SIEMENS

Product data sheet 3RM1102-3AA04



MOTORSTARTER SIRIUS 3RM1 DIRECT STARTER SAFETY 500 V; 0.4-2.0 A; 24 V DC CONTROL CIRCUIT PUSH-IN MAIN CIRCUIT SCREW TERMINAL

General technical data:		
product brand name		SIRIUS
Product designation		Motor starter
Design of the product		with electronic overload protection and safety-related shutdown
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 height above sea level / maximum	m	2,000
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 conductor-conductor SURGE / acc. to IEC 61000-4-5		2 kV
Conducted interference BURST / acc. to IEC 61000-4-4		3 kV / 5 kHz
Conducted interference as high-frequency radiation acc. to IEC 61000-4-6		10 V
Electrostatic discharge / acc. to IEC 61000-4-2		6 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
Reference code		
 acc. to DIN 40719 extended according to IEC 204-2 / acc. to IEC 750 		Q
• acc. to DIN EN 61346-2		Q
Safety related data:		
Safety Integrity Level (SIL) / acc. to IEC 61508		SIL3
Performance level (PL) / acc. to EN ISO 13849-1		е
Category / acc. to EN ISO 13849-1		4
T1 value / for proof test interval or service life / acc. to IEC 61508	а	20
PFHD / with high demand rate / acc. to EN 62061	1/h	0.00000002
Protection against electrical shock		finger-safe
Safety device type / acc. to IEC 61508-2		Туре В
OFF-delay time / with safety-related request / when switched off via control inputs / maximum	ms	65
OFF-delay time / with safety-related request / when switched off via supply voltage / maximum	ms	120
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 / with AC / at 400 V / Rated value	Α	2

Minimum load in % of I_M

Active power loss / typical

Adjustable response value current

20

0.3

%

W

of the current-dependent overload release	Α	0.4 2
Operating power / for three-phase motors / at 400 V		
• at 50 Hz	kW	0.09 0.75
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	13
during operation	mA	57
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	8
• with signal <0>		
• for DC	mA	1
Switch-on delay time	ms	90 120
OFF-delay time	ms	40 55

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	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	screw-type terminals
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), 2x (0,5 2,5 mm²)
• finely stranded	
with core end processing	1x (0,5 2,5 mm²), 2x (0,5 1,5 mm²)
• for AWG conductors	1x (20 12), 2x (20 14)
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)
• for AWG conductors	1x (20 16), 2x (20 16)

UL ratings:		
Full-load current (FLA) / for three-phase AC motor / at 480 V / Rated value	Α	2
yielded mechanical performance [hp]		
• for single-phase AC motor		
• at 230 V / Rated value	hp	0.125
• for three-phase AC motor		
• at 200/208 V / Rated value	hp	0.333
• at 220/230 V / Rated value	hp	0.333
• at 460/480 V / Rated value	hp	0.75

Certificates/ approvals: General Product Approval For use in hazardous locations Declaration of Conformity









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

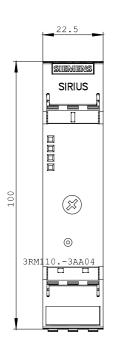
http://www.siemens.com/cax

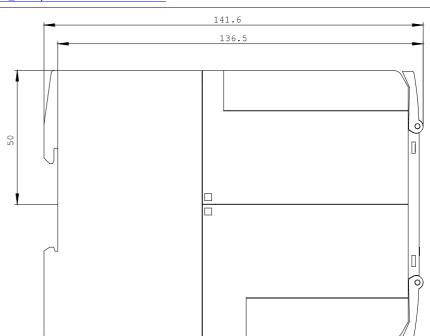
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

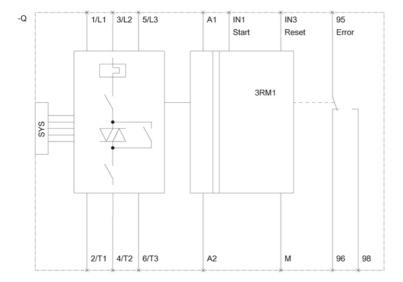
http://support.automation.siemens.com/WW/view/en/3RM1102-3AA04/all

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RM1102-3AA04







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