



SIRIUS SOFT STARTER, VALUES WITH 400 V,  
40 DEG., STANDARD: 113A, 55KW,  
INSIDE-DELTA CIRCUIT 3: 196A, 110KW,  
200-460 V AC, 230 V AC,  
CAGE CLAMP TERMINALS

### General details:

<b>Product brand name</b>		SIRIUS
<b>Product equipment</b>		
• integrated bridging contact system		Yes
• thyristors		Yes
<b>Product function</b>		
• intrinsic device protection		Yes
• motor overload protection		Yes
• evaluation of thermal resistor motor protection		Yes
• reset external		Yes
• adjustable current limitation		Yes
• inside-delta circuit		Yes
<b>Product component / outlet for enine brake</b>		Yes
<b>Item designation</b>		
• according to DIN EN 61346-2		Q
• according to DIN 40719 extendable after IEC 204-2 / according to IEC 750		G

### Power Electronics:

<b>product designation</b>		soft starters for high feature applications
Operating current		

<ul style="list-style-type: none"> <li>• at 40 °C / rated value</li> <li>• at 50 °C / rated value</li> <li>• at 60 °C / rated value</li> <li>• for three-phase servomotors / at 3-phase root switching <ul style="list-style-type: none"> <li>• at 40 °C / rated value</li> <li>• at 50 °C / rated value</li> <li>• at 60 °C / rated value</li> </ul> </li> </ul>	A	113
	A	100
	A	88
	A	196
	A	173
	A	152
<b>Emitted mechanical power / for three-phase servomotors</b>		
<ul style="list-style-type: none"> <li>• at 230 V / at standard switching / at 40 °C <ul style="list-style-type: none"> <li>• rated value</li> </ul> </li> <li>• at 400 V / at standard switching / at 40 °C <ul style="list-style-type: none"> <li>• rated value</li> </ul> </li> <li>• at 230 V / at 3-phase root switching / at 40 °C <ul style="list-style-type: none"> <li>• rated value</li> </ul> </li> <li>• at 400 V / at 3-phase root switching / at 40 °C <ul style="list-style-type: none"> <li>• rated value</li> </ul> </li> </ul>	W	30,000
	W	55,000
	W	55,000
	W	110,000
<b>yielded mechanical performance (hp) / for three-phase squirrel cage motors / at 200/208 V / at standard circuit / at 50 °C / rated value</b>	hp	30
<b>Operating frequency</b>		
<ul style="list-style-type: none"> <li>• rated value</li> </ul>	Hz	50 ... 60
<b>Relative negative tolerance / of the operating frequency</b>	%	-10
<b>Relative positive tolerance / of the operating frequency</b>	%	10
<b>Operating voltage / with standard circuit / rated value</b>	V	200 ... 460
<b>Relative negative tolerance / of the operating voltage / with standard circuit</b>	%	-15
<b>Relative positive tolerance / of the operating voltage / with standard circuit</b>	%	10
<b>Operating voltage / at 3-phase root switching / rated value</b>	V	200 ... 460
<b>Relative negative tolerance / of the operating voltage / with inside-delta circuit</b>	%	-15
<b>Relative positive tolerance / of the operating voltage / with inside-delta circuit</b>	%	10
<b>Minimum load in % of I<sub>M</sub></b>	%	8
<b>Adjustable rated current / of the motor / for motor overload protection / minimum</b>	A	22
<b>Continuous operating current in % of I<sub>e</sub> / at 40°C</b>	%	115
<b>Active power loss / at operating current / at 40°C / during operating phase / typical</b>	W	64
<b>Control electronics:</b>		
<b>Type of voltage / of the controlled supply voltage</b>		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		
• at 50 Hz / for AC	V	230
• at 60 Hz / for AC	V	230
Relative negative tolerance / of the control supply voltage / at 60 Hz / for AC	%	-15
Relative positive tolerance / of the control supply voltage / at 60 Hz / for AC	%	10
Type of display / for fault signal		Display

<b>Mechanical design:</b>		
Width	mm	170
Height	mm	200
Depth	mm	270
Type of mounting		screw fixing
Built in orientation		bei senkrechter Montageebene +/-90° drehbar, bei senkrechter Montageebene +/- 22,5° nach vorne und hinten kippbar
Distance, to be maintained, to the ranks assembly		
• upwards	mm	100
• sideways	mm	5
• downwards	mm	75
Altitude of installation site / at a height over sea level	m	5,000
Cable length / maximum	m	500
Number of poles / for main current circuit		3








<b>Electrical connections:</b>		
Design of the electrical connection		
• for main current circuit		busbar connection
• for auxiliary and control current circuit		spring-loaded terminals
Number of NC contacts / for auxiliary contacts		0
Number of NO contacts / for auxiliary contacts		3
Number of change-over switches / for auxiliary contacts		1
Type of the connectable conductor cross section / for main contacts / for box terminal / when using the front clamping point		
• finely stranded / with conductor end processing		16 ... 70 mm <sup>2</sup>
• finely stranded / without conductor end processing		16 ... 70 mm <sup>2</sup>
• stranded		16 ... 70 mm <sup>2</sup>

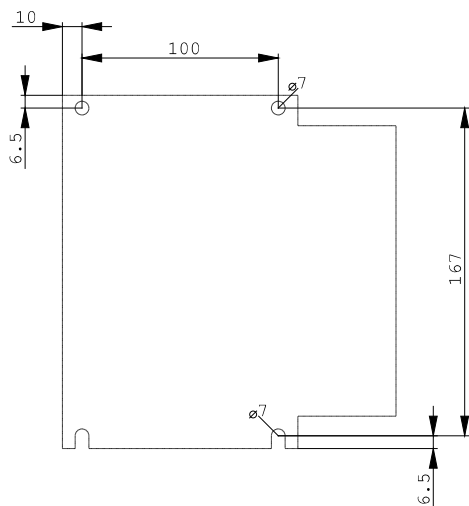
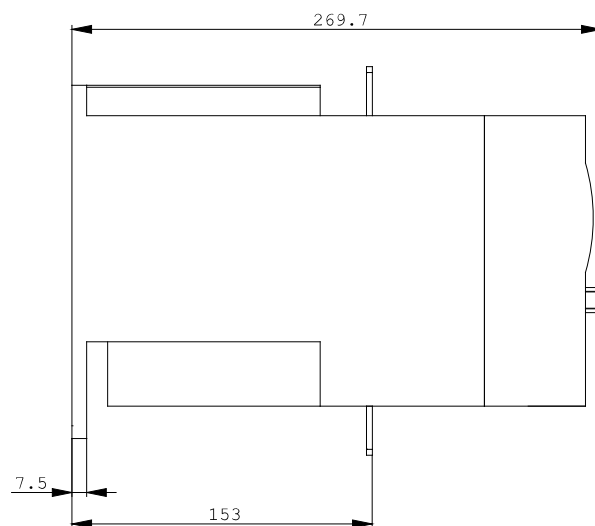
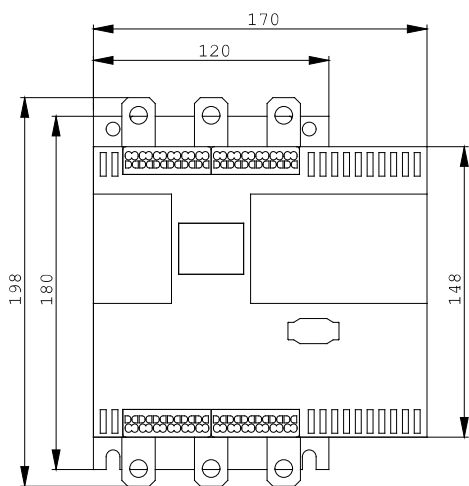
<b>Type of the connectable conductor cross-section / for main contacts / for box terminal / when using the back clamping point</b> <ul style="list-style-type: none"> <li>• finely stranded / with conductor end processing</li> <li>• without conductor final cutting / without conductor end processing</li> <li>• stranded</li> </ul>		16 ... 70 mm <sup>2</sup> 16 ... 70 mm <sup>2</sup> 16 ... 70 mm <sup>2</sup>
<b>Type of the connectable conductor cross-section / for main contacts / for box terminal / when using both clamping points</b> <ul style="list-style-type: none"> <li>• finely stranded / with conductor end processing</li> <li>• without conductor final cutting / without conductor end processing</li> <li>• stranded</li> </ul>		max. 1x 50 mm <sup>2</sup> , 1x 70 mm <sup>2</sup> max. 1x 50 mm <sup>2</sup> , 1x 70 mm <sup>2</sup> max. 2x 70 mm <sup>2</sup>
<b>Type of the connectable conductor cross-section / for AWG conductors / for main contacts / for box terminal</b> <ul style="list-style-type: none"> <li>• when using the back clamping point</li> <li>• when using the front clamping point</li> <li>• when using both clamping points</li> </ul>		6 ... 2/0 6 ... 2/0 max. 2x 1/0
<b>Type of the connectable conductor cross-section / for DIN cable lug / for main contacts</b> <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 the connectable conductor cross-section</b> <ul style="list-style-type: none"> <li>• for AWG conductors / for main contacts</li> </ul>		4 ... 250 kcmil
<b>Type of the connectable conductor cross-section</b> <ul style="list-style-type: none"> <li>• for auxiliary contacts <ul style="list-style-type: none"> <li>• solid</li> </ul> </li> <li>• finely stranded / with conductor end processing</li> <li>• for AWG conductors / for auxiliary contacts</li> </ul>		2x (0.25 ... 1.5 mm <sup>2</sup> ) 2x (0.25 ... 1.5 mm <sup>2</sup> ) 2x (24 ... 16)

#### Ambient conditions:

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

#### Certificates/approvals:

General Product Approval			Test Certificates	
 CQC	 CSA	<a href="#">ROSTEST</a>	 UL	<a href="#">Manufacturer</a>
Shipping Approval			other	
 BUREAU VERITAS	 DNV	 GL	 PRS	<a href="#">Manufacturer</a>
UL/CSA ratings				
<b>yielded mechanical performance (hp) / for three-phase squirrel cage motors</b>				
<ul style="list-style-type: none"> <li>at 220/230 V / at standard circuit               <ul style="list-style-type: none"> <li>at 50 °C / rated value</li> </ul> </li> <li>at 460/480 V / at standard circuit               <ul style="list-style-type: none"> <li>at 50 °C / rated value</li> </ul> </li> <li>at 200/208 V / at inside-delta circuit / at 50 °C / rated value</li> <li>at 220/230 V / at inside-delta circuit / at 50 °C / rated value</li> <li>at 460/480 V / at inside-delta circuit / at 50 °C / rated value</li> </ul>		hp	30	
		hp	75	
		hp	50	
		hp	60	
		hp	125	
Further information:				
<b>Information- and Downloadcenter (Catalogs, Brochures,...)</b> <a href="http://www.siemens.com/industrial-controls/catalogs">http://www.siemens.com/industrial-controls/catalogs</a>				
<b>Industry Mall (Online ordering system)</b> <a href="http://www.siemens.com/industrial-controls/mall">http://www.siemens.com/industrial-controls/mall</a>				
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<b>Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)</b> <a href="http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RW4434-2BC44">http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RW4434-2BC44</a>				



last change:

Aug 22, 2011