



SIRIUS SOFT STARTER, S0, 38A, 22KW/500V, 40 DEGR., AC 400-600V, AC/DC 24V, SCREW TERMINALS

### General technical data:

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

### Power Electronics:

<b>Product designation</b>		soft starters for standard applications
<b>Operating current</b>		
<ul style="list-style-type: none"> <li>at 40 °C Rated value</li> </ul>	A	38
<ul style="list-style-type: none"> <li>at 50 °C Rated value</li> </ul>	A	34
<ul style="list-style-type: none"> <li>at 60 °C Rated value</li> </ul>	A	31
<b>Mechanical power output for three-phase motors</b>		
<ul style="list-style-type: none"> <li>at 400 V</li> </ul>		

— at standard circuit at 40 °C Rated value	W	18 500
• at 500 V		
— at standard circuit at 40 °C Rated value	W	22 000
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 <sub>M</sub>	%	20
Adjustable motor current for motor overload protection minimum rated value	A	23
Continuous operating current in % of I <sub>e</sub> at 40 °C	%	115
Active power loss at operating current at 40 °C during operation typical	W	19

#### 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

<b>Mounting type</b>		screw and snap-on mounting
<b>mounting position</b>		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
<b>Required spacing with side-by-side mounting</b>		
• upwards	mm	60
• at the side	mm	15
• downwards	mm	40
<b>Installation altitude at height above sea level</b>	m	5 000
<b>Cable length maximum</b>	m	300
<b>Number of poles for main current circuit</b>		3

#### Connections/ Terminals:

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

#### Ambient conditions:

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

[Environmental Confirmations](#)

[Declaration of Conformity](#)

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

25

• at 575/600 V

— at standard circuit at 50 °C Rated value

metric  
hp

30

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

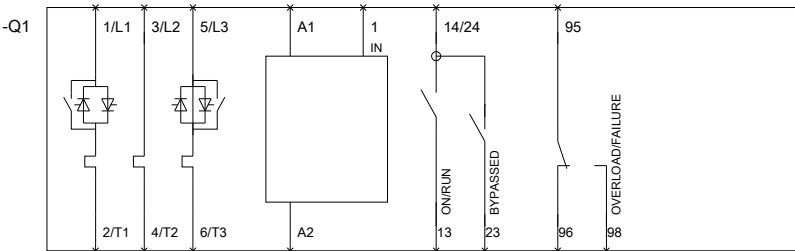
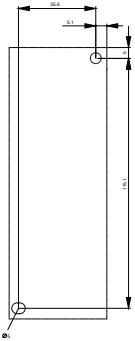
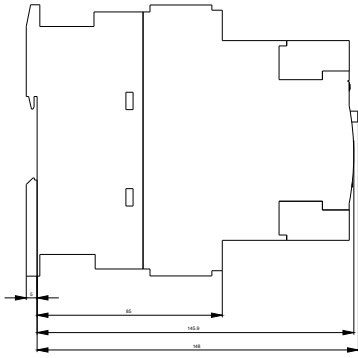
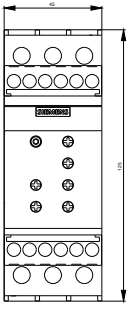
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW40281BB05>

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

<http://support.automation.siemens.com/WW/view/en/3RW40281BB05/all>

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

<http://www.automation.siemens.com/bilddb/index.aspx?attID9=3RW40281BB05&lang=en>



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15.01.2015