



SIRIUS SOFT STARTER, SIZE S3, 80A,  
45KW/400V, 40 DEGREES, 200-480V AC,  
24V AC/DC, SPRING-LOADED TERMINALS

### General details:

<b>product brand name</b>		SIRIUS
<b>Product feature</b>		
• integrated bypass contact system		Yes
• Thyristors		Yes
<b>Product function</b>		
• Intrinsic device protection		No
• motor overload protection		No
• Evaluation of thermistor motor protection		No
• External reset		No
• Adjustable current limitation		No
• inside-delta circuit		No
<b>Product component / Motor brake output</b>		No
<b>Reference code</b>		
• acc. to DIN EN 61346-2		Q
• acc. to DIN 40719 extended according to IEC 204-2 / acc. to IEC 750		G

### Power Electronics:

<b>Product designation</b>		soft starters for standard applications
Operating current		

• at 40 °C / Rated value	A	80
• at 50 °C / Rated value	A	73
• at 60 °C / Rated value	A	66
<b>Mechanical power output / for three-phase motors</b>		
• at 230 V / at standard circuit / at 40 °C		
• Rated value	W	22,000
• at 400 V / at standard circuit / at 40 °C		
• Rated value	W	45,000
<b>yielded mechanical performance [hp] / for three-phase AC motor / at 200/208 V / at standard circuit / at 50 °C / Rated value</b>	hp	20
<b>Operating frequency</b>		
• Rated value	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 / at standard circuit / Rated value</b>	V	200 ... 480
<b>Relative negative tolerance / of the operating voltage / at standard circuit</b>	%	-15
<b>Relative positive tolerance / of the operating voltage / at standard circuit</b>	%	10
<b>Minimum load in % of I<sub>M</sub></b>	%	10
<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 operation / typical</b>	W	12

#### Control electronics:

<b>Type of voltage / of the control supply voltage</b>		AC/DC
<b>Control supply voltage frequency / 1 / Rated value</b>	Hz	50
<b>Control supply voltage frequency / 2 / Rated value</b>	Hz	60
<b>Relative negative tolerance / of the control supply voltage frequency</b>	%	-10
<b>Relative positive tolerance / of the control supply voltage frequency</b>	%	10
<b>Control supply voltage / 1</b>		
• with AC / at 50 Hz	V	24
• with AC / at 60 Hz	V	24
<b>Relative negative tolerance / of the control supply voltage / with AC / at 60 Hz</b>	%	-15
<b>Relative positive tolerance / of the control supply voltage / with AC / at 60 Hz</b>	%	10
<b>Control supply voltage / 1 / for DC / Rated value</b>	V	24
<b>Relative negative tolerance / of the control supply voltage / for DC</b>	%	-15

Relative positive tolerance / of the control supply voltage / for DC	%	10
Display version / for fault signal		red

#### Mechanical design:

Size of engine control device		S3
Width	mm	70
Height	mm	170
Depth	mm	190
Mounting type		screw and snap-on mounting
mounting position		With vertical mounting surface +/-10° rotatable, with vertical mounting surface +/- 10° tiltable to the front and back
Spacing required		
• with side-by-side mounting	mm	60
• with side-by-side mounting	mm	30
• with side-by-side mounting	mm	40
Installation altitude / at height above sea level	m	5,000
Cable length / maximum	m	300
Number of poles / for main current circuit		3

#### Electrical connections:






Design of the electrical connection		
• for main current circuit		screw-type terminals
• for auxiliary and control current circuit		spring-loaded terminals
Number of NC contacts / for auxiliary contacts		0
Number of NO contacts / for auxiliary contacts		1
Number of CO contacts / for auxiliary contacts		0
Type of connectable conductor cross-section / for main contacts / for box terminal / using the front clamping point		
• solid		2x (2.5 ... 16 mm <sup>2</sup> )
• finely stranded / with core end processing		2.5 ... 35 mm <sup>2</sup>
• stranded		4 ... 70 mm <sup>2</sup>
Type of connectable conductor cross-section / for main contacts / for box terminal / using the back clamping point		
• solid		2x (2.5 ... 16 mm <sup>2</sup> )
• finely stranded / with core end processing		2.5 ... 50 mm <sup>2</sup>
• stranded		10 ... 70 mm <sup>2</sup>
Type of connectable conductor cross-section / for main contacts / for box terminal / using both clamping points		
• solid		2x (2.5 ... 16 mm <sup>2</sup> )
• finely stranded / with core end processing		2x (2.5 ... 35 mm <sup>2</sup> )

<ul style="list-style-type: none"> <li>• stranded</li> </ul>		2x (10 ... 50 mm <sup>2</sup> )
<b>Type of connectable conductor cross-section / for AWG conductors / for main contacts / for box terminal</b> <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>		10 ... 2/0 10 ... 2/0 2x (10 ... 1/0)
<b>Type of 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>		2 x (10 ... 50 mm <sup>2</sup> ) 2x (10 ... 70 mm <sup>2</sup> )
<b>Type of connectable conductor cross-section</b> <ul style="list-style-type: none"> <li>• for AWG conductors / for main contacts</li> </ul>		2x (7 ... 1/0)
<b>Type of connectable conductor cross-section</b> <ul style="list-style-type: none"> <li>• for auxiliary contacts <ul style="list-style-type: none"> <li>• solid</li> <li>• finely stranded / with core end processing</li> </ul> </li> <li>• for AWG conductors / for auxiliary contacts</li> </ul>		2x (0.25 ... 2.5 mm <sup>2</sup> ) 2x (0.25 ... 1.5 mm <sup>2</sup> ) 2x (24 ... 14)

#### Ambient conditions:

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

#### Certificates/approvals:

General Product Approval			EMC	Test Certificates
 CCC	 CSA		 UL	 C-TICK
<a href="#">Type Test Certificates/Test Report</a>				
<b>other</b>				
<a href="#">Declaration of Conformity</a>	<a href="#">other</a>	<a href="#">Environmental Confirmations</a>		

#### UL/CSA ratings

<b>yielded mechanical performance [hp] / for three-phase AC motor</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> </ul>	hp	25
	hp	50
<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/industrial-controls/mall>

CAX-Online-Generator

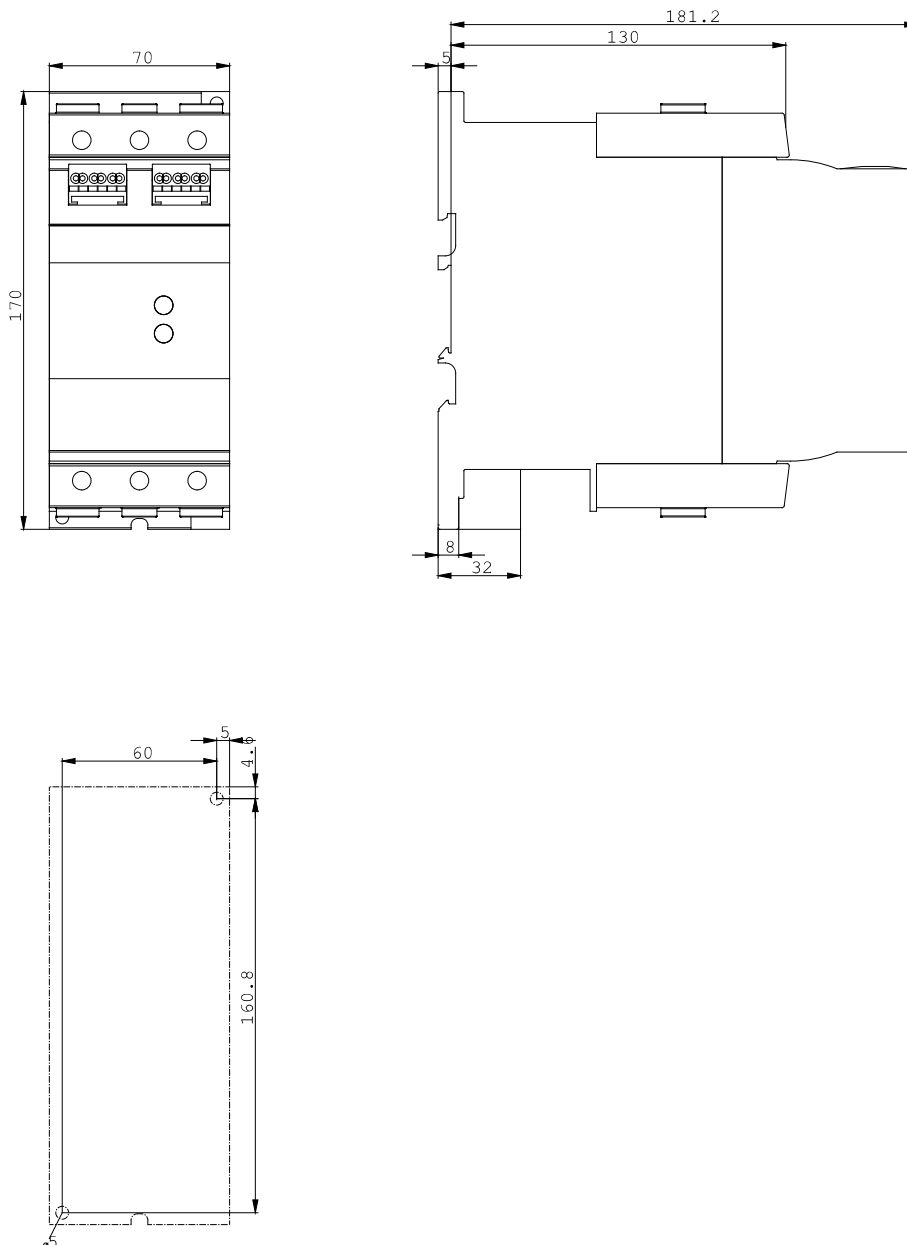
<http://www.siemens.com/cax>

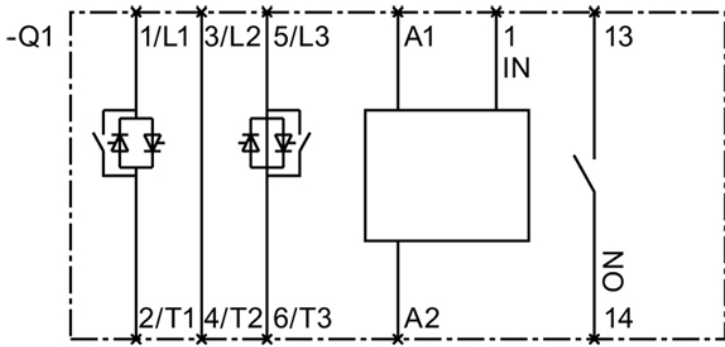
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<http://support.automation.siemens.com/WW/view/en/3RW3046-2BB04/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RW3046-2BB04](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RW3046-2BB04)





last change:

Sep 29, 2014