



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

**General technical data:**

<b>product brand name</b>		SIRIUS
<b>Product feature</b>		
<ul style="list-style-type: none"> <li>integrated bypass contact system</li> </ul>		Yes
<ul style="list-style-type: none"> <li>Thyristors</li> </ul>		Yes
<b>Product function</b>		
<ul style="list-style-type: none"> <li>Intrinsic device protection</li> </ul>		No
<ul style="list-style-type: none"> <li>motor overload protection</li> </ul>		No
<ul style="list-style-type: none"> <li>Evaluation of thermistor motor protection</li> </ul>		No
<ul style="list-style-type: none"> <li>External reset</li> </ul>		No
<ul style="list-style-type: none"> <li>Adjustable current limitation</li> </ul>		No
<ul style="list-style-type: none"> <li>inside-delta circuit</li> </ul>		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>		
<ul style="list-style-type: none"> <li>at 40 °C Rated value</li> </ul>	A	80
<ul style="list-style-type: none"> <li>at 50 °C Rated value</li> </ul>	A	73
<ul style="list-style-type: none"> <li>at 60 °C Rated value</li> </ul>	A	66
<b>Mechanical power output for three-phase motors</b>		
<ul style="list-style-type: none"> <li>at 230 V</li> </ul>		

— 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>	metric hp	20
Operating frequency 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
Operating voltage at standard circuit Rated value	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
Minimum load in % of I <sub>M</sub>	%	10
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	12

#### Control electronics:

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

#### Mechanical data:

Size of engine control device		S3
Width	mm	70
Height	mm	170

<b>Depth</b>	mm	190
<b>Mounting type</b>		screw and snap-on mounting
<b>mounting position</b>		With vertical mounting surface +/-10° rotatable, with vertical mounting surface +/- 10° tiltable to the front and back
<b>Required spacing with side-by-side mounting</b>		
• upwards	mm	60
• at the side	mm	30
• downwards	mm	40
<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>		
• for main current circuit		screw-type terminals
• for auxiliary and control current circuit		screw-type terminals
<b>Number of NC contacts for auxiliary contacts</b>		0
<b>Number of NO contacts for auxiliary contacts</b>		1
<b>Number of CO contacts for auxiliary contacts</b>		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> )
• stranded		2x (10 ... 50 mm <sup>2</sup> )
Type of connectable conductor cross-section for AWG conductors for main contacts for box terminal		
• using the back clamping point		10 ... 2/0
• using the front clamping point		10 ... 2/0
• using both clamping points		2x (10 ... 1/0)

Type of connectable conductor cross-section for DIN cable lug for main contacts		2 x (10 ... 50 mm <sup>2</sup> ) 2x (10 ... 70 mm <sup>2</sup> )
<ul style="list-style-type: none"> <li>finely stranded</li> <li>stranded</li> </ul>		
Type of connectable conductor cross-section for auxiliary contacts		2x (0.5 ... 2.5 mm <sup>2</sup> ) 2x (0.5 ... 1.5 mm <sup>2</sup> )
<ul style="list-style-type: none"> <li>solid</li> <li>finely stranded with core end processing</li> </ul>		
Type of connectable conductor cross-section for AWG conductors		2x (7 ... 1/0) 2x (20 ... 14)
<ul style="list-style-type: none"> <li>for main contacts</li> <li>for auxiliary contacts</li> </ul>		

#### Ambient conditions:

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

#### Certificates/ approvals:

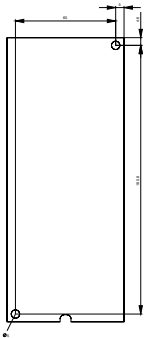
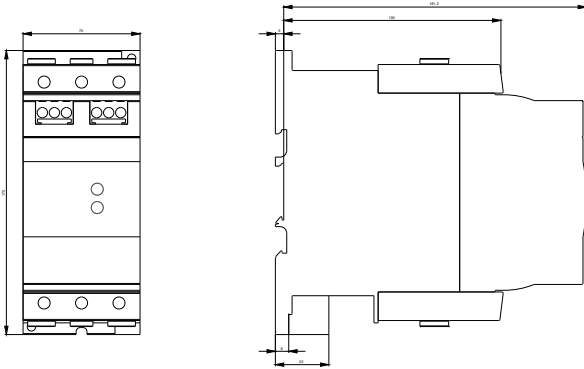
General Product Approval	EMC	Test Certificates
 CCC	 CSA	 UL
 EAC		 C-TICK
<a href="#">Type Test Certificates/Test Report</a>		

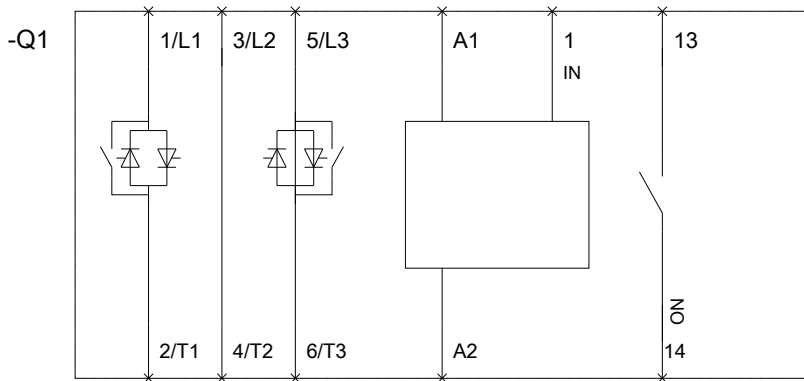
Test Certificates	other
<a href="#">Special Test Certificate</a>	<a href="#">Environmental Confirmations</a>
	<a href="#">Declaration of Conformity</a>
	<a href="#">other</a>

#### UL/CSA ratings:

yielded mechanical performance [hp] for three-phase AC motor		
<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	25
<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	50

## 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=3RW30461BB04>**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**<https://support.industry.siemens.com/cs/ww/en/ps/3RW30461BB04>**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)**[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RW30461BB04&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW30461BB04&lang=en)



last modified:

24.04.2015