SIEMENS

Product data sheet 3RM1207-1AA14



MOTOR STARTER SIRIUS 3RM1 REVERSING STARTER 500 V; 1,6-7,0 A; 110-230 V AC SCREW 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		No	
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	

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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 domestic, business and commercial environments; Class A for industrial environments at 110 V DC
Conductor-bound HF-interference emission / according to CISPR11		Class B for domestic, business and commercial environments; Class A for industrial environments at 110 V DC
Maximum permissible voltage for safe disconnection		
between main circuit and auxiliary circuit	V	500
 between control and auxiliary circuit 	V	250
Reference code		
 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	Α	7	
Derating temperature	°C	40	
Minimum load in % of I_M	%	20	
Active power loss / typical	W	3.4	
Adjustable response current			
of the current-dependent overload release	Α	1.6 7	
Service power / for three-phase servomotors / at 400 V			
• at 50 Hz	kW	0.55 3	
Operating cycles / maximum	1/s	1	

Control circuit/ Control:	
Voltage type / of control feed voltage	AC/DC

Control supply voltage / 1		
• for DC / rated value	V	110
• at 50 Hz		
• for AC	V	110 230
• at 60 Hz		
• for AC	V	110 230
Operating range factor control supply voltage rated value		
• for DC		0.85 1.1
• at 50 Hz		
• for AC		0.85 1.1
• at 60 Hz		
• for AC		1.1 0.85
Control current		
• with AC		
• at 230 V		
 with standby operating mode 	mA	9
during operation	mA	22
• when switching on	mA	33
• at 110 V		
 with standby operating mode 	mA	16
during operation	mA	36
• on switching on	mA	55
• with DC		
• in standby mode	mA	6
during operation	mA	30
• on switching on	mA	15
Input voltage / at the digital input		
• with signal <1>		
• for DC	V	79 121
• with AC	V	93 253
• with signal <0>		
• with AC	V	0 40
• with DC	V	0 40
Input voltage / at digital input		
• with signal <1>		
• with AC		
• at 230 V	mA	2.3
• at 110 V	mA	1.1
• with DC	mA	1.5
• with signal <0>		

• with AC		
• at 230 V	mA	0.4
• at 110 V	mA	0.2
• with DC	mA	0.25
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 function		Electronic	
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	

screw-type terminals
screw-type terminals
1x (0,5 4 mm²), 2x (0,5 2,5 mm²)
1x (0,5 2,5 mm²), 2x (0,5 1,5 mm²)
1x (20 12), 2x (20 14)
1x (0,5 2,5 mm²), 2x (1,0 1,5 mm²)
1x (0.5 2.5 mm²), 2x (0.5 1 mm²)
1x (20 14), 2x (18 16)

UL ratings:

Full-load current (FLA) / for 3-phase motor / at 480 V / rated value	А	6.1
yielded mechanical performance (hp)		
 for single-phase squirrel cage motors 		
• 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 Product Approval

Declaration of Conformity

Test Certificates











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

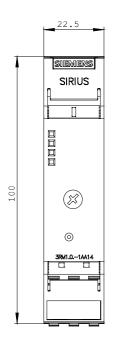
http://www.siemens.com/cax

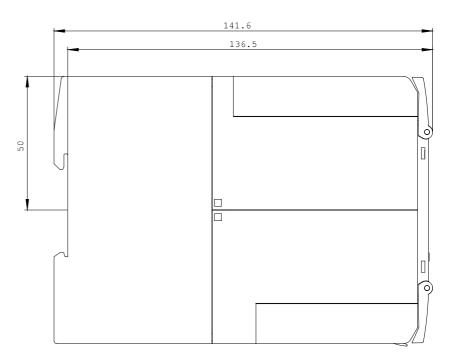
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

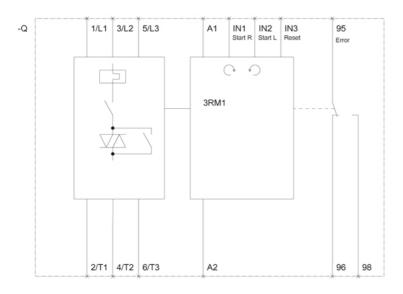
http://support.automation.siemens.com/WW/view/en/3RM1207-1AA14/all

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RM1207-1AA14







last change: Mar 17, 2014