# **SIEMENS**

Product data sheet 3RM1207-2AA04



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

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		3 kV / 5 kHz	
Conducted interference as high-frequency radiation according to IEC 61000-4-6		10 V	
Electrostatic discharge / according to IEC 61000-4-2		4 kV contact discharge / 8 kV air discharge	
Field-bound HF-interference emission / according to CISPR11	Class B for the domestic, business and commercial environments		
Conductor-bound HF-interference emission / according to CISPR11		Class B for the domestic, business and commercial environments	
Maximum permissible voltage for safe disconnection			
between main circuit and auxiliary circuit	V	500	
between control and auxiliary circuit	V	250	
Reference code			
<ul> <li>according to DIN 40719 extended according to IEC 204-2 / according to IEC 750</li> </ul>		Q	
according to DIN EN 61346-2		Q	

Protection against electrical shock  Main circuit:  Number of poles / for main current circuit  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 7  Derating temperature  C 40  Minimum load in % of I_M  Active power loss / typical  Adjustable response current	Safety related data:		
Number of poles / for main current circuit  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 7  Derating temperature  C 40  Minimum load in % of I_M  Active power loss / typical  3  C 3  Active power loss / typical	Protection against electrical shock		finger-safe
Operating voltage / rated value / maximum  Operating frequency  1	Main circuit:		
Operating frequency  • 1  • 2  Hz  60  Operating current / at 400 V / for AC / rated value  A  7  Derating temperature  °C  40  Minimum load in % of I_M  %  20  Active power loss / typical  W  3.4	Number of poles / for main current circuit		3
• 1 • 2 Hz 50 Hz 60  Operating current / at 400 V / for AC / rated value A 7  Derating temperature °C 40  Minimum load in % of I_M % 20  Active power loss / typical W 3.4	Operating voltage / rated value / maximum	V	500
• 2  Operating current / at 400 V / for AC / rated value  A 7  Derating temperature  °C 40  Minimum load in % of I_M  Active power loss / typical  W 3.4	Operating frequency		
Operating current / at 400 V / for AC / rated value  A 7  Derating temperature  °C 40  Minimum load in % of I_M  % 20  Active power loss / typical  W 3.4	•1	Hz	50
Derating temperature  °C 40  Minimum load in % of I_M % 20  Active power loss / typical W 3.4	• 2	Hz	60
Minimum load in % of I_M  Active power loss / typical  W  3.4	Operating current / at 400 V / for AC / rated value	Α	7
Active power loss / typical W 3.4	Derating temperature	°C	40
	Minimum load in % of I_M	%	20
Adjustable response current	Active power loss / typical	W	3.4
	Adjustable response current		
• of the current-dependent overload release A 1.6 7	of the current-dependent overload release	Α	1.6 7
Service power / for three-phase servomotors / at 400 V	Service power / for three-phase servomotors / at 400 V		
• at 50 Hz kW 0.55 3	• at 50 Hz	kW	0.55 3
Operating cycles / maximum 1/s 1	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	
Control current			
• with DC			
• in standby mode	mA	25	
during operation	mA	70	
• on switching on	mA	150	
Input voltage / at the digital input			
• with signal <1>			
• for DC	V	15 30	
• with signal <0>			
• with DC	V	0 5	
Input voltage / at digital input			
• with signal <1>			
• with DC	mA	11	
• with signal <0>			
• with DC	mA	1	
ON-delay time	ms	60 90	
OFF-delay time	ms	60 90	
Auxiliary circuit:			
Number of changeover contacts / for auxiliary contacts		1	
Design of the switching contact / as make contact / for reporting		Electronic	
function		2.55.15.115	
Operating current / of the auxiliary contacts			
• at AC-15	Α	3	
• at DC-13	Α	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		PUSH-IN connection (spring-loaded connection)	
for auxiliary and control current circuit		PUSH-IN connection (spring-loaded connection)	
Type of the connectable conductor cross-section			

• solid	1x (0.5 4 mm²)		
• finely stranded			
<ul> <li>with conductor end processing</li> </ul>	1x (0.5 2.5 mm²)		
<ul> <li>without conductor final cutting</li> </ul>	1x (0.5 4 mm²)		
• for AWG conductors	1x (20 12)		
Type of the connectable conductor cross-section			
• for auxiliary contacts			
• solid	1x (0.5 1.5 mm²), 2x (0.5 1.5 mm²)		
• finely stranded			
<ul> <li>with conductor end processing</li> </ul>	1x (0,5 1,0 mm²), 2x (0,5 1,0 mm²)		
without conductor final cutting	1x (0.5 1.5 mm²), 2x (0.5 1.5 mm²)		
• for AWG conductors	1x (20 16), 2x (20 16)		

UL ratings:			
Full-load current (FLA) / for 3-phase motor / at 480 V / rated value	А	6.1	
yielded mechanical performance [hp]			
<ul> <li>for single-phase squirrel cage motors</li> </ul>			
• at 110/120 V / rated value	hp	0.25	
at 230 V / rated value	hp	0.5	
• for three-phase squirrel cage motors			
• at 200/208 V / rated value	hp	1	
• at 220/230 V / rated value	hp	1.5	
• at 460/480 V / rated value	hp	3	

### Certificates/ approvals:

General Produc	t Approval		Declaration of Conformity	Test Certificates
<u> </u>	EHC	P T	EG-Konf.	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)

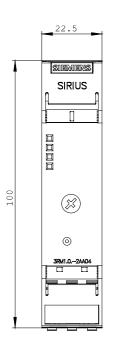
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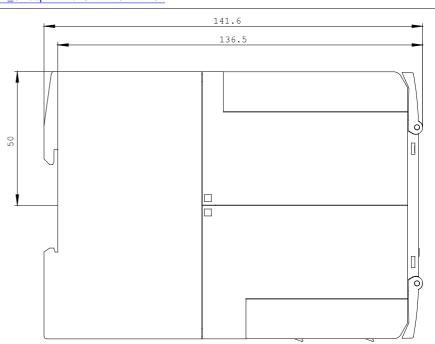
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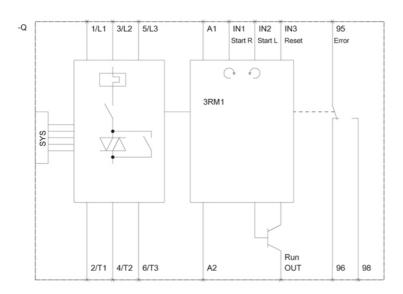
http://www.siemens.com/cax

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

http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3RM1207-2AA04







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