



MOTOR STARTER 3RM1 SIRIUS DIRECT STARTER 500 V;
0,4-2,0 A;
110-230 V AC SCREW-TYPE CONNECTION SYSTEM

General technical data:

| | | |
|---|----|-------------------------------------|
| product designation | | Motor starter |
| Design of the product | | with electronic overload protection |
| Protection class IP | | IP20 |
| Suitability for use / device connector 3ZY12 | | No |
| Installation altitude / at a height over sea level / maximum | m | 4,000 |
| Ambient temperature | | |
| • during operating | °C | -25 ... +60 |
| • during transport | °C | -40 ... +70 |
| • during storage | °C | -40 ... +70 |
| Resistance against shock | | 6g / 11 ms |
| Resistance against vibration | | 1 ... 6 Hz, 15 mm; 20 m/s², 500 Hz |
| Impulse voltage resistance / rated value | kV | 6 |
| Insulation voltage / rated value | V | 600 |
| Mechanical operating cycles as operating time / typical | | 30,000,000 |
| Conductor-bound parasitic coupling conductor-conductor SURGE / according to IEC 61000-4-5 | | 1 kV |
| Conductor-bound parasitic coupling BURST / according to IEC 61000-4-4 | | 2 kV / 5 kHz |
| Conducted interference as high-frequency radiation according to IEC 61000-4-6 | | 10 V |

| | | |
|--|--|---|
| Electrostatic discharge / according to IEC 61000-4-2 | | 4 kV contact discharge / 8 kV air discharge |
| Field-bound HF-interference emission / according to CISPR11 | | Class B for domestic, business and commercial environments; Class A for industrial environments at 110 V DC |
| Conductor-bound HF-interference emission / according to CISPR11 | | Class B for domestic, business and commercial environments; Class A for industrial environments at 110 V DC |

Safety:

| | | |
|--|--|--------|
| Safety device type / according to IEC 61508-2 | | Type B |
|--|--|--------|

Main circuit:

| | | |
|---|-----|---------------|
| Operating voltage / rated value / maximum | V | 500 |
| Operating frequency | | |
| • 1 | Hz | 50 |
| • 2 | Hz | 60 |
| Operating current / at 400 V / for AC / rated value | A | 2 |
| Minimum load in % of I_M | % | 20 |
| Active power loss / typical | W | 0.3 |
| Adjustable response current | | |
| • of the current-dependent overload release | A | 0.4 ... 2 |
| Service power / for three-phase servomotors / at 400 V | | |
| • at 50 Hz | kW | 0.09 ... 0.75 |
| Operating cycles / maximum | 1/s | 1 |

Control circuit:

| | | |
|--|---|--------------|
| Type of voltage / of the controlled supply voltage | | AC/DC |
| Control supply voltage / 1 | | |
| • for DC / rated value | V | 110 |
| • at 50 Hz | | |
| • for AC | V | 110 ... 230 |
| • at 60 Hz | | |
| • for AC | V | 110 ... 230 |
| Operating range factor control supply voltage rated value | | |
| • for DC | | 0.85 ... 1.1 |
| • at 50 Hz | | |
| • for AC | | 0.85 ... 1.1 |
| Control current | A | 0.05 |
| Input voltage / at the digital input / with signal <1> | | |
| • for DC | V | 93 ... 121 |
| • with AC | V | 93 ... 253 |
| Input current / at the digital input / for signal <1> / typical | A | 0.0020 |

| | | |
|------------------------------|----|----|
| Start-up delay time | ms | 80 |
| Switch-off delay time | ms | 90 |

| Installation/mounting/dimensions: | | |
|-----------------------------------|----|----------------------|
| mounting position | | vertical, horizontal |
| Width | mm | 22.5 |
| Height | mm | 100 |
| Depth | mm | 141.6 |

| Connections: | | |
|---|--|--|
| Design of the electrical connection <ul style="list-style-type: none"> • for main current circuit • for auxiliary and control current circuit | | screw-type terminals |
| | | screw-type terminals |
| Type of the connectable conductor cross-section <ul style="list-style-type: none"> • for main contacts <ul style="list-style-type: none"> • solid • finely stranded <ul style="list-style-type: none"> • with conductor end processing • for AWG conductors | | 1x (0.2 ... 4 mm ²), 2x (0.2 ... 2.5 mm ²) |
| | | 1x (0.5 ... 2.5 mm ²), 2x (0.5 ... 2.5 mm ²) |
| | | 1x (20 ... 12), 2x (20 ... 14) |
| | | |
| Type of the connectable conductor cross-section <ul style="list-style-type: none"> • for auxiliary contacts <ul style="list-style-type: none"> • finely stranded <ul style="list-style-type: none"> • with conductor end processing • for AWG conductors | | 1x (0.5 ... 2.5 mm ²), 2x (0.5 ... 1 mm ²) |
| | | 1x (20 ... 14), 2x (20 ... 16) |
| | | |
| | | |

| UL ratings: | | |
|--|----|-------|
| Operating current (FLA) / for three-phase squirrel cage motors / at 480 V / rated value | A | 2 |
| yielded mechanical performance (hp) <ul style="list-style-type: none"> • for single-phase squirrel cage motors <ul style="list-style-type: none"> • at 230 V / rated value • for three-phase squirrel cage motors <ul style="list-style-type: none"> • at 200/208 V / rated value • at 220/230 V / rated value • at 460/480 V / rated value | hp | 0.125 |
| | hp | 0.333 |
| | hp | 0.333 |
| | hp | 0.75 |
| | | |
| | | |

| Certificates/approvals: |
|-------------------------|
|-------------------------|

| General Product Approval | Declaration of Conformity | Test Certificates |
|--------------------------|---------------------------|-------------------|
|--------------------------|---------------------------|-------------------|



[Type Test
Certificates/Test
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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

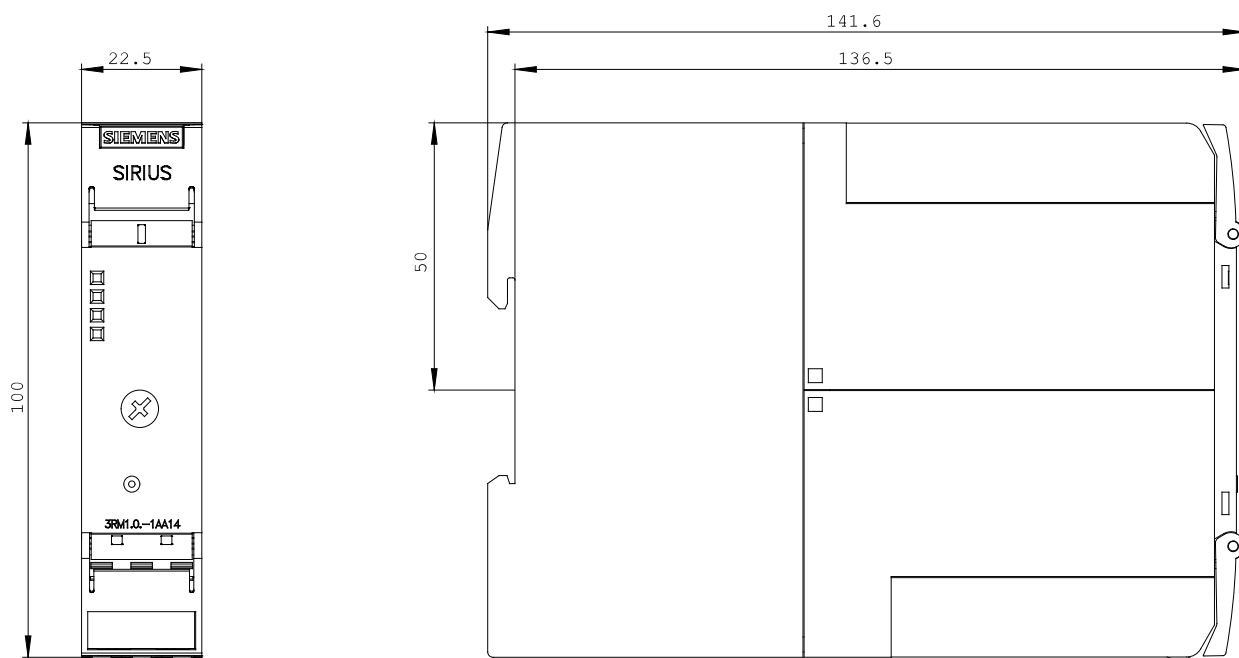
<http://www.siemens.com/cax>

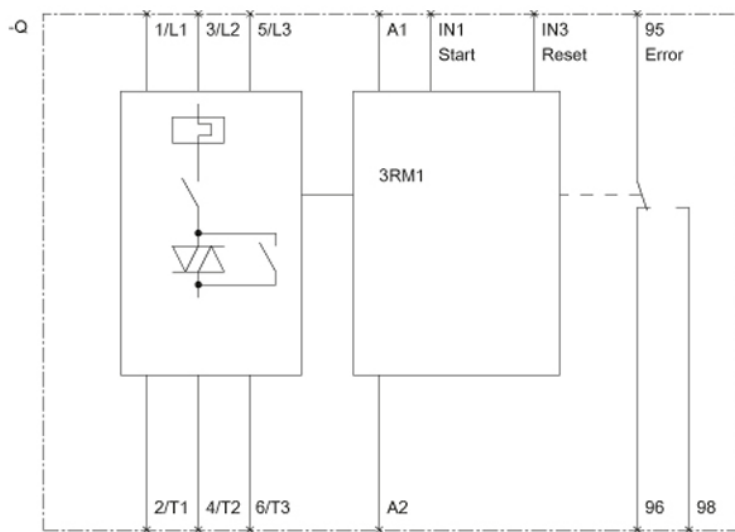
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<http://support.automation.siemens.com/WW/view/en/3RM1002-1AA14/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RM1002-1AA14





last change:

Mar 11, 2013