



SIRIUS SOFT STARTER, S6, 162 A, 110 KW/500 V, 40 DEG., 400-600 V AC, 230 V AC, SCREW TERMINALS

### General technical data:

<b>product brand name</b>		SIRIUS
<b>Product feature</b>		
• integrated bypass contact system		Yes
• Thyristors		Yes
<b>Product function</b>		
• Intrinsic device protection		Yes
• motor overload protection		Yes
• Evaluation of thermistor motor protection		No
• External reset		Yes
• Adjustable current limitation		Yes
• inside-delta circuit		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>		
• at 40 °C Rated value	A	162
• at 50 °C Rated value	A	145
• at 60 °C Rated value	A	125
<b>Mechanical power output for three-phase motors</b>		
• at 400 V		

— at standard circuit at 40 °C Rated value	W	90 000
• at 500 V		
— at standard circuit at 40 °C Rated value	W	110 000
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	87
Continuous operating current [% of I <sub>e</sub> ] at 40 °C	%	115
Active power loss at operating current at 40 °C during operation typical	W	75

Control electronics:		
Type of voltage of the control supply voltage		AC
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	230
• at 60 Hz Rated value	V	230
Relative negative tolerance of the control supply voltage with AC at 60 Hz	%	-15
Relative positive tolerance of the control supply voltage with AC at 60 Hz	%	10
Display version for fault signal		red

Mechanical data:		
Size of engine control device		S6
Width	mm	120
Height	mm	198
Depth	mm	250
Mounting type		screw fixing

<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	100
• at the side	mm	5
• downwards	mm	75
<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>		busbar connection screw-type terminals
• for main current circuit		
• for auxiliary and control current circuit		
<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		
• finely stranded with core end processing		16 ... 70 mm <sup>2</sup>
• finely stranded without core end processing		16 ... 70 mm <sup>2</sup>
• stranded		16 ... 70 mm <sup>2</sup>
Type of connectable conductor cross-section for main contacts for box terminal using the back clamping point		
• finely stranded with core end processing		16 ... 70 mm <sup>2</sup>
• finely stranded without core end processing		16 ... 70 mm <sup>2</sup>
• stranded		16 ... 70 mm <sup>2</sup>
Type of connectable conductor cross-section for main contacts for box terminal using both clamping points		
• finely stranded with core end processing		max. 1x 50 mm <sup>2</sup> , 1x 70 mm <sup>2</sup>
• finely stranded without core end processing		max. 1x 50 mm <sup>2</sup> , 1x 70 mm <sup>2</sup>
• stranded		max. 2x 70 mm <sup>2</sup>
Type of connectable conductor cross-section for AWG conductors for main contacts for box terminal		
• using the back clamping point		6 ... 2/0
• using the front clamping point		6 ... 2/0
• using both clamping points		max. 2x 1/0
Type of connectable conductor cross-section for DIN cable lug for main contacts		

<ul style="list-style-type: none"> <li>finely stranded</li> <li>stranded</li> </ul>	16 ... 95 mm <sup>2</sup> 25 ... 120 mm <sup>2</sup>
<b>Type of connectable conductor cross-section for auxiliary contacts</b> <ul style="list-style-type: none"> <li>solid</li> <li>finely stranded with core end processing</li> </ul>	2x (0.5 ... 2.5 mm <sup>2</sup> ) 2x (0.5 ... 1.5 mm <sup>2</sup> )
<b>Type of connectable conductor cross-section for AWG conductors</b> <ul style="list-style-type: none"> <li>for main contacts</li> <li>for auxiliary contacts</li> <li>for auxiliary contacts finely stranded with core end processing</li> </ul>	4 ... 250 kcmil 2x (20 ... 14) 2x (20 ... 16)

Ambient conditions:		
<b>Ambient temperature</b>		
<ul style="list-style-type: none"> <li>during operation</li> <li>during storage</li> </ul>	°C	-25 ... +60 -40 ... +80
<b>Derating temperature</b>	°C	40
<b>Protection class IP</b>		IP00

Certificates/ approvals:

General Product Approval	EMC	For use in hazardous locations	Test Certificates
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[Special Test Certificate](#)

Shipping Approval	other
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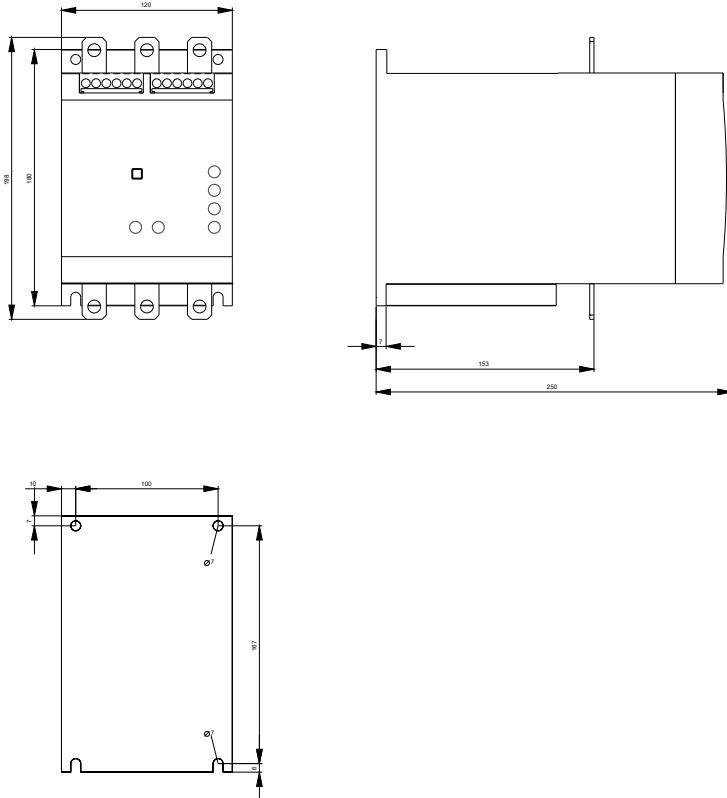
[Environmental Confirmations](#)

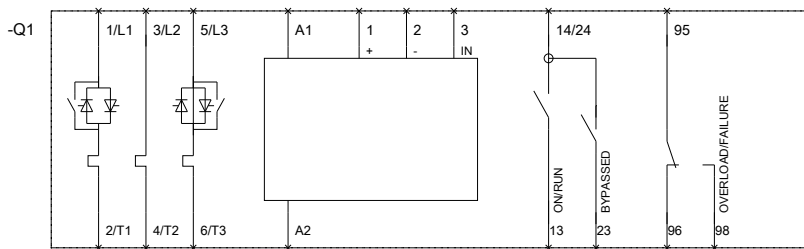
[Declaration of Conformity](#)

UL/CSA ratings:

yielded mechanical performance [hp] for three-phase AC motor		
<ul style="list-style-type: none"> <li>at 460/480 V           <ul style="list-style-type: none"> <li>at standard circuit at 50 °C Rated value</li> </ul> </li> </ul>	metric hp	100
<ul style="list-style-type: none"> <li>at 575/600 V           <ul style="list-style-type: none"> <li>at standard circuit at 50 °C Rated value</li> </ul> </li> </ul>	metric hp	150

## 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=3RW40566BB45>**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**<https://support.industry.siemens.com/cs/ww/en/ps/3RW40566BB45>**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)**[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RW40566BB45&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW40566BB45&lang=en)



last modified:

27.04.2015