



MOTOR STARTER 3RM1 SIRIUS REVERSING STARTER  
500 V,  
0,1-0,5A,  
24V DC SCREW-TYPE CONNECTION SYSTEM

General technical data:		
product brand name		SIRIUS
Product designation		Motor starter
Design of the product		with reversing functionality and electronic overload protection
Trip class		CLASS 10A
Protection class IP		IP20
Suitability for use / device connector 3ZY12		Yes
Product function / intrinsic device protection		Yes
Type of the motor protection		solid-state
Product function / adjustable current limitation		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/s <sup>2</sup> , 500 Hz
Impulse voltage resistance / rated value	kV	6
Insulation voltage / rated value	V	500

<b>Mechanical operating cycles as operating time / typical</b>		30,000,000
<b>Conductor-bound parasitic coupling conductor-conductor SURGE / according to IEC 61000-4-5</b>		1 kV
<b>Conductor-bound parasitic coupling BURST / according to IEC 61000-4-4</b>		3 kV / 5 kHz
<b>Conducted interference as high-frequency radiation according to IEC 61000-4-6</b>		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
<b>Maximum permissible voltage for safe disconnection</b>		
• between main circuit and auxiliary circuit	V	500
• between control and auxiliary circuit	V	250
<b>Reference code</b>		
• according to DIN 40719 extended according to IEC 204-2 / according to IEC 750		Q
• according to DIN EN 61346-2		Q

#### Safety related data:

##### Protection against electrical shock

finger-safe

#### Main circuit:

##### Number of poles / for main current circuit

3

##### 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 0.5

##### Minimum load in % of I<sub>M</sub>

% 20

##### Active power loss / typical

W 0.02

##### Adjustable response current

- of the current-dependent overload release A 0.1 ... 0.5

##### Service power / for three-phase servomotors / at 400 V

- at 50 Hz kW 0 ... 0.12

##### Operating cycles / maximum

1/s 1

#### Control circuit/ Control:

##### Voltage type / of control feed voltage

DC

##### Control supply voltage / 1

- for DC / rated value V 24

##### Operating range factor control supply voltage rated value

• for DC		0.8 ... 1.25
<b>Control current</b>		
• with DC		
• in standby mode	mA	25
• during operation	mA	70
• on switching on	mA	150
<b>Input voltage / at the digital input</b>		
• with signal <1>		
• for DC	V	15 ... 30
• with signal <0>		
• with DC	V	0 ... 5
<b>Input voltage / at digital input</b>		
• with signal <1>		
• with DC	mA	11
• with signal <0>		
• with DC	mA	1
<b>ON-delay time</b>	ms	60 ... 90
<b>OFF-delay time</b>	ms	60 ... 90

#### Auxiliary circuit:

**Number of changeover contacts / for auxiliary contacts**

1

**Design of the switching contact / as make contact / for reporting function**

Electronic

**Operating current / of the auxiliary contacts**

- at AC-15
- at DC-13

A 3  
A 1

#### Installation/ mounting/ dimensions:

**mounting position**

vertical, horizontal, standing

**Mounting type**

screw and snap-on mounting onto 35 mm standard mounting rail

**Width**

mm 22.5

**Height**

mm 100

**Depth**

mm 141.6

#### Connections/ terminals:

**Design of the electrical connection**

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

screw-type terminals  
screw-type terminals

**Type of the connectable conductor cross-section**






- for main contacts
- solid

1x (0,5 ... 4 mm<sup>2</sup>), 2x (0,5 ... 2,5 mm<sup>2</sup>)

<ul style="list-style-type: none"> <li>finely stranded             <ul style="list-style-type: none"> <li>with conductor end processing</li> </ul> </li> <li>for AWG conductors</li> </ul>	1x (0,5 ... 2,5 mm <sup>2</sup> ), 2x (0,5 ... 1,5 mm <sup>2</sup> ) 1x (20 ... 12), 2x (20 ... 14)
<b>Type of the connectable conductor cross-section</b> <ul style="list-style-type: none"> <li>for auxiliary contacts             <ul style="list-style-type: none"> <li>solid</li> <li>finely stranded             <ul style="list-style-type: none"> <li>with conductor end processing</li> </ul> </li> </ul> </li> <li>for AWG conductors</li> </ul>	1x (0,5 ... 2,5 mm <sup>2</sup> ), 2x (1,0 ... 1,5 mm <sup>2</sup> ) 1x (0,5 ... 2,5 mm <sup>2</sup> ), 2x (0,5 ... 1 mm <sup>2</sup> ) 1x (20 ... 14), 2x (18 ... 16)

UL ratings:		
Full-load current (FLA) / for 3-phase motor / at 480 V / rated value	A	0.5

**Certificates/ approvals:**

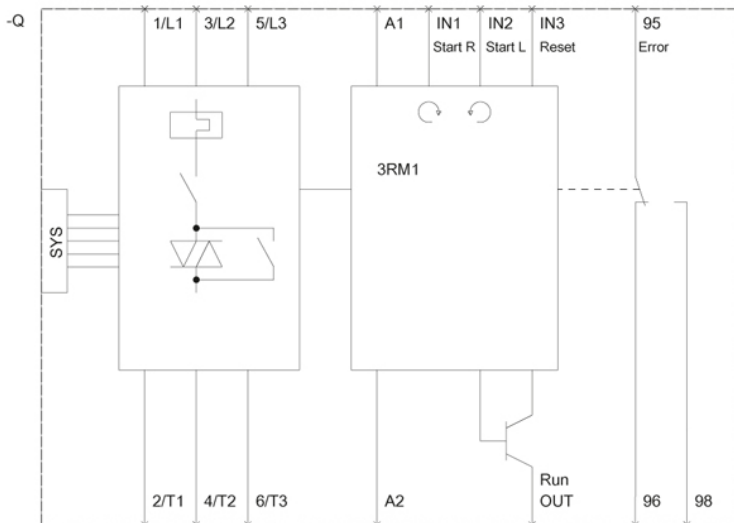
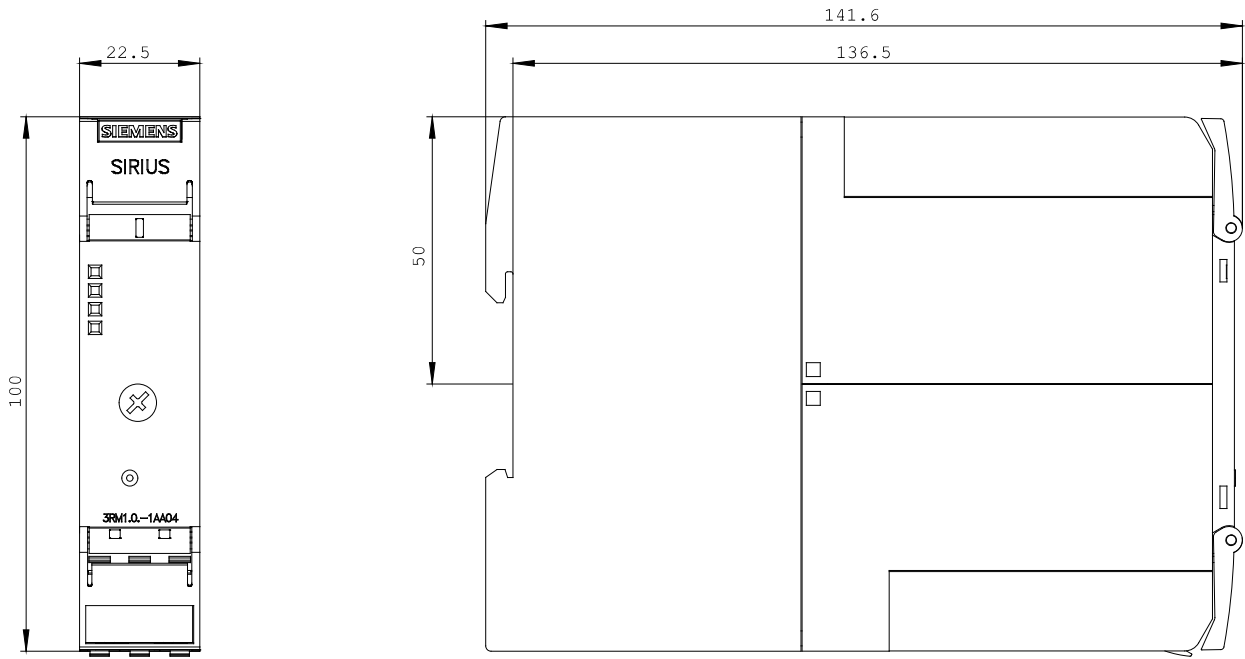
General Product Approval	Declaration of Conformity	Test Certificates
 CCC  EAC  GOST	 UL  EG-Konf.	<a href="#">Type Test Certificates/Test Report</a>

**other**

[Environmental Confirmations](#)

**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/3RM1201-1AA04/all>
- Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)**  
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RM1201-1AA04](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RM1201-1AA04)



last change:

Jul 28, 2014