



SOLID-STATE CONTACTOR 3-PH 3RF3 AC53 16A
 40 DEGREES C 48-600V / 24V DC 2-PH.
 CONTROLLED INSTANTANEOUS SPRING-LOADED
 TERMINALS

General technical data:

| | | |
|---|----|-------------------------|
| product brand name | | SIRIUS |
| Protection class IP | | IP20 |
| Insulation voltage Rated value | V | 600 |
| Installation altitude at height above sea level maximum | m | 1 000 |
| Ambient temperature | | |
| • during storage | °C | -55 ... +80 |
| • during operation | °C | -25 ... +60 |
| Shock resistance acc. to IEC 60068-2-27 | | 15g / 11 ms |
| Vibration resistance acc. to IEC 60068-2-6 | | 2g |
| Surge current resistance Rated value | A | 1 150 |
| Active power loss total typical | W | 28 |
| Equipment marking acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750 | | K |
| Equipment marking acc. 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 with AC | | |
| • at 60 Hz Rated value | V | 48 ... 600 |
| • at 50 Hz Rated value | V | 48 ... 600 |

| | | |
|--|-------------------|------------|
| Operating current | | |
| • minimum | mA | 500 |
| • at AC-3 at 400 V Rated value | A | 16 |
| Operating range relative to the operating voltage with AC | | |
| • at 50 Hz | V | 40 ... 660 |
| • at 60 Hz | V | 40 ... 660 |
| Operating power at AC-3 at 400 V Rated value | kW | 7.5 |
| Derating temperature | °C | 40 |
| Symmetrical line frequency tolerance | Hz | 5 |
| Relative symmetrical tolerance of the operating frequency | % | 10 |
| I²t value maximum | A ² ·s | 6 600 |
| Rate of voltage rise at the thyristor for main contacts maximum permissible | V/μs | 1 000 |
| Blocking voltage at the thyristor for main contacts maximum permissible | V | 1 600 |
| Reverse current of the thyristor | mA | 10 |

Control circuit/ Control:

| | | |
|---|----|---------------------------------------|
| Type of voltage of the control supply voltage | | DC |
| Control supply voltage 1 | | |
| • for DC | | |
| — Initial rated value | V | 15 |
| — Final rated value | V | 30 |
| Control supply voltage for DC Full-scale value for signal<0> recognition | V | 5 |
| Control current | | |
| • at minimum control supply voltage | | |
| — for DC | mA | 2 |
| • for DC Rated value | mA | 15 |
| switching times | | |
| • ON delay | | 1 ms |
| • OFF delay | | 1 ms + in addition max. one half-wave |

Auxiliary circuit:

| | | |
|---|--|---|
| Number of NC contacts for auxiliary contacts | | 0 |
| Number of NO contacts for auxiliary contacts | | 0 |
| Number of CO contacts for auxiliary contacts | | 0 |

Installation/ mounting/ dimensions:

| | | |
|--|--|--|
| mounting position | | vertical |
| Mounting type | | screw and snap-on mounting onto 35 mm standard mounting rail |
| Mounting type Side-by-side mounting | | Yes |

| | | |
|---|-----|-------|
| Tightening torque of the screw for securing the equipment | N·m | 1.5 |
| Design of the thread of the screw for securing the equipment | | M4 |
| Width | mm | 90 |
| Height | mm | 95 |
| Depth | mm | 100.8 |
| Required spacing with side-by-side mounting | | |
| • upwards | mm | 70 |
| • downwards | mm | 50 |

Connections/ Terminals:

| | | |
|--|----|--|
| Type of electrical connection | | |
| • for main current circuit | | spring-loaded terminals |
| • for auxiliary and control current circuit | | spring-loaded terminals |
| Design of the thread of the connection screw | | |
| • of the auxiliary and control contacts | | M3 |
| Product function removable terminal for auxiliary and control circuit | | Yes |
| Type of connectable conductor cross-section | | |
| • for main contacts | | |
| — solid | | 2x (0.5 ... 2.5 mm ²) |
| — finely stranded | | |
| — with core end processing | | 2x (0.5 ... 1.5 mm ²) |
| — without core end processing | | 2x (0.5 ... 2.5 mm ²) |
| • for AWG conductors | | |
| — for main contacts | | 2x (18 ... 14) |
| — for auxiliary and control contacts | | 1x (AWG 20 ... 12) |
| • for auxiliary and control contacts | | |
| — solid | | 1x (0.5 ... 2.5 mm ²), 2x (0.5 ... 1.0 mm ²) |
| — finely stranded | | |
| — with core end processing | | 1x (0.5 ... 2.5 mm ²), 2x (0.5 ... 1.0 mm ²) |
| — without core end processing | | 1x (0.5 ... 2.5 mm ²), 2x (0.5 ... 1.0 mm ²) |
| Wire stripping length of the cable | | |
| • for main contacts | mm | 10 |
| • for auxiliary and control contacts | mm | 10 |

Certificates/ approvals:

| | |
|-----------------------------------|------------------------------|
| Certificate of suitability | CE / UL / CSA / CCC / C-TICK |
|-----------------------------------|------------------------------|

| | | |
|--------------------------|-----|---------------------------|
| General Product Approval | EMC | Declaration of Conformity |
|--------------------------|-----|---------------------------|



| | |
|-------------------|-------|
| Test Certificates | other |
|-------------------|-------|

[Type Test Certificates/Test Report](#)

[Environmental Confirmations](#)

UL/CSA ratings:

| | | |
|---|-----------|-----|
| yielded mechanical performance [hp] for three-phase AC motor | | |
| • at 200/208 V Rated value | metric hp | 2 |
| • at 220/230 V Rated value | metric hp | 2 |
| • at 460/480 V Rated value | metric hp | 5 |
| • at 575/600 V Rated value | metric hp | 7.5 |
| Full-load current (FLA) for three-phase AC motor | | |
| • at 480 V Rated value | A | 7.6 |
| • at 600 V Rated value | A | 9 |

Further information

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

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

Industry Mall (Online ordering system)

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

Cax online generator

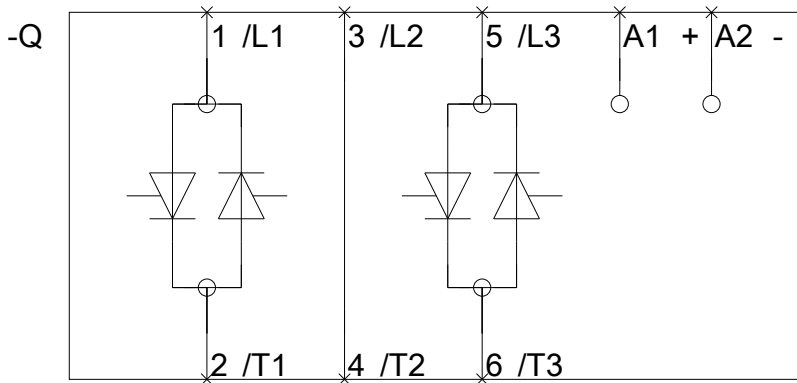
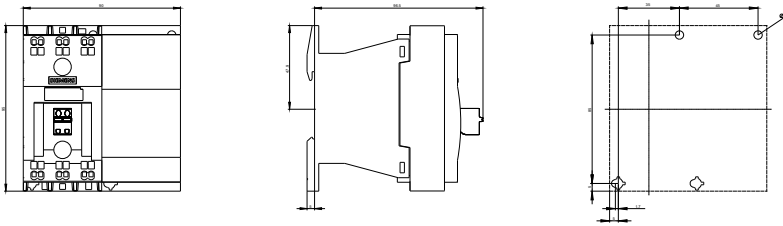
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RF34162BB06>

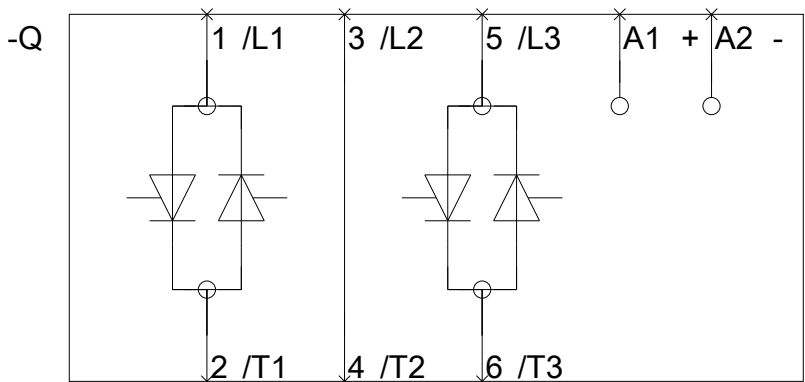
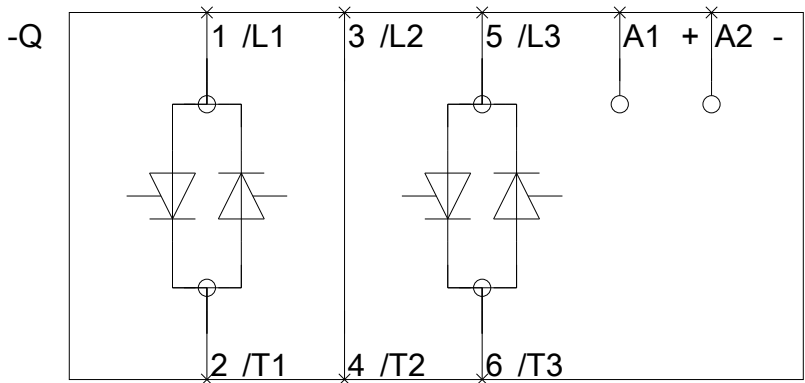
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<http://support.automation.siemens.com/WW/view/en/3RF34162BB06/all>

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

<http://www.automation.siemens.com/bilddb/index.aspx?attID9=3RF34162BB06&lang=en>





last modified:

09.03.2015