



SOLID-STATE CONTACTOR 3-PH 3RF3 AC53 5.2A 40
DEGREES C 48-480V / 24V DC 2-PH. CONTROLLED
INSTANTANEOUS SPRING-LOADED TERMINALS

General technical data:

| | | |
|--|----|-----------------------------|
| Product brand name | | SIRIUS |
| product designation | | solid-state motor contactor |
| Protection class IP | | IP20 |
| Insulation voltage / rated value | V | 600 |
| Installation altitude / at a height over sea level / maximum | m | 1,000 |
| Ambient temperature | | |
| • during storage | °C | -55 ... 80 |
| • during operating | °C | -25 ... 60 |
| Resistance against shock | | |
| • according to IEC 60068-2-27 | | 15g / 11 ms |
| Resistance against vibration | | |
| • according to IEC 60068-2-6 | | 2g |
| Resistance against the impulse current / rated value | A | 200 |
| Active power loss / total / typical | W | 10 |
| Item designation | | |
| • according to DIN 40719 extendable after IEC 204-2 / according to IEC 750 | | K |
| • according to DIN EN 61346-2 | | Q |
| Product function | | instantaneous switching |

| 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 | | 2 |
| Operating frequency | | |
| • rated value | Hz | 60 ... 50 |
| Operating voltage | | |
| • at 60 Hz / at AC / rated value | V | 48 ... 480 |
| • at 50 Hz / at AC / rated value | V | 48 ... 480 |
| Operating current | | |
| • minimum | mA | 500 |
| • at AC-3 / at 400 V / rated value | A | 5.2 |
| Working area related to the operating voltage | | |
| • at 50 Hz / for AC | V | 40 ... 506 |
| • at 60 Hz / for AC | V | 40 ... 506 |
| Service power / at AC-3 / at 400 V | | |
| • rated value | kW | 2.2 |
| Derating temperature | °C | 40 |
| Tolerance of the line frequency | Hz | 5 |
| Relative symmetrical tolerance / of the operation frequency | % | 10 |
| I ² t-level / maximum | A ² ·s | 200 |
| Voltage slew rate / at the thyristor / for main contacts | | |
| • maximum permissible | V/μs | 1,000 |
| Block voltage / at the thyristor / for main contacts | | |
| • maximum permissible | V | 1,200 |
| Reverse current / of the thyristor | mA | 10 |
| Control circuit: | | |
| Type of voltage / of the controlled supply voltage | | DC |
| Control supply voltage | | |
| • 1 | | |
| • for DC | | |
| • initial rated value | V | 15 |
| • final rated value | V | 30 |
| • for DC / final value for signal<0>-recognition | V | 5 |
| Control current | | |
| • for DC / rated value | mA | 15 |
| • at minimum control supply voltage / for DC | mA | 2 |
| Auxiliary circuit: | | |

| | | |
|--|--|---|
| Number of NC contacts / for auxiliary contacts | | 0 |
| Number of NO contacts / for auxiliary contacts | | 0 |
| Number of change-over switches / for auxiliary contacts | | 0 |

| Installation/mounting/dimensions: | | |
|--|-----|--|
| Built in orientation | | vertical |
| Type of mounting | | screw and snap-on mounting onto 35 mm standard mounting rail |
| Type of fixing/fixation / series installation | | Yes |
| Tightening torque / of the screw for fastening of the operating resource | N·m | 1.5 |
| Design of the thread / of the screw for fastening of the operating resource | | M4 |
| Width | mm | 45 |
| Height | mm | 95 |
| Depth | mm | 100.8 |
| Distance, to be maintained, to the ranks assembly | | |
| • upwards | mm | 70 |
| • downwards | mm | 50 |

| Connections: | | |
|--|----|-------------------------|
| Design of the electrical connection | | |
| • for main current circuit | | spring-loaded terminals |
| • for auxiliary and control current circuit | | spring-loaded terminals |
| Product function / removable terminal for auxiliary and control circuit | | Yes |
| Type of the connectable conductor cross-section | | |
| • for main contacts | | |
| • solid | | 2x (0.5 ... 2.5 mm²) |
| • finely stranded | | |
| • with conductor end processing | | 2x (0.5 ... 1.5 mm²) |
| • without conductor final cutting | | 2x (0.5 ... 2.5 mm²) |
| • for AWG conductors / for main contacts | | 2x (18 ... 14) |
| • for auxiliary and control contacts | | |
| • solid | | 0.5 ... 1.5 mm² |
| • finely stranded | | |
| • with conductor end processing | | 0.5 ... 2.5 mm² |
| • without conductor final cutting | | 0.5 ... 2.5 mm² |
| • for AWG conductors / for auxiliary and control contacts | | 1x (AWG 20 ... 12) |
| Skinning length / of the cable | | |
| • for main contacts | mm | 10 |
| • for auxiliary and control contacts | mm | 10 |

Certificates/approvals:

Verification of suitability

CE / UL / CSA / CCC / C-TICK

General Product Approval

[ROSTEST](#)

Test Certificates

[Manufacturer](#)

other

[Manufacturer](#)

UL/CSA ratings

yielded mechanical performance (hp) / for three-phase squirrel cage motors

- at 200/208 V / rated value
- at 220/230 V / rated value
- at 460/480 V / rated value

| | |
|----|------|
| hp | 0.5 |
| hp | 0.75 |
| hp | 2 |

Operating current (FLA) / for three-phase squirrel cage motors

- at 480 V / rated value

| | |
|---|-----|
| A | 3.4 |
|---|-----|

Further information:

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

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

Industry Mall (Online ordering system)

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

CAX-Online-Generator

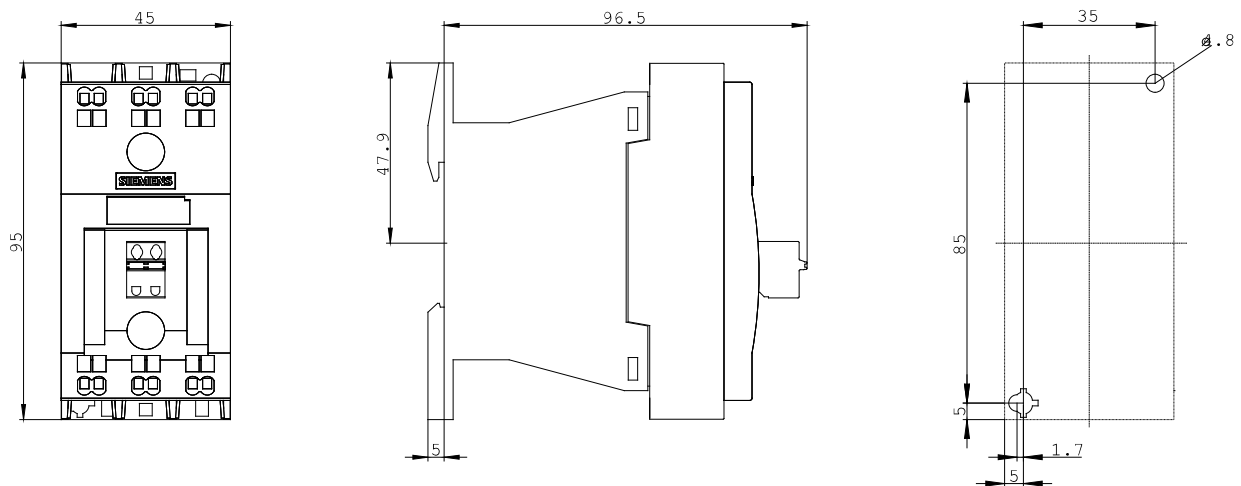
<http://www.siemens.com/cax>

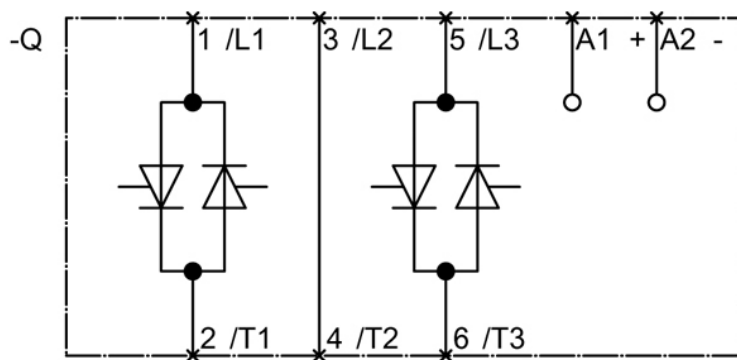
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<http://support.automation.siemens.com/WW/view/en/3RF3405-2BB04/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RF3405-2BB04





last change:

Oct 21, 2011