



CONTACTOR, AC-3, 11KW/400V, 1NO+1NC,
AC 230V 50HZ, 3-POLE,
SZ S0 SCREW TERMINAL

General technical data:

| | | |
|-----------------------------------------------------------------------------|-----|-------------------------------|
| Product brand name | | SIRIUS |
| Product designation | | 3RT2 contactor |
| Size of the contactor | | S0 |
| Protection class IP / frontal/front side | | IP20 |
| Degree of pollution | | 3 |
| Altitude of installation site / at a height over sea level / maximum | m | 2,000 |
| Ambient temperature | | |
| • during storage | °C | -55 ... 80 |
| • during the operating phase | °C | -25 ... 60 |
| • during transport | °C | -55 ... 80 |
| Resistance against shock | | 12.5g / 5 ms and 7.8g / 10 ms |
| Impulse voltage resistance / rated value | kV | 6 |
| Insulation voltage / rated value | V | 690 |
| Resistive loss | | |
| • per conductor / typical | W | 1.6 |
| Apparent loss power / of the magnet coil / at AC / typical | V·A | 9.8 |
| Item designation | | |
| • according to DIN 40719 extendable after IEC 204-2 / according to IEC 750 | | K |

| | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|------------|
| <ul style="list-style-type: none"> • according to DIN EN 61346-2 | | Q |
| Mechanical operating cycles as operating time | | |
| <ul style="list-style-type: none"> • of the contactor / typical | | 10,000,000 |
| <ul style="list-style-type: none"> • of the contactor with added auxiliary switch block / typical | | 10,000,000 |
| <ul style="list-style-type: none"> • of the contactor with added electronics-compatible auxiliary switch block / typical | | 10,000,000 |
| Main circuit: | | |
| Number of poles / for main current circuit | | 3 |
| Number of NC contacts / for main contacts | | 0 |
| Number of NO contacts / for main contacts | | 3 |
| Operating voltage / at 3 AC / rated value | | |
| <ul style="list-style-type: none"> • maximum | V | 690 |
| Operating current / at AC-1 / at 400 V | | |
| <ul style="list-style-type: none"> • at 40 °C ambient temperature / rated value | A | 40 |
| <ul style="list-style-type: none"> • at 60 °C ambient temperature / rated value | A | 35 |
| Operating current | | |
| <ul style="list-style-type: none"> • at AC-2 / at 400 V / rated value | A | 25 |
| <ul style="list-style-type: none"> • at AC-3 / at 400 V / rated value | A | 25 |
| <ul style="list-style-type: none"> • at AC-4 / at 400 V / rated value | A | 15.5 |
| <ul style="list-style-type: none"> • with 1 current path / at DC-1 <ul style="list-style-type: none"> • at 24 V / rated value • at 110 V / rated value | A | 35 |
| | A | 4.5 |
| <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 | A | 35 |
| | A | 35 |
| <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 110 V / rated value | A | 35 |
| | A | 35 |
| <ul style="list-style-type: none"> • with 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 | A | 20 |
| | A | 2.5 |
| <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 | A | 35 |
| | A | 15 |
| <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 110 V / rated value | A | 35 |
| | A | 35 |
| Service power | | |
| <ul style="list-style-type: none"> • at AC-2 / at 400 V / rated value | kW | 11 |

| | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-------|
| <ul style="list-style-type: none"> • at AC-3 <ul style="list-style-type: none"> • at 400 V / rated value • at 500 V / rated value • at 690 V / rated value • at AC-4 / at 400 V / rated value | kW | 11 |
| | kW | 11 |
| | kW | 11 |
| | kW | 7.5 |
| Operating reactive power / at AC-6b | | |
| <ul style="list-style-type: none"> • at 230 V / rated value • at 400 V / rated value • at 690 V / rated value | var | 0 |
| | var | 0 |
| | var | 0 |
| Off-load operating frequency | 1/h | 5,000 |
| Switching frequency | | |
| <ul style="list-style-type: none"> • at AC-1 / according to IEC 60947-6-2 / maximum • at AC-2 / according to IEC 60947-6-2 / maximum • at AC-3 / according to IEC 60947-6-2 / maximum • at AC-4 / according to IEC 60947-6-2 / maximum | 1/h | 1,000 |
| | 1/h | 750 |
| | 1/h | 750 |
| | 1/h | 250 |

Control circuit:

| | | |
|--------------------------------------------------------------------------------------------------------------------------|-----|--------------|
| Design of activation of the operating mechanism | | conventional |
| Type of voltage / of the controlled supply voltage | | AC |
| control supply voltage frequency | | |
| <ul style="list-style-type: none"> • 1 / rated value | Hz | 50 |
| Control supply voltage / 1 | | |
| <ul style="list-style-type: none"> • at 50 Hz / for AC • rated value | V | 230 |
| Operating range factor control supply voltage rated value / of the solenoid | | |
| <ul style="list-style-type: none"> • at 50 Hz / for AC | | 0.8 ... 1.1 |
| Apparent pull-in power / of the solenoid / for AC | V·A | 77 |
| Apparent holding power / of the solenoid / for AC | V·A | 9.8 |
| Power factor inductive | | |
| <ul style="list-style-type: none"> • at pull-in power of the coil • at holding power of the coil | | 0.82 |
| | | 0.25 |

Auxiliary circuit:

| | | |
|----------------------------------------------------------------------------------------------------------|--|-------------------------------------------------|
| Product extension / auxiliary switch | | Yes |
| Contact reliability / of the auxiliary contacts | | 1 faulty switching per 100 million (17 V, 1 mA) |
| Number of NC contacts / for auxiliary contacts | | |
| <ul style="list-style-type: none"> • instantaneous switching • lagging switching | | 1 |
| | | 0 |
| Number of NO contacts / for auxiliary contact | | |
| <ul style="list-style-type: none"> • instantaneous switching | | 1 |

| | | |
|------------------------------------------------------|---|-----|
| • leading switching | | 0 |
| Operating current / of the auxiliary contacts | | |
| • at AC-12 / maximum | A | 10 |
| • at AC-15 | | |
| • at 230 V | A | 10 |
| • at 400 V | A | 3 |
| • at DC-12 | | |
| • at 48 V | A | 6 |
| • at 60 V | A | 6 |
| • at 110 V | A | 3 |
| • at 220 V | A | 1 |
| • at DC-13 | | |
| • at 24 V | A | 6 |
| • at 48 V | A | 2 |
| • at 60 V | A | 2 |
| • at 110 V | A | 1 |
| • at 220 V | A | 0.3 |

Short-circuit:

Design of the fuse link

- for short-circuit protection of the auxiliary switch / required
- for short-circuit protection of the main circuit
 - at type of coordination 1 / required
 - at type of coordination 2 / required

fuse gL/gG: 10 A

gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE:
100 A

gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE:
35A

Installation/mounting/dimensions:

| | | |
|----------------------------------------------------------|----|----------------------------------------------------------------------------------------|
| built in orientation | | vertical |
| Type of fixing/fixation | | screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022 |
| Type of fixing/fixation / Series installation | | Yes |
| Width | mm | 45 |
| Height | mm | 85 |
| Depth | mm | 92 |
| distance, to be maintained, to the ranks assembly | | |
| • forwards | mm | 0 |
| • backwards | mm | 0 |
| • upwards | mm | 6 |
| • downwards | mm | 6 |
| • sideways | mm | 0 |
| distance, to be maintained, to earthed part | | |

| | | |
|--------------------------------------------------------|----|----|
| • forwards | mm | 6 |
| • backwards | mm | 0 |
| • upwards | mm | 6 |
| • downwards | mm | 6 |
| • sideways | mm | 6 |
| distance, to be maintained, conductive elements | | |
| • forwards | mm | 6 |
| • backwards | mm | 6 |
| • upwards | mm | 6 |
| • downwards | mm | 10 |
| • sideways | mm | 6 |

| Connections: | | |
|--------------------------------------------------------|--|-----------------------------------------------------------------------------------------|
| design of the electrical connection | | |
| • for main current circuit | | screw-type terminals |
| • for auxiliary and control current circuit | | screw-type terminals |
| Type of the connectable conductor cross-section | | |
| • for main contacts | | |
| • unifilar | | 2x (1 ... 2.5 mm ²), 2x (2.5 ... 10 mm ²) |
| • stranded wire | | 2x (1 ... 2.5 mm ²), 2x (2.5 ... 10 mm ²) |
| • stranded wire | | |
| • with conductor end processing | | 2x (1 ... 2.5 mm ²), 2x (2.5 ... 6 mm ²), 1x 10 mm ² |
| • at AWG-conductors / for main contacts | | 2x (16 ... 12), 2x (14 ... 8) |
| • for auxiliary contacts | | |
| • solid | | 2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²) |
| • finely stranded | | |
| • with wire end processing | | 2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²) |
| • for AWG conductors / for auxiliary contacts | | 2x (20 ... 16), 2x (18 ... 14) |

| Certificates/approvals: | | |
|------------------------------------|--|---------------------|
| verification of suitability | | CE / UL / CSA / CCC |

| Safety: | | |
|-----------------------------------------------------------|---|-----------|
| B10 value / with high demand rate | | |
| • according to SN 31920 | | 1,000,000 |
| T1 value / for proof test interval or service life | | |
| • according to IEC 61508 | a | 20 |
| Proportion of dangerous failures | | |
| • with low demand rate / according to SN 31920 | % | 75 |
| • with high demand rate / according to SN 31920 | % | 75 |
| Failure rate (FIT value) / with low demand rate | | |

• according to SN 31920

FIT 50

Protection against electrical shock

finger-safe

Further information:

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

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

Global Industry Mall (Online ordering system)

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

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

<http://support.automation.siemens.com/WW/view/en/3RT2026-1AP00/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RT2026-1AP00



