



SIRIUS SOFT STARTER, S0, 12.5A, 7.5KW/500V, 40 DEGR., AC 400-600V, AC/DC 24V, SCREW TERMINALS, THERMISTOR MOTOR PROTECTION

General technical data:

product brand name		SIRIUS
Product feature		
<ul style="list-style-type: none"> integrated bypass contact system 		Yes
<ul style="list-style-type: none"> Thyristors 		Yes
Product function		
<ul style="list-style-type: none"> Intrinsic device protection 		Yes
<ul style="list-style-type: none"> motor overload protection 		Yes
<ul style="list-style-type: none"> Evaluation of thermistor motor protection 		Yes
<ul style="list-style-type: none"> External reset 		Yes
<ul style="list-style-type: none"> Adjustable current limitation 		Yes
<ul style="list-style-type: none"> inside-delta circuit 		No
Product component Motor brake output		No
Equipment marking acc. to DIN EN 61346-2		Q
Equipment marking acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750		G

Power Electronics:

Product designation		soft starters for standard applications
Operating current		
<ul style="list-style-type: none"> at 40 °C Rated value 	A	12.5
<ul style="list-style-type: none"> at 50 °C Rated value 	A	11
<ul style="list-style-type: none"> at 60 °C Rated value 	A	10
Mechanical power output for three-phase motors		
<ul style="list-style-type: none"> at 400 V 		

— at standard circuit at 40 °C Rated value	W	5 500
• at 500 V		
— at standard circuit at 40 °C Rated value	W	7 500
Operating frequency Rated value	Hz	50 ... 60
Relative negative tolerance of the operating frequency	%	-10
Relative positive tolerance of the operating frequency	%	10
Operating voltage at standard circuit Rated value	V	400 ... 600
Relative negative tolerance of the operating voltage at standard circuit	%	-15
Relative positive tolerance of the operating voltage at standard circuit	%	10
Minimum load in % of I _M	%	20
Adjustable motor current for motor overload protection minimum rated value	A	5
Continuous operating current in % of I _e at 40 °C	%	115
Active power loss at operating current at 40 °C during operation typical	W	2

Control electronics:

Type of voltage of the control supply voltage		AC/DC
Control supply voltage frequency 1 Rated value	Hz	50
Control supply voltage frequency 2 Rated value	Hz	60
Relative negative tolerance of the control supply voltage frequency	%	-10
Relative positive tolerance of the control supply voltage frequency	%	10
Control supply voltage 1 with AC		
• at 50 Hz Rated value	V	24
• at 60 Hz Rated value	V	24
Relative negative tolerance of the control supply voltage with AC at 60 Hz	%	-20
Relative positive tolerance of the control supply voltage with AC at 60 Hz	%	20
Control supply voltage 1 for DC Rated value	V	24
Relative negative tolerance of the control supply voltage for DC	%	-20
Relative positive tolerance of the control supply voltage for DC	%	20
Display version for fault signal		red

Mechanical data:

Size of engine control device		S0
Width	mm	45
Height	mm	125
Depth	mm	155

Mounting type		screw and snap-on mounting
mounting position		With additional fan: With vertical mounting surface +/- 90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back Without additional fan: With vertical mounting surface +/-10° rotatable, with vertical mounting surface +/- 10° t
Required spacing with side-by-side mounting		
• upwards	mm	60
• at the side	mm	15
• downwards	mm	40
Installation altitude at height above sea level	m	5 000
Cable length maximum	m	300
Number of poles for main current circuit		3

Connections/ Terminals:

Type of electrical connection		
• for main current circuit		screw-type terminals
• for auxiliary and control current circuit		screw-type terminals
Number of NC contacts for auxiliary contacts		0
Number of NO contacts for auxiliary contacts		2
Number of CO contacts for auxiliary contacts		1
Type of connectable conductor cross-section for main contacts for box terminal using the front clamping point		
• solid		2x (1.5 ... 2.5 mm ²), 2x (2.5 ... 6 mm ²), max. 1x 10 mm ²
• finely stranded with core end processing		2x (1.5 ... 2.5 mm ²), 2x (2.5 ... 6 mm ²)
Type of connectable conductor cross-section for AWG conductors for main contacts for box terminal		
• using the front clamping point		1x 8, 2x (16 ... 10)
Type of connectable conductor cross-section for auxiliary contacts		
• solid		2x (0.5 ... 2.5 mm ²)
• finely stranded with core end processing		2x (0.5 ... 1.5 mm ²)
Type of connectable conductor cross-section for AWG conductors		
• for auxiliary contacts		2x (20 ... 14)
• for auxiliary contacts finely stranded with core end processing		2x (20 ... 16)

Ambient conditions:

Ambient temperature		
• during operation	°C	-25 ... +60
• during storage	°C	-40 ... +80
Derating temperature	°C	40

Protection class IP

IP20

Certificates/ approvals:

General Product Approval

EMC

For use in hazardous locations



CCC



CSA



UL



C-TICK



ATEX

Test Certificates

Shipping Approval

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



DNV



GL



LRS



PRS

other

[Declaration of Conformity](#)

[Environmental Confirmations](#)

UL/CSA ratings:

yielded mechanical performance [hp] for three-phase AC motor

• at 460/480 V

— at standard circuit at 50 °C Rated value

metric
hp

7.5

• at 575/600 V

— at standard circuit at 50 °C Rated value

metric
hp

10

Contact rating of the auxiliary contacts acc. to UL

B300 / R300

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

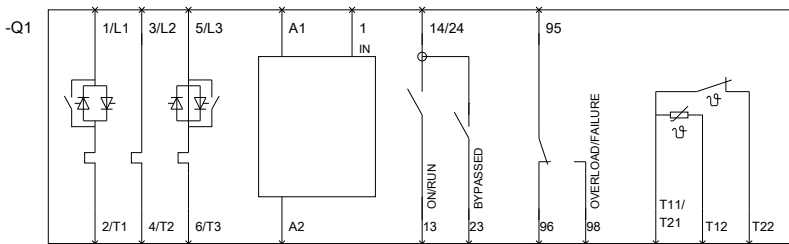
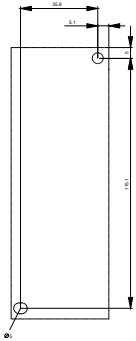
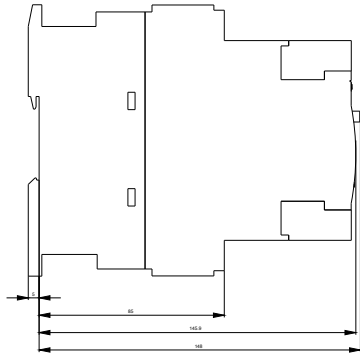
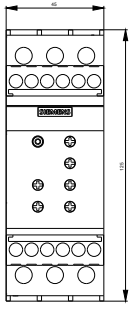
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW40241TB05>

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

<http://support.automation.siemens.com/WW/view/en/3RW40241TB05/all>

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

<http://www.automation.siemens.com/bilddb/index.aspx?attID9=3RW40241TB05&lang=en>



last modified:

15.01.2015