



MOTOR STARTER SIRIUS 3RM1 DIRECT STARTER 500 V;  
0,1-0,5 A;  
24 V DC PUSH-IN 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		Yes
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

<b>Electrostatic discharge / according to IEC 61000-4-2</b>		4 kV contact discharge / 8 kV air discharge
<b>Field-bound HF-interference emission / according to CISPR11</b>		Class B for the domestic, business and commercial environments
<b>Conductor-bound HF-interference emission / according to CISPR11</b>		Class B for the domestic, business and commercial environments

#### Safety:

<b>Safety device type / according to IEC 61508-2</b>		Type B
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#### Main circuit:

<b>Operating voltage / rated value / maximum</b>	V	500
<b>Operating frequency</b>		
• 1	Hz	50
• 2	Hz	60
<b>Operating current / at 400 V / for AC / rated value</b>	A	0.5
<b>Minimum load in % of I<sub>M</sub></b>	%	20
<b>Active power loss / typical</b>	W	0.02
<b>Adjustable response current</b>		
• of the current-dependent overload release	A	0.1 ... 0.5
<b>Service power / for three-phase servomotors / at 400 V</b>		
• at 50 Hz	kW	0 ... 0.12
<b>Operating cycles / maximum</b>	1/s	1

#### Control circuit:

<b>Type of voltage / of the controlled supply voltage</b>		DC
<b>Control supply voltage / 1</b>		
• for DC / rated value	V	24
<b>Operating range factor control supply voltage rated value</b>		
• for DC		0.8 ... 1.25
<b>Control current</b>	A	0.08
<b>Input voltage / at the digital input / with signal &lt;1&gt;</b>		
• for DC	V	19.2 ... 30
<b>Input current / at the digital input / for signal &lt;1&gt; / typical</b>	A	0.01
<b>Start-up delay time</b>	ms	80
<b>Switch-off delay time</b>	ms	90

#### Installation/mounting/dimensions:

<b>mounting position</b>		vertical, horizontal
<b>Width</b>	mm	22.5
<b>Height</b>	mm	100
<b>Depth</b>	mm	141.6

## Connections:

### Design of the electrical connection

- for main current circuit
- for auxiliary and control current circuit

PUSH-IN connection (spring-loaded connection)

PUSH-IN connection (spring-loaded connection)

### Type of the connectable conductor cross-section

#### • for main contacts

- solid
- finely stranded
  - with conductor end processing
  - without conductor final cutting

1x (0.2 ... 4 mm<sup>2</sup>)

1x (0.5 ... 2.5 mm<sup>2</sup>)

1x (0.5 ... 4 mm<sup>2</sup>)

1x (24 ... 12)

- for AWG conductors

### Type of the connectable conductor cross-section

#### • for auxiliary contacts

- solid
- finely stranded
  - with conductor end processing
  - without conductor final cutting

1x (0.2 ... 1.5 mm<sup>2</sup>), 2x (0.2 ... 1.5 mm<sup>2</sup>)

1x (0.5 ... 1.5 mm<sup>2</sup>), 2x (0.5 ... 1.5 mm<sup>2</sup>)

1x (0.5 ... 1.5 mm<sup>2</sup>), 2x (0.5 ... 1.5 mm<sup>2</sup>)

1x (24 ... 16), 2x (24 ... 16)

- for AWG conductors

## UL ratings:

Operating current (FLA) / for three-phase squirrel cage motors /  
at 480 V / rated value

A

0.5

## Certificates/approvals:

### General Product Approval



### Declaration of Conformity

### Test Certificates

[Type Test](#)  
[Certificates/Test](#)  
[Report](#)

## 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

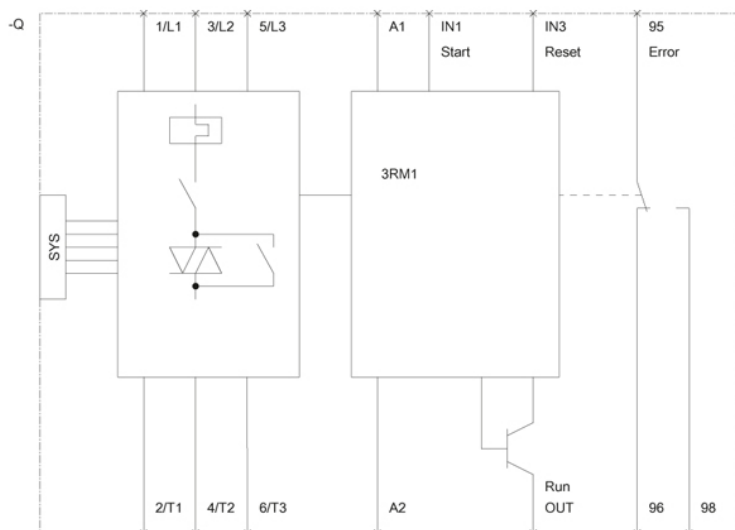
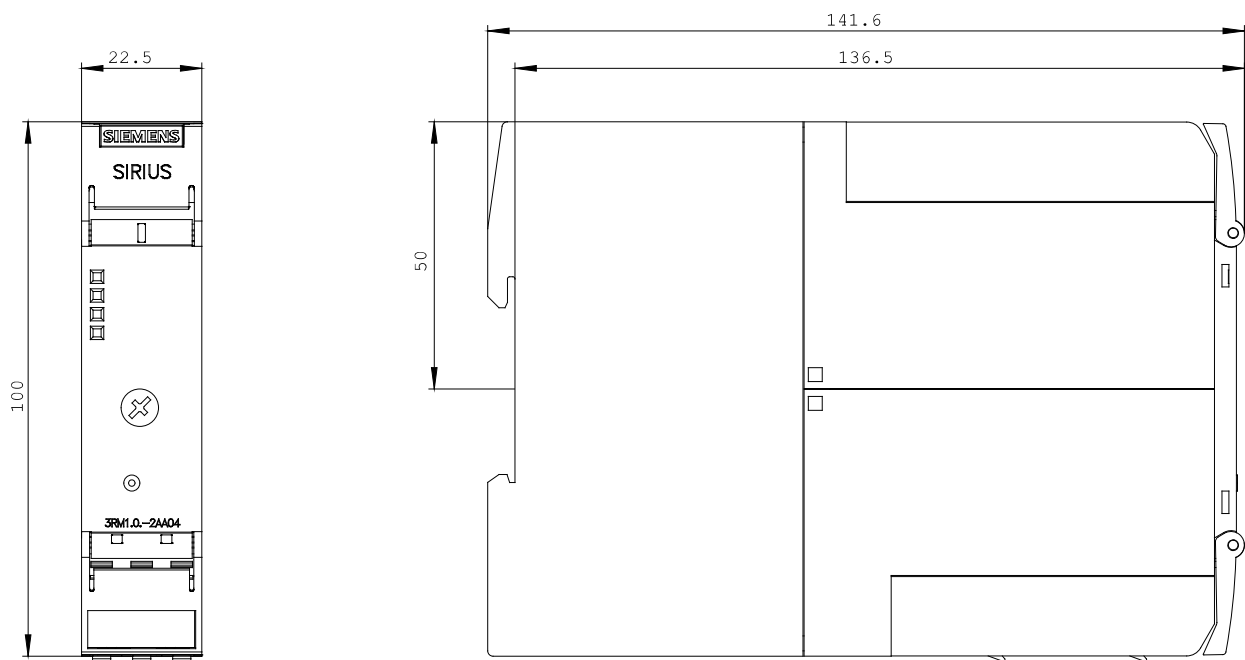
<http://www.siemens.com/cax>

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

<http://support.automation.siemens.com/WW/view/en/3RM1001-2AA04/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RM1001-2AA04](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RM1001-2AA04)



last change:

Mar 11, 2013