

SIRIUS SOFT STARTER, VALUES WITH 460 V, 50 DEG., STANDARD: 180A, 125HP, INSIDE-DELTA CIRCUIT 3: 312A, 250HP, 200-460 V AC, 115 V AC, SCREW TERMINALS

### General technical data:

product brand name		SIRIUS
Product feature		
• integrated bypass contact system		Yes
• Thyristors		Yes
Product function		
• Intrinsic device protection		Yes
• motor overload protection		Yes
• Evaluation of thermistor motor protection		Yes
• External reset		Yes
• Adjustable current limitation		Yes
• inside-delta circuit		Yes
Product component Motor brake output		Yes
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 high feature applications
Operating current		
• at 40 °C Rated value	A	203
• at 50 °C Rated value	A	180
• at 60 °C Rated value	A	156
Operating current for three-phase motors at 3-phase root switching		
• at 40 °C Rated value	A	352

• at 50 °C Rated value	A	312
• at 60 °C Rated value	A	270
<b>Mechanical power output for three-phase motors</b>		
• at 230 V		
— at standard circuit at 40 °C Rated value	W	55 000
— at 3-phase root switching at 40 °C Rated value	W	110 000
• at 400 V		
— at standard circuit at 40 °C Rated value	W	110 000
— at 3-phase root switching at 40 °C Rated value	W	200 000
<b>yielded mechanical performance [hp] for three-phase AC motor at 200/208 V at standard circuit at 50 °C Rated value</b>	metric hp	50
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	200 ... 460
Relative negative tolerance of the operating voltage at standard circuit	%	-15
Relative positive tolerance of the operating voltage at standard circuit	%	10
Operating voltage at 3-phase root switching Rated value	V	200 ... 460
Relative negative tolerance of the operating voltage at 3-phase root switching	%	-15
Relative positive tolerance of the operating voltage at 3-phase root switching	%	10
Minimum load in % of I <sub>M</sub>	%	8
Adjustable motor current for motor overload protection minimum rated value	A	40
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	89

#### 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	115

• at 60 Hz Rated value	V	115
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		Display

Mechanical data:		
Width	mm	210
Height	mm	230
Depth	mm	298
Mounting type		screw fixing
mounting position		bei senkrechter Montageebene +/- 90° drehbar, bei senkrechter Montageebene +/- 22,5° nach vorne und hinten kippbar
Required spacing with side-by-side mounting		
• upwards	mm	100
• at the side	mm	5
• downwards	mm	75
Installation altitude at height above sea level	m	5 000
Cable length maximum	m	500
Number of poles for main current circuit		3

Connections/ Terminals:		
Type of electrical connection		
• for main current circuit		busbar connection
• for auxiliary and control current circuit		screw-type terminals
Number of NC contacts for auxiliary contacts		0
Number of NO contacts for auxiliary contacts		3
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		
• finely stranded with core end processing		70 ... 240 mm <sup>2</sup>
• finely stranded without core end processing		70 ... 240 mm <sup>2</sup>
• stranded		95 ... 300 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		120 ... 185 mm <sup>2</sup>
• finely stranded without core end processing		120 ... 185 mm <sup>2</sup>
• stranded		120 ... 240 mm <sup>2</sup>
Type of connectable conductor cross-section for main contacts for box terminal using both clamping points		

<ul style="list-style-type: none"> <li>• finely stranded with core end processing</li> <li>• finely stranded without core end processing</li> <li>• stranded</li> </ul>		min. 2x 50 mm <sup>2</sup> , max. 2x 185 mm <sup>2</sup> min. 2x 50 mm <sup>2</sup> , max. 2x 185 mm <sup>2</sup> max. 2x 70 mm <sup>2</sup> , max. 2x 240 mm <sup>2</sup>
Type of connectable conductor cross-section for AWG conductors for main contacts for box terminal <ul style="list-style-type: none"> <li>• using the back clamping point</li> <li>• using the front clamping point</li> <li>• using both clamping points</li> </ul>		250 ... 500 kcmil 3/0 ... 600 kcmil min. 2x 2/0, max. 2x 500 kcmil
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>		50 ... 240 mm <sup>2</sup> 70 ... 240 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>		2/0 ... 500 kcmil 2x (20 ... 14) 2x (20 ... 16)

#### Ambient conditions:

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

#### Certificates/ approvals:

General Product Approval	EMC	Declaration of Conformity
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Test Certificates	Shipping Approval
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[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



Shipping Approval	other
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[Environmental Confirmations](#)

#### UL/CSA ratings:

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

- at 200/208 V

- at 3-phase root switching at 50 °C Rated value

metric hp 100

- at 220/230 V

- at standard circuit at 50 °C Rated value

metric hp 60

- at 3-phase root switching at 50 °C Rated value

metric hp 125

- at 460/480 V

- at standard circuit at 50 °C Rated value

metric hp 125

- at 3-phase root switching at 50 °C Rated value

metric hp 250

Contact rating of the auxiliary contacts acc. to UL

B300 / R300

#### Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

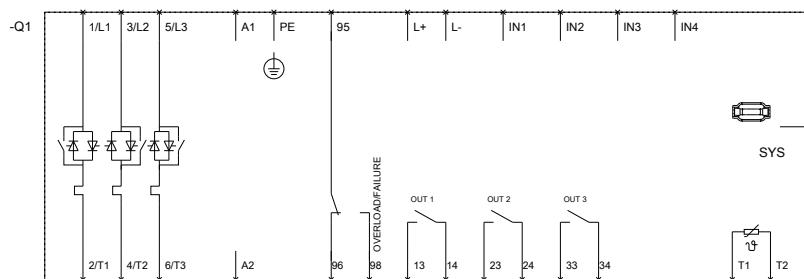
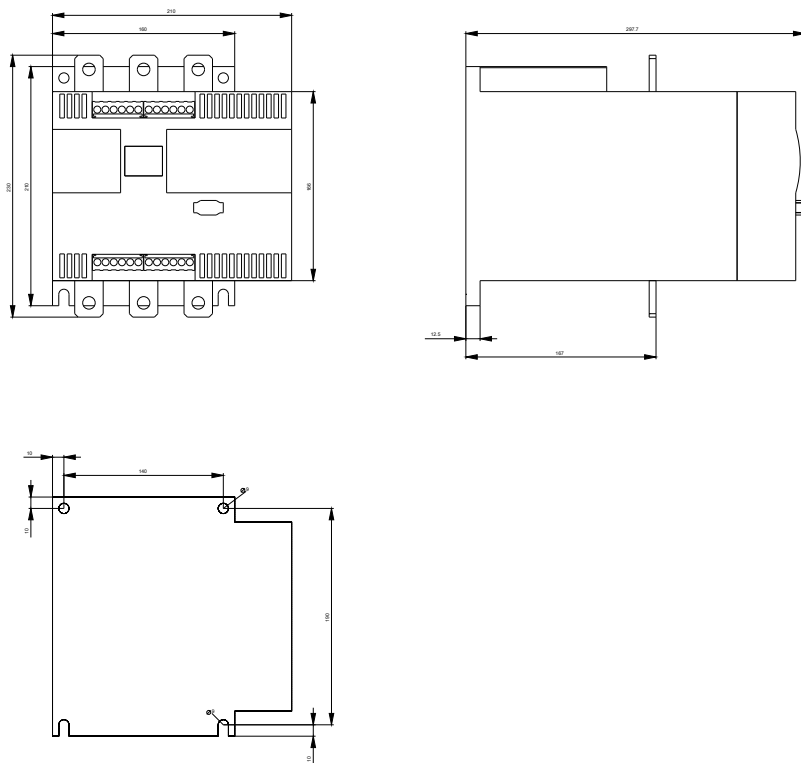
<http://www.siemens.com/industrial-controls/catalogs>

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=3RW44436BC34>



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