



MOTOR STARTER SIRIUS 3RM1 REVERSING STARTER  
500 V;  
0,1-0,5 A;  
24 V DC PUSH-IN 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/s², 500 Hz
Impulse voltage resistance / rated value	kV	6
Insulation voltage / rated value	V	600

<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:

<b>Number of poles / for main current circuit</b>		3
<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/ Control:

<b>Voltage type / of control feed 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>		
• 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:

<b>Number of changeover contacts / for auxiliary contacts</b>		1
<b>Design of the switching contact / as make contact / for reporting function</b>		Electronic
<b>Operating current / of the auxiliary contacts</b>		
• at AC-15	A	3
• at DC-13	A	1

#### Installation/ mounting/ dimensions:

<b>mounting position</b>		vertical, horizontal, standing
<b>Mounting type</b>		screw and snap-on mounting onto 35 mm standard mounting rail
<b>Width</b>	mm	22.5
<b>Height</b>	mm	100
<b>Depth</b>	mm	141.6

#### Connections/ terminals:

<b>Design of the electrical connection</b>		
• for main current circuit		PUSH-IN connection (spring-loaded connection)
• for auxiliary and control current circuit		PUSH-IN connection (spring-loaded connection)
<b>Type of the connectable conductor cross-section</b>		
• for main contacts		
• solid		1x (0.5 ... 4 mm²)

<ul style="list-style-type: none"> <li>finely stranded             <ul style="list-style-type: none"> <li>with conductor end processing</li> <li>without conductor final cutting</li> </ul> </li> <li>for AWG conductors</li> </ul>	1x (0.5 ... 2.5 mm <sup>2</sup> ) 1x (0.5 ... 4 mm <sup>2</sup> ) 1x (20 ... 12)
<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> <li>without conductor final cutting</li> </ul> </li> </ul> </li> <li>for AWG conductors</li> </ul>	1x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.5 ... 1.5 mm <sup>2</sup> )  1x (0.5 ... 1.0 mm <sup>2</sup> ), 2x (0.5 ... 1.0 mm <sup>2</sup> ) 1x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.5 ... 1.5 mm <sup>2</sup> ) 1x (20 ... 16), 2x (20 ... 16)

#### UL ratings:

Full-load current (FLA) / for 3-phase motor / at 480 V / rated value

A

0.5

#### Certificates/ approvals:

##### General Product Approval



[Type Test Certificates/Test Report](#)

##### 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

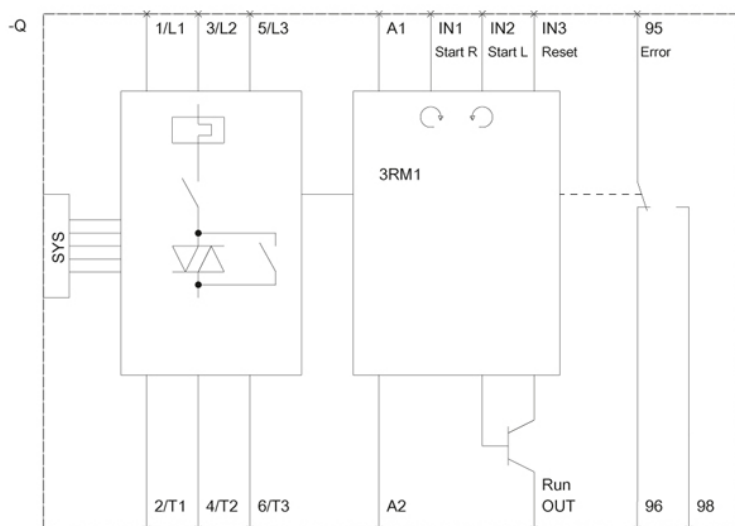
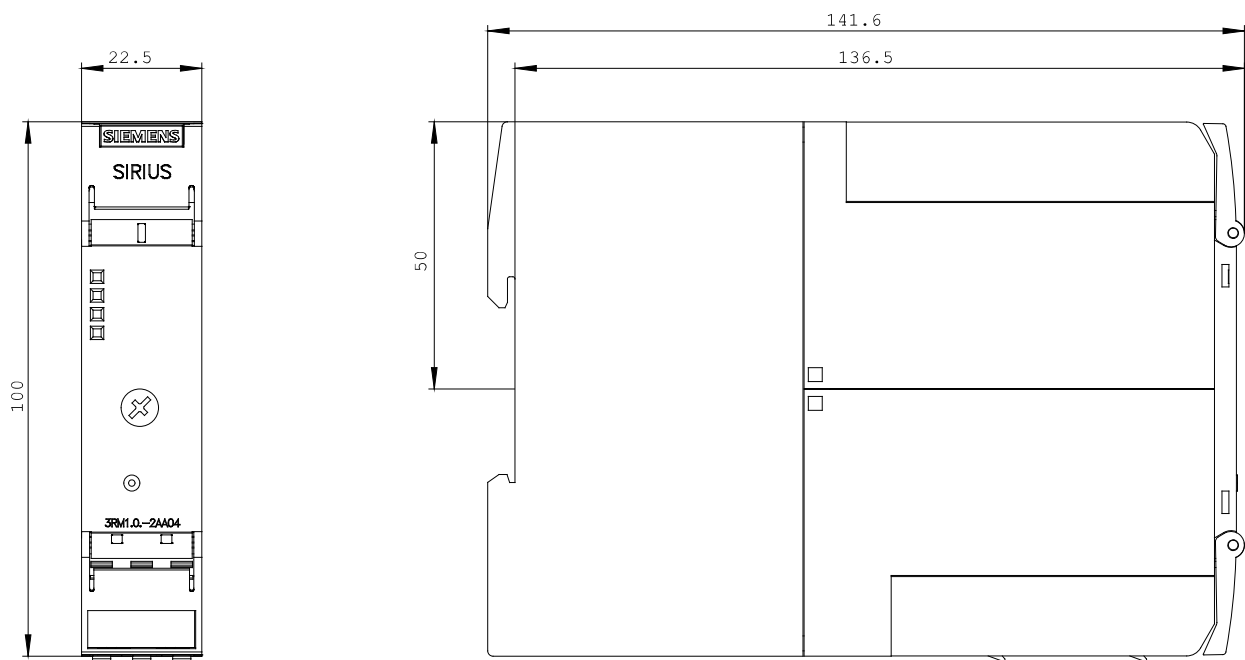
<http://www.siemens.com/cax>

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

<http://support.automation.siemens.com/WW/view/en/3RM1201-2AA04/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RM1201-2AA04](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RM1201-2AA04)



last change:

Mar 17, 2014