ms |
| shock resistance with sine pulse | |
| • at AC | 11,4 g / 5 ms, 7,3 g / 10 ms |
| mechanical service life (operating cycles) | |
| • of contactor typical | 30 000 000 |
| • of the contactor with added auxiliary switch block typical | 10 000 000 |
| reference code according to IEC 81346-2 | Q |
| Substance Prohibitance (day/month/year) | 10/01/2009 |
| Net Weight | 0.255 kg |
| 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 |
| relative humidity minimum | 10 % |
| relative humidity at 55 °C according to IEC 60068-2-30 maximum | 95 % |
| Main circuit | |

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| number of poles for main current circuit | 4 |
| number of NO contacts for main contacts | 4 |
| type of voltage for main current circuit | AC |
| operational current | |
| <ul style="list-style-type: none"> ● at AC-1 at 400 V at ambient temperature 40 °C rated value | 22 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 — up to 690 V at ambient temperature 60 °C rated value | 22 A 20 A |
| <ul style="list-style-type: none"> ● at AC-3 <ul style="list-style-type: none"> — at 400 V rated value | 12 A |
| <ul style="list-style-type: none"> ● at AC-4 at 400 V rated value | 8.5 A |
| minimum cross-section in main circuit at maximum AC-1 rated value | 4 mm ² |
| operational 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 — at 60 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value | 20 A 20 A 2.1 A 0.8 A 0.6 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 60 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value | 20 A 20 A 12 A 1.6 A 0.8 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 — at 60 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value | 20 A 20 A 20 A 20 A 1.3 A |
| <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 60 V rated value — at 110 V rated value | 20 A 0.5 A 0.15 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 60 V rated value — at 110 V rated value | 20 A 5 A 0.35 A |
| <ul style="list-style-type: none"> ● with 3 current paths in series at DC-3 at DC-5 <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 — at 440 V rated value | 20 A 20 A 20 A 1.5 A 0.2 A |
| operating power | |
| <ul style="list-style-type: none"> ● at AC-3 at 400 V rated value | 5.5 kW |
| <ul style="list-style-type: none"> ● at AC-4 at 400 V rated value | 4 kW |
| no-load switching frequency | |
| <ul style="list-style-type: none"> ● at AC | 10 000 1/h |
| operating frequency | |
| <ul style="list-style-type: none"> ● at AC-1 maximum | 1 000 1/h |
| Control circuit/ Control | |
| type of voltage | AC |
| type of voltage of the control supply voltage | AC |
| control supply voltage at AC | |

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| <ul style="list-style-type: none"> • at 50 Hz rated value • at 60 Hz rated value | 110 V 120 V |
| operating range factor control supply voltage rated value of magnet coil at AC <ul style="list-style-type: none"> • at 50 Hz • at 60 Hz | 0.8 ... 1.1 0.8 ... 1.1 |
| apparent pick-up power of magnet coil at AC <ul style="list-style-type: none"> • at 50 Hz • at 60 Hz | 36 VA 36 VA |
| inductive power factor with closing power of the coil <ul style="list-style-type: none"> • at 50 Hz • at 60 Hz | 0.8 0.8 |
| apparent holding power of magnet coil at AC <ul style="list-style-type: none"> • at 50 Hz • at 60 Hz | 5.9 VA 5.9 VA |
| inductive power factor with the holding power of the coil <ul style="list-style-type: none"> • at 50 Hz • at 60 Hz | 0.24 0.24 |
| closing delay <ul style="list-style-type: none"> • at AC | 9 ... 35 ms |
| opening delay <ul style="list-style-type: none"> • at AC | 7 ... 13 ms |
| arcing time | 10 ... 15 ms |
| control version of the switch operating mechanism | Standard A1 - A2 |
| Auxiliary circuit | |
| number of NC contacts for auxiliary contacts <ul style="list-style-type: none"> • attachable | 2 |
| number of NO contacts for auxiliary contacts <ul style="list-style-type: none"> • attachable | 2 |
| 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 coordination 2 required | gG: 35 A (690 V, 100 kA) gG: 20 A (690 V, 100 kA) |
| Installation/ mounting/ dimensions | |
| mounting position | +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface |
| fastening method side-by-side mounting | Yes |
| fastening method | screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 |
| height | 70 mm |
| width | 45 mm |
| depth | 73 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 • for grounded parts <ul style="list-style-type: none"> — forwards — upwards — at the side — downwards • for live parts <ul style="list-style-type: none"> — forwards — upwards — downwards — at the side | 10 mm 10 mm 10 mm 0 mm 10 mm 10 mm 6 mm 10 mm 10 mm 10 mm 10 mm 6 mm |
| Connections/ Terminals | |

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| type of electrical connection | |
| <ul style="list-style-type: none"> • for main current circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil | spring-loaded terminals spring-loaded terminals Spring-type terminals Spring-type terminals |
| type of connectable conductor cross-sections | |
| <ul style="list-style-type: none"> • for main contacts <ul style="list-style-type: none"> — solid — solid or stranded — finely stranded with core end processing — finely stranded without core end processing • for AWG cables for main contacts | 2x (0.5 ... 4 mm ²) 2x (0.5 ... 4 mm ²) 2x (0.5 ... 2.5 mm ²) 2x (0.5 ... 2.5 mm ²) 2x (20 ... 12) |
| connectable conductor cross-section for main contacts | |
| <ul style="list-style-type: none"> • solid • solid or stranded • stranded • finely stranded with core end processing • finely stranded without core end processing | 0.5 ... 4 mm ² 0.5 ... 4 mm ² 0.5 ... 4 mm ² 0.5 ... 2.5 mm ² 0.5 ... 2.5 mm ² |
| connectable conductor cross-section for auxiliary contacts | |
| <ul style="list-style-type: none"> • solid or stranded • finely stranded with core end processing • finely stranded without core end processing | 0.5 ... 4 mm ² 0.5 ... 2.5 mm ² 0.5 ... 2.5 mm ² |
| type of connectable conductor cross-sections | |
| <ul style="list-style-type: none"> • for auxiliary contacts <ul style="list-style-type: none"> — solid — solid or stranded — finely stranded with core end processing — finely stranded without core end processing • for AWG cables for auxiliary contacts | 2x (0.5 ... 2.5 mm ²) 2x (0.5 ... 4 mm ²) 2x (0.5 ... 2.5 mm ²) 2x (0.5 ... 2.5 mm ²) 2x (20 ... 12) |
| AWG number as coded connectable conductor cross section for main contacts | 20 ... 12 |
| AWG number as coded connectable conductor cross section for auxiliary contacts | 20 ... 12 |

Safety related data

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|---|-----------------------|
| product function | |
| <ul style="list-style-type: none"> • mirror contact according to IEC 60947-4-1 • positively driven operation according to IEC 60947-5-1 | Yes; with 3RH29 No |

Electrical Safety

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|--|--|
| protection class IP on the front according to IEC 60529 | IP20 |
| touch protection on the front according to IEC 60529 | finger-safe, for vertical contact from the front |

Communication/ Protocol

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|---|----|
| product function bus communication | No |
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Approvals Certificates

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|--|--|
| Environmental Product Declaration | |
| <ul style="list-style-type: none"> • global warming potential [CO2 eq] / during manufacturing • global warming potential [CO2 eq] / during operation • global warming potential [CO2 eq] / after end of life • global warming potential [CO2 eq] / total | 1.15 kg 93.8 kg -0.178 kg 94.8 kg |

Environment

General Product Approval

[Environmental Confirmations](#)



| | | | |
|--------------------------|-----|-------------------|----------------------|
| General Product Approval | EMV | Test Certificates | Maritime application |
|--------------------------|-----|-------------------|----------------------|



[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



Maritime application



other

[Confirmation](#)

[Miscellaneous](#)



Railway

[Special Test Certificate](#)

Further information

Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

Information for data generation and storage

<https://support.industry.siemens.com/cs/ww/en/view/109995012>

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=3RT2317-2AK60>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RT2317-2AK60>

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

https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2317-2AK60&lang=en

Cax online generator

<https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2317-2AK60>

Characteristic curves

[https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP="HAUPT"></mmp_prod_no>](https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP=)

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