



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 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 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/s ² , 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 the domestic, business and commercial environments
Conductor-bound HF-interference emission / according to CISPR11		Class B for the domestic, business and commercial environments
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	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	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/ Control:

Voltage type / of control feed 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		
• with DC		
• in standby mode	mA	25
• during operation	mA	70
• on switching on	mA	150
Input voltage / at the digital input		
• with signal <1>		
• for DC	V	15 ... 30
• with signal <0>		
• with DC	V	0 ... 5
Input voltage / at digital input		
• with signal <1>		
• with DC	mA	11
• with signal <0>		
• with DC	mA	1
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
- at DC-13

A 3
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
- 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






- for main contacts
- solid

1x (0.5 ... 4 mm²)

<ul style="list-style-type: none"> finely stranded <ul style="list-style-type: none"> with conductor end processing without conductor final cutting for AWG conductors 	<p>1x (0.5 ... 2.5 mm²)</p> <p>1x (0.5 ... 4 mm²)</p> <p>1x (20 ... 12)</p>
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 	<p>1x (0.5 ... 1.5 mm²), 2x (0.5 ... 1.5 mm²)</p> <p>1x (0,5 ... 1,0 mm²), 2x (0,5 ... 1,0 mm²)</p> <p>1x (0.5 ... 1.5 mm²), 2x (0.5 ... 1.5 mm²)</p> <p>1x (20 ... 16), 2x (20 ... 16)</p>

UL ratings:		
Full-load current (FLA) / for 3-phase motor / 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 	<p>hp</p> <p>hp</p> <p>hp</p> <p>hp</p> <p>hp</p> <p>hp</p>	<p>0.25</p> <p>0.5</p> <p>1</p> <p>1.5</p> <p>3</p>

Certificates/ approvals:

General Product Approval	Declaration of Conformity	Test Certificates
 CCC  EAC  PGT GOST  UL  CE EG-Konf.		Type Test Certificates/Test Report
other Environmental Confirmations		

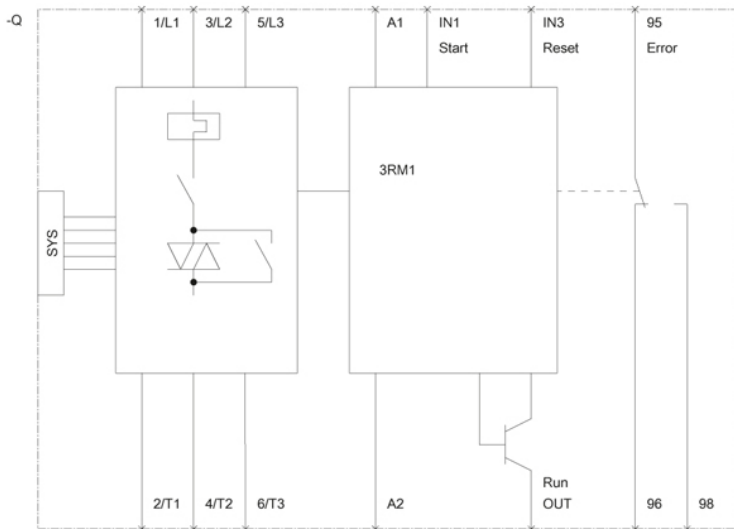
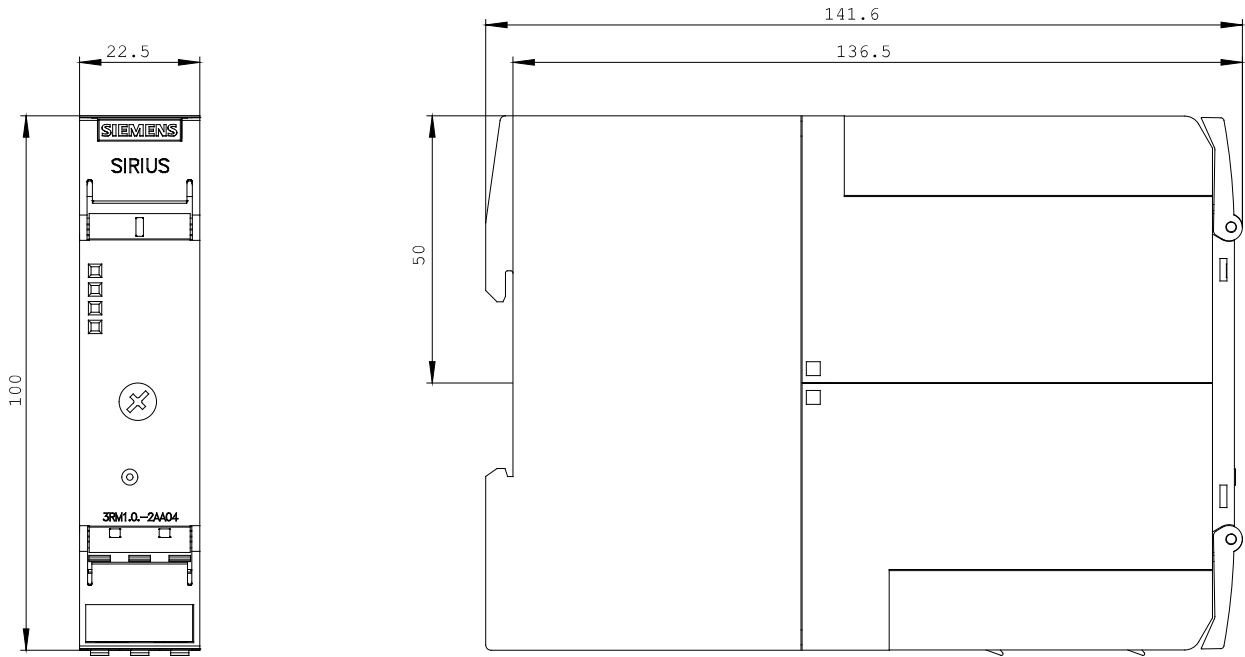
Further information:

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/3RM1007-2AA04/all>



last change:

Jul 28, 2014