



MOTORSTARTER SIRIUS 3RM1 REVERSING  
STARTER 500 V; 1.6-7.0 A; 24 V DC CONTROL  
CIRCUIT PUSH-IN MAIN CIRCUIT SCREW TERMINAL

Figure similar

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 operation 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 height above sea level maximum	m	4 000
Ambient temperature		
• during operation	°C	-25 ... +60
• during transport	°C	-40 ... +70
• during storage	°C	-40 ... +70
Shock resistance		6g / 11 ms
Vibration resistance		1 ... 6 Hz, 15 mm; 20 m/s <sup>2</sup> , 500 Hz
Surge voltage resistance Rated value	kV	6
Insulation voltage Rated value	V	500
Mechanical service life (switching cycles) typical		30 000 000
Conducted interference due to conductor-conductor surge acc. to IEC 61000-4-5		1 kV
Conducted interference due to burst acc. to IEC 61000-4-4		3 kV / 5 kHz

Conducted interference due to high-frequency radiation acc. to IEC 61000-4-6		10 V
Electrostatic discharge acc. to IEC 61000-4-2		4 kV contact discharge / 8 kV air discharge
Field-bound HF-interference emission acc. to CISPR11		Class B for the domestic, business and commercial environments
Conducted HF-interference emissions acc. to CISPR11		Class B for the domestic, business and commercial environments
maximum permissible voltage for safe isolation		
• between main and auxiliary circuit	V	500
• between control and auxiliary circuit	V	250
Equipment marking acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750		Q
Equipment marking acc. to DIN EN 61346-2		Q

#### Safety related data:

Protection against electrical shock		finger-safe
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#### Main circuit:

Number of poles for main current circuit		3
Operating voltage Rated value maximum	V	500
Operating frequency		
• 1 Rated value	Hz	50
• 2 Rated value	Hz	60
Operating current with AC at 400 V Rated value	A	7
Derating temperature	°C	40
Minimum load in % of I <sub>M</sub>	%	20
Active power loss typical	W	3.4
Adjustable response value current of the current-dependent overload release	A	1.6 ... 7
Operating power for three-phase motors at 400 V at 50 Hz	kW	0.55 ... 3
Operating frequency maximum	1/s	1

#### Control circuit/ Control:

Type of voltage of the control supply 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
Control current		
• for DC		
— in standby mode	mA	25
— during operation	mA	70
— when switching on	mA	150
Input voltage at digital input		

<ul style="list-style-type: none"> <li>• for signal &lt;1&gt; <ul style="list-style-type: none"> <li>— for DC</li> </ul> </li> </ul>	V	15 ... 30
<ul style="list-style-type: none"> <li>• with signal &lt;0&gt; <ul style="list-style-type: none"> <li>— for DC</li> </ul> </li> </ul>	V	0 ... 5
<b>Input current at digital input</b>		
<ul style="list-style-type: none"> <li>• for signal &lt;1&gt; <ul style="list-style-type: none"> <li>— for DC</li> </ul> </li> </ul>	mA	11
<ul style="list-style-type: none"> <li>• with signal &lt;0&gt; <ul style="list-style-type: none"> <li>— for DC</li> </ul> </li> </ul>	mA	1
<b>Switch-on delay time</b>	ms	60 ... 90
<b>OFF-delay time</b>	ms	60 ... 90

Auxiliary circuit:		
<b>Number of CO contacts for auxiliary contacts</b>		1
<b>Design of the switching contact as NO contact for signaling function</b>		Electronic
<b>Operating current of the auxiliary contacts</b>		
<ul style="list-style-type: none"> <li>• at AC-15 maximum</li> </ul>	A	3
<ul style="list-style-type: none"> <li>• at DC-13 maximum</li> </ul>	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>Type of electrical connection</b>		
<ul style="list-style-type: none"> <li>• for main current circuit</li> </ul>		screw-type terminals
<ul style="list-style-type: none"> <li>• for auxiliary and control current circuit</li> </ul>		PUSH-IN connection (spring-loaded connection)
<b>Type of connectable conductor cross-section for main contacts</b>		
<ul style="list-style-type: none"> <li>• solid</li> </ul>		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 core end processing</li> </ul> </li> </ul>		1x (0,5 ... 2,5 mm <sup>2</sup> ), 2x (0,5 ... 1,5 mm <sup>2</sup> )
<b>Type of connectable conductor cross-section for AWG conductors for main contacts</b>		1x (20 ... 12), 2x (20 ... 14)
<b>Type of connectable conductor cross-section for auxiliary contacts</b>		
<ul style="list-style-type: none"> <li>• solid</li> </ul>		1x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.5 ... 1.5 mm <sup>2</sup> )
<ul style="list-style-type: none"> <li>• finely stranded <ul style="list-style-type: none"> <li>— with core end processing</li> </ul> </li> </ul>		1x (0,5 ... 1,0 mm <sup>2</sup> ), 2x (0,5 ... 1,0 mm <sup>2</sup> )
<ul style="list-style-type: none"> <li>— without core end processing</li> </ul>		1x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.5 ... 1.5 mm <sup>2</sup> )

Type of connectable conductor cross-section for AWG conductors for auxiliary contacts		1x (20 ... 16), 2x (20 ... 16)
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**UL ratings:**

Full-load current (FLA) for three-phase AC motor at 480 V Rated value	A	6.1
yielded mechanical performance [hp]		
<ul style="list-style-type: none"> <li>• for single-phase AC motor <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 AC motor <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>	metric hp  metric hp  metric hp  metric hp  metric hp	0.25  0.5  1  1.5  3

**Certificates/ approvals:**

<b>General Product Approval</b>	<b>other</b>
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[Environmental Confirmations](#)

[Confirmation](#)

**Further information**

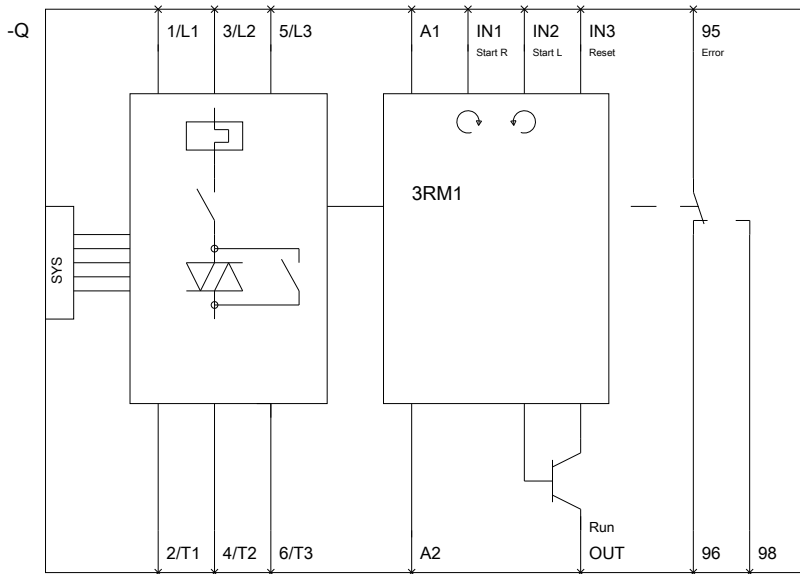
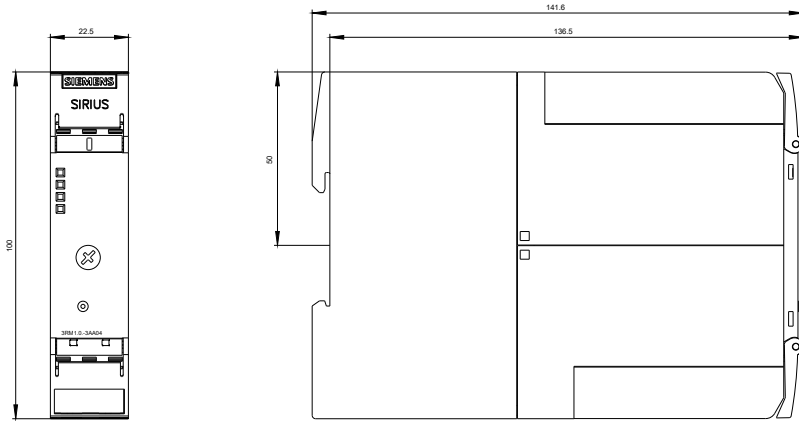
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