

SIRIUS SOFT STARTER, VALUES AT 460V, 50 DEG.,  
STANDARD: 494A, 400HP, INSIDE-DELTA CIRCUIT 3:  
856A, 750HP, 200-460V AC, 115V 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	551
• at 50 °C Rated value	A	494
• at 60 °C Rated value	A	438
Operating current for three-phase motors at 3-phase root switching		
• at 40 °C Rated value	A	954

• at 50 °C Rated value	A	856
• at 60 °C Rated value	A	759
<b>Mechanical power output for three-phase motors</b>		
• at 230 V		
— at standard circuit at 40 °C Rated value	W	160 000
— at 3-phase root switching at 40 °C Rated value	W	315 000
• at 400 V		
— at standard circuit at 40 °C Rated value	W	315 000
— at 3-phase root switching at 40 °C Rated value	W	560 000
<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	150
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	110
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	159

#### 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

<b>Mechanical data:</b>		
Width	mm	510
Height	mm	640
Depth	mm	290
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

<b>Connections/ Terminals:</b>		
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 DIN cable lug for main contacts		
• finely stranded		50 ... 240 mm <sup>2</sup>
• stranded		70 ... 240 mm <sup>2</sup>
Type of connectable conductor cross-section for auxiliary contacts		
• 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> )
Type of connectable conductor cross-section for AWG conductors		
• for main contacts		2/0 ... 500 kcmil
• for auxiliary contacts		2x (20 ... 14)
• for auxiliary contacts finely stranded with core end processing		2x (20 ... 16)

<b>Ambient conditions:</b>		
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<b>Ambient temperature</b> • during operation • during storage	°C	60
	°C	-25 ... +80
<b>Derating temperature</b>	°C	40
<b>Protection class IP</b>		IP00

#### Certificates/ approvals:

<b>General Product Approval</b>	<b>EMC</b>	<b>Declaration of Conformity</b>
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CCC

CSA

UL

C-TICK

EG-Konf.

<b>Test Certificates</b>	<b>Shipping Approval</b>	<b>other</b>
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[Special Test Certificate](#)



ABS



DNV



LRS

[Environmental Confirmations](#)

#### UL/CSA ratings:

<b>yielded mechanical performance [hp] for three-phase AC motor</b>		
<ul style="list-style-type: none"> <li>• at 200/208 V <ul style="list-style-type: none"> <li>— at 3-phase root switching at 50 °C Rated value</li> </ul> </li> </ul>	metric hp	300
<ul style="list-style-type: none"> <li>• at 220/230 V <ul style="list-style-type: none"> <li>— at standard circuit at 50 °C Rated value</li> </ul> </li> </ul>	metric hp	200
<ul style="list-style-type: none"> <li>— at 3-phase root switching at 50 °C Rated value</li> </ul>	metric hp	350
<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	400
<ul style="list-style-type: none"> <li>— at 3-phase root switching at 50 °C Rated value</li> </ul>	metric hp	750
<b>Contact rating of the auxiliary contacts acc. to UL</b>		B300 / R300

#### Further information

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

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

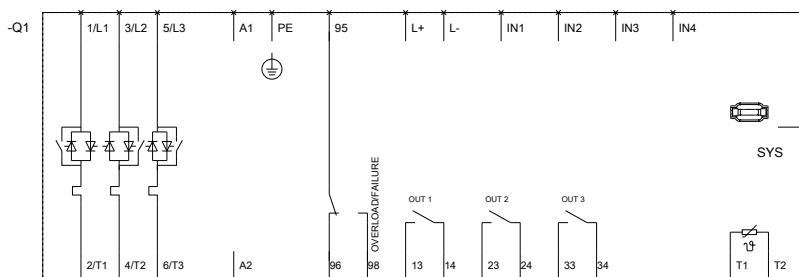
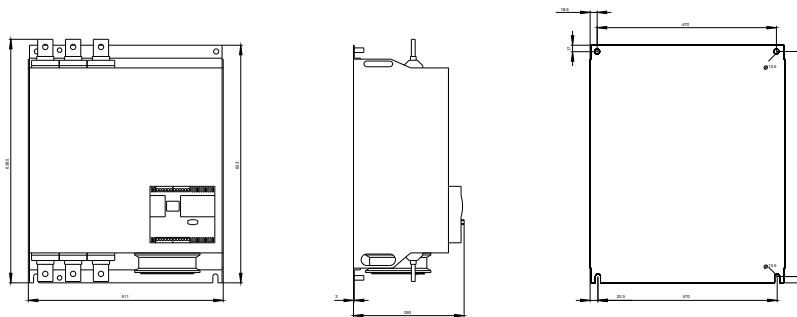
**Industry Mall (Online ordering system)**

<http://www.siemens.com/industrymall>

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW44536BC34>

<https://support.industry.siemens.com/cs/ww/en/ps/3RW44536BC34>

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