



MOTOR STARTER 3RM1 SIRIUS DIRECT STARTER 500 V;
1,6-7,0 A;
110-230 V AC PUSH-IN-TYPE CONNECTION SYSTEM

General technical data:

product designation		Motor starter
Design of the product		with electronic overload protection
Protection class IP		IP20
Suitability for use / device connector 3ZY12		No
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
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		2 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

Safety:

Safety device type / according to IEC 61508-2

Type B

Main 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	%	20
Active power loss / typical	W	3.3
Adjustable response current		
• of the current-dependent overload release	A	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:

Type of voltage / of the controlled supply 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
Control current	A	0.05
Input voltage / at the digital input / with signal <1>		
• for DC	V	93 ... 121
• with AC	V	93 ... 253

Input current / at the digital input / for signal <1> / typical	A	0.0020
Start-up delay time	ms	80
Switch-off delay time	ms	90

Installation/mounting/dimensions:		
mounting position		vertical, horizontal
Width	mm	22.5
Height	mm	100
Depth	mm	141.6

Connections:		
Design of the electrical connection <ul style="list-style-type: none"> • for main current circuit • for auxiliary and control current circuit 		PUSH-IN connection (spring-loaded connection) PUSH-IN connection (spring-loaded connection)
Type of the connectable conductor cross-section <ul style="list-style-type: none"> • for main contacts <ul style="list-style-type: none"> • solid • finely stranded <ul style="list-style-type: none"> • with conductor end processing • without conductor final cutting • for AWG conductors 		1x (0.2 ... 4 mm ²) 1x (0.5 ... 2.5 mm ²) 1x (0.5 ... 4 mm ²) 1x (24 ... 12)
Type of the connectable conductor cross-section <ul style="list-style-type: none"> • for auxiliary contacts <ul style="list-style-type: none"> • solid • finely stranded <ul style="list-style-type: none"> • with conductor end processing • without conductor final cutting • for AWG conductors 		1x (0.2 ... 1.5 mm ²), 2x (0.2 ... 1.5 mm ²) 1x (0.5 ... 1.5 mm ²), 2x (0.5 ... 1.5 mm ²) 1x (0.5 ... 1.5 mm ²), 2x (0.5 ... 1.5 mm ²) 1x (24 ... 16), 2x (24 ... 16)

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

Certificates/approvals:

General Product Approval



GOST



UL



EG-Konf.

Test Certificates

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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

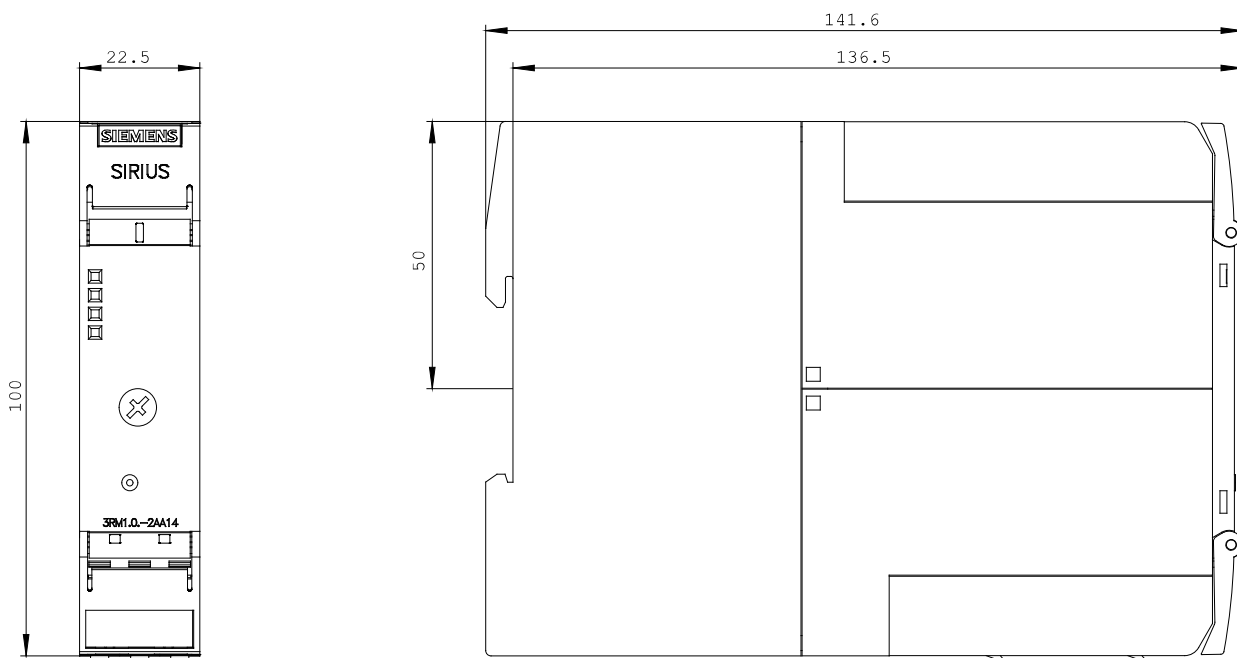
<http://www.siemens.com/cax>

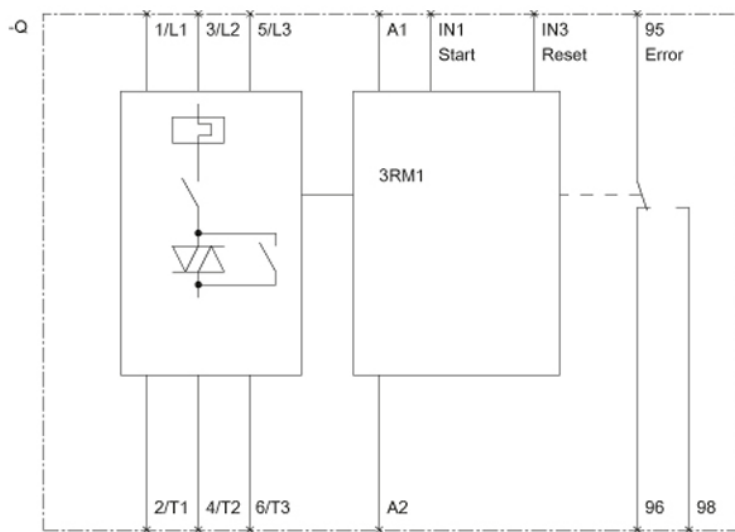
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<http://support.automation.siemens.com/WW/view/en/3RM1007-2AA14/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RM1007-2AA14





last change:

Mar 11, 2013