SIEMENS

Product data sheet 3RM1001-2AA14

MOTOR STARTER 3RM1 SIRIUS DIRECT STARTER 500 V;
0,1-0,5 A;
110-230 V AC PUSH-IN-TYPE CONNECTION SYSTEM

General technical data:		
product brand name		SIRIUS
Product designation		Motor starter
Design of the product		with 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	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 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	A	0.5
Minimum load in % of I_M	%	20
Active power loss / typical	W	0.02
Adjustable response current		
• of the current-dependent overload release	A	0.1 … 0.5
Service power / for three-phase servomotors / at 400 V		
• at 50 Hz	kW	0 … 0.12
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	A	3
• at DC-13	A	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		
• for main contacts		
• solid		1x (0.5 ... 4 mm²)
• finely stranded		
• with conductor end processing		1x (0.5 ... 2.5 mm²)
• without conductor final cutting		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		
• with conductor end processing		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	A	0.5

Certificates/ approvals:

General Product Approval				Declaration of Conformity	Test Certificates
CCC	EAC	GOST	UL	EG-Konf.	Type Test Certificates/Test Report

other

Environmental Confirmations

Further information:

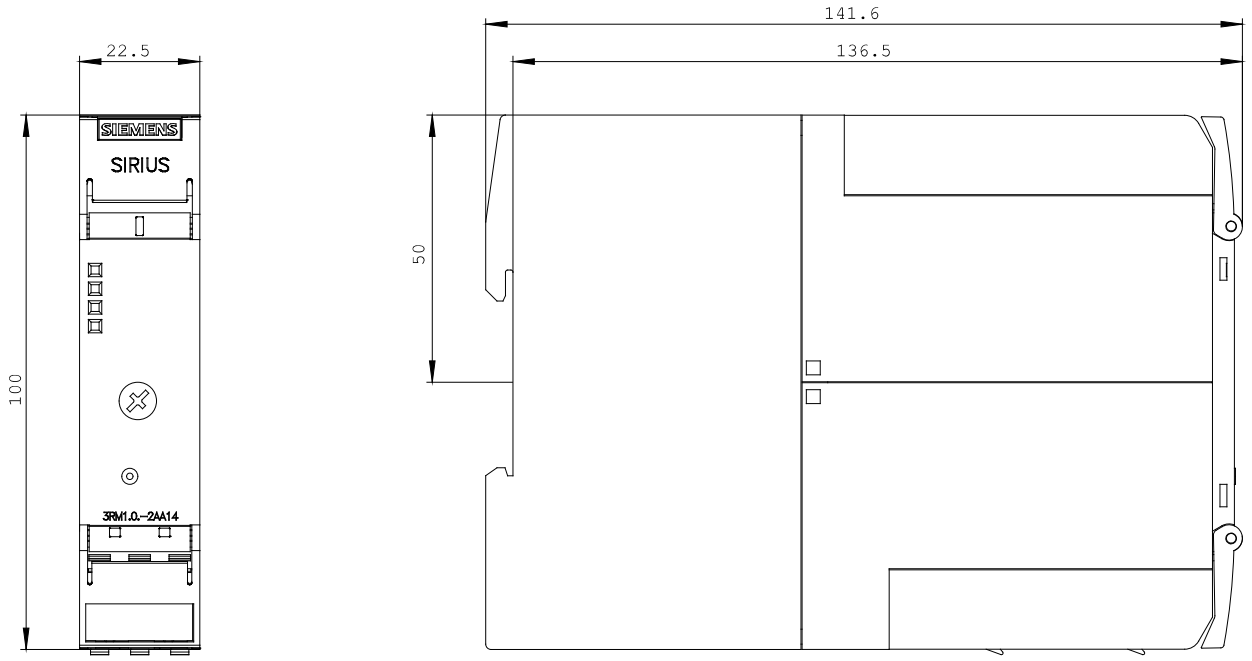
Information- and Downloadcenter (Catalogs, Brochures,…)
http://www.siemens.com/industrial-controls/catalogs

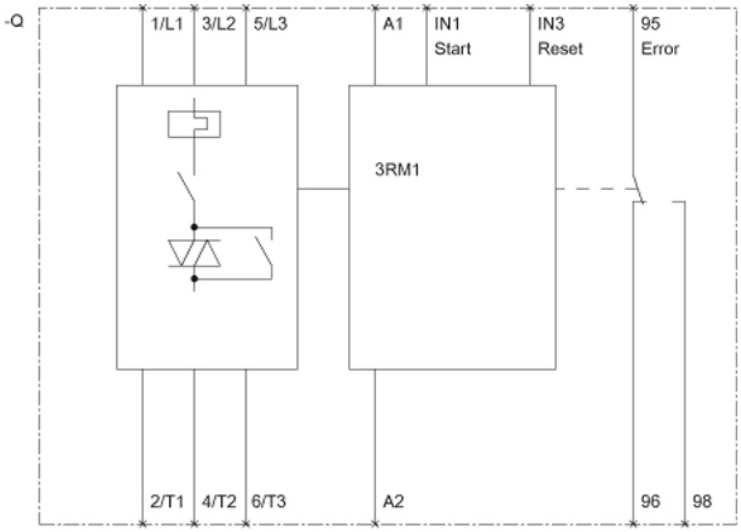
Industry Mall (Online ordering system)
http://www.siemens.com/industrial-controls/mall

Cax online generator
http://www.siemens.com/cax

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
http://support.automation.siemens.com/WW/view/en/3RM1001-2AA14/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RM1001-2AA14





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