



MOTOR STARTER SIRIUS 3RM1 REVERSING STARTER  
 500 V;  
 1,6-7,0 A;  
 24 V 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:

<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	7
<b>Derating temperature</b>	°C	40
<b>Minimum load in % of I<sub>M</sub></b>	%	20
<b>Active power loss / typical</b>	W	3.4
<b>Adjustable response current</b>		
• of the current-dependent overload release	A	1.6 ... 7
<b>Service power / for three-phase servomotors / at 400 V</b>		
• at 50 Hz	kW	0.55 ... 3
<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 • during operation • on switching on	mA mA mA	25 70 150
<b>Input voltage / at the digital input</b> • with signal <1> • for DC • with signal <0> • with DC	V V	15 ... 30 0 ... 5
<b>Input voltage / at digital input</b> • with signal <1> • with DC • with signal <0> • with DC	mA mA	11 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 • at DC-13	A A	3 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 • for auxiliary and control current circuit		screw-type terminals screw-type terminals
<b>Type of the connectable conductor cross-section</b> • for main 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> <li>• for AWG conductors</li> </ul>	<p>1x (0,5 ... 4 mm<sup>2</sup>), 2x (0,5 ... 2,5 mm<sup>2</sup>)</p> <p>1x (0,5 ... 2,5 mm<sup>2</sup>), 2x (0,5 ... 1,5 mm<sup>2</sup>)</p> <p>1x (20 ... 12), 2x (20 ... 14)</p>
<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>	<p>1x (0,5 ... 2,5 mm<sup>2</sup>), 2x (1,0 ... 1,5 mm<sup>2</sup>)</p> <p>1x (0,5 ... 2,5 mm<sup>2</sup>), 2x (0,5 ... 1 mm<sup>2</sup>)</p> <p>1x (20 ... 14), 2x (18 ... 16)</p>

UL ratings:		
<b>Full-load current (FLA) / for 3-phase motor / at 480 V / rated value</b>	A	6.1
<b>yielded mechanical performance [hp]</b>		
<ul style="list-style-type: none"> <li>• for single-phase squirrel cage motors <ul style="list-style-type: none"> <li>• at 110/120 V / rated value</li> <li>• at 230 V / rated value</li> </ul> </li> <li>• for three-phase squirrel cage motors <ul style="list-style-type: none"> <li>• at 200/208 V / rated value</li> <li>• at 220/230 V / rated value</li> <li>• at 460/480 V / rated value</li> </ul> </li> </ul>	<p>hp</p> <p>hp</p> <p>hp</p> <p>hp</p> <p>hp</p>	<p>0.25</p> <p>0.5</p> <p>1</p> <p>1.5</p> <p>3</p>

**Certificates/ approvals:**

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

**Further information:**

**Information- and Downloadcenter (Catalogs, Brochures,...)**  
<http://www.siemens.com/industrial-controls/catalogs>

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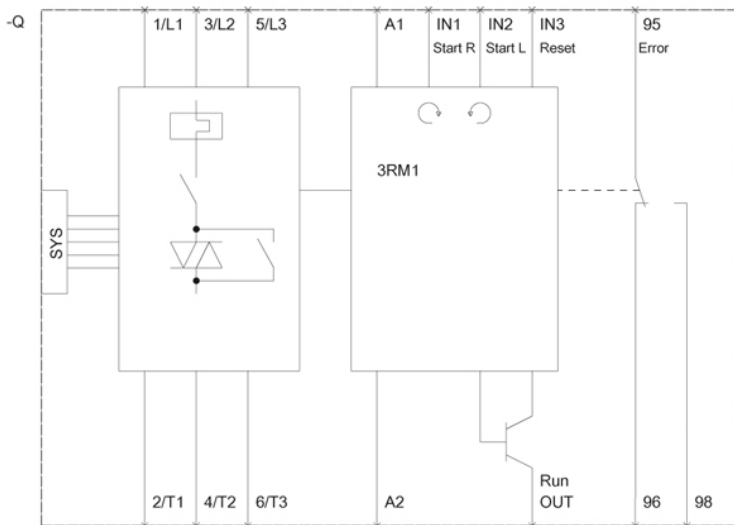
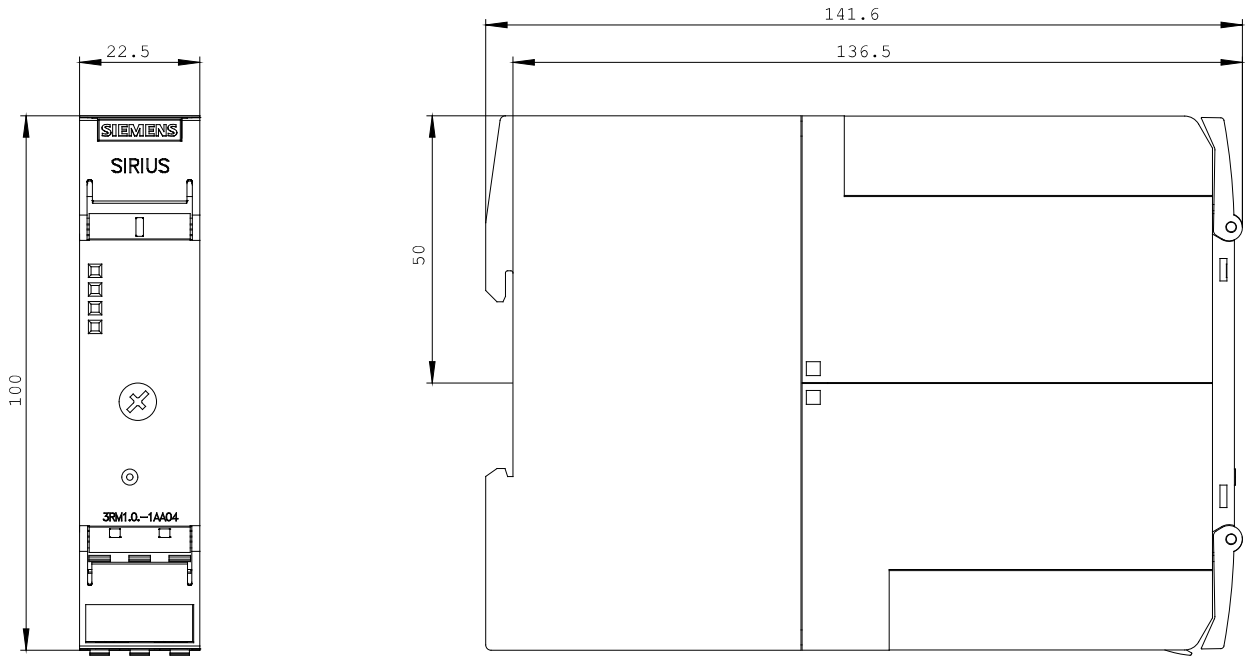
**Industry Mall (Online ordering system)**  
<http://www.siemens.com/industrial-controls/mall>

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**Cax online generator**  
<http://www.siemens.com/cax>

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**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**  
<http://support.automation.siemens.com/WW/view/en/3RM1207-1AA04/all>



last change:

Jul 28, 2014