SIEMENS

Data sheet 3RM1007-2AA04

Figure similar

MOTOR STARTER SIRIUS 3RM1 DIRECT 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 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/s², 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

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_M	%	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		

• for signal <1>		
— for DC	V	15 ... 30
• with signal <0>		
— for DC	V	0 ... 5
Input current at digital input		
• for signal <1>		
— for DC	mA	11
• with signal <0>		
— for DC	mA	1
Switch-on delay time	ms	60 ... 90
OFF-delay time	ms	60 ... 90

Auxiliary circuit:		
Number of CO contacts for auxiliary contacts		1
Design of the switching contact as NO contact for signaling function		Electronic
Operating current of the auxiliary contacts		
• at AC-15 maximum	A	3
• at DC-13 maximum	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:		
Type of 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 connectable conductor cross-section for main contacts		
• solid		1x (0.5 ... 4 mm²)
• finely stranded		
— with core end processing		1x (0.5 ... 2.5 mm²)
— without core end processing		1x (0.5 ... 4 mm²)
Type of connectable conductor cross-section for AWG conductors for main contacts		1x (20 ... 12)
Type of connectable conductor cross-section for auxiliary contacts		
• solid		1x (0.5 ... 1.5 mm²), 2x (0.5 ... 1.5 mm²)
• finely stranded		
— with core end processing		1x (0,5 ... 1,0 mm²), 2x (0,5 ... 1,0 mm²)

— without core end processing		1x (0.5 ... 1.5 mm²), 2x (0.5 ... 1.5 mm²)
Type of connectable conductor cross-section for AWG conductors for auxiliary contacts		1x (20 ... 16), 2x (20 ... 16)

UL ratings:

Full-load current (FLA) for three-phase AC motor at 480 V Rated value	A	6.1
yielded mechanical performance [hp]		
• for single-phase AC motor		
— at 110/120 V Rated value	metric hp	0.25
— at 230 V Rated value	metric hp	0.5
• for three-phase AC motor		
— at 200/208 V Rated value	metric hp	1
— at 220/230 V Rated value	metric hp	1.5
— at 460/480 V Rated value	metric hp	3

Certificates/ approvals:

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

Test Certificates	other	
Special Test Certificate	Environmental Confirmations	Confirmation

Further information

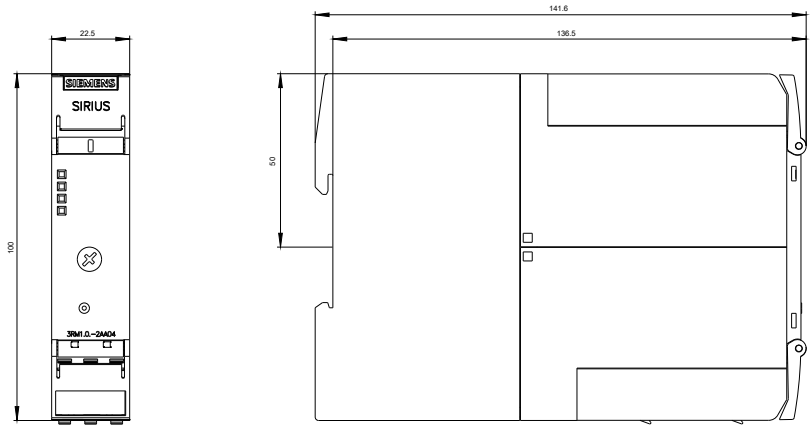
Information- and Downloadcenter (Catalogs, Brochures,…)
http://www.siemens.com/industrial-controls/catalogs

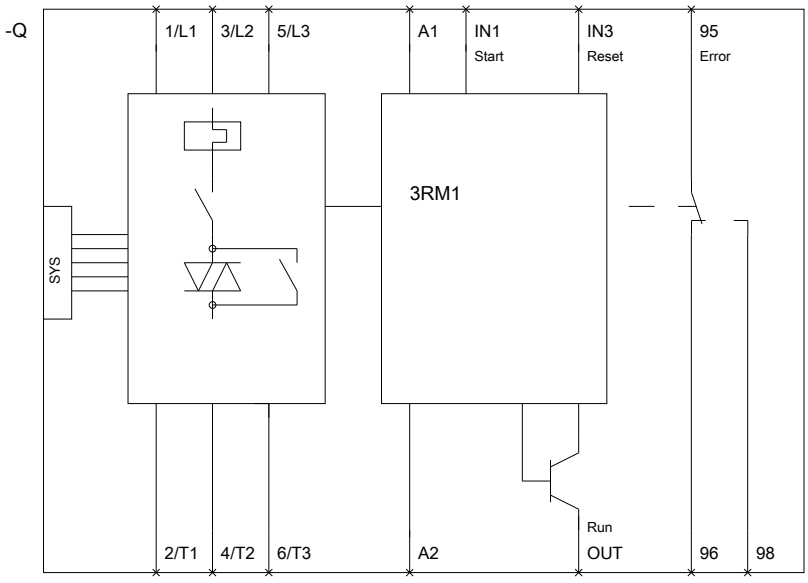
Industry Mall (Online ordering system)
http://www.siemens.com/industrymall

Cax online generator
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RM10072AA04

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
http://support.automation.siemens.com/WW/view/en/3RM10072AA04/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
http://www.automation.siemens.com/bilddb/index.aspx?attID9=3RM10072AA04&lang=en





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