

SIRIUS SOFT STARTER, S0, 12.5A, 5.5KW/400V, 40 DEGR., AC 200-480V, AC/DC 110-230V, 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>		Yes
<ul style="list-style-type: none"> <li>motor overload protection</li> </ul>		Yes
<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>		Yes
<ul style="list-style-type: none"> <li>Adjustable current limitation</li> </ul>		Yes
<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
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<b>Operating current</b>		
• at 40 °C rated value	A	12.5
• at 50 °C rated value	A	11
• at 60 °C rated value	A	10
<b>Mechanical power output for three-phase motors</b>		
• at 230 V		
— at standard circuit at 40 °C rated value	W	3 000
• at 400 V		
— at standard circuit at 40 °C rated value	W	5 500
<b>Yielded mechanical performance [hp] for three-phase AC motor at 200/208 V at standard circuit at 50 °C rated value</b>	hp	3
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 ... 480
Relative negative tolerance of the operating voltage at standard circuit	%	-15
Relative positive tolerance of the operating voltage at standard circuit	%	10
Minimum load [% of IM]	%	20
Adjustable motor current for motor overload protection minimum rated value	A	5
Continuous operating current [% of I <sub>e</sub> ] at 40 °C	%	115
Power loss [W] at operating current at 40 °C during operation typical	W	2

<b>Control electronics:</b>		
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
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 AC at 50 Hz	V	110 ... 230
Control supply voltage 1 at AC at 60 Hz	V	110 ... 230
Relative negative tolerance of the control supply voltage at AC at 60 Hz	%	-15
Relative positive tolerance of the control supply voltage at AC at 60 Hz	%	10
Control supply voltage 1 at DC	V	110 ... 230
Relative negative tolerance of the control supply voltage at DC	%	-15

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

#### Mechanical data:

Size of engine control device		S0
Width	mm	45
Height	mm	125
Depth	mm	155
Mounting type		screw and snap-on mounting
Mounting position		With additional fan: With vertical mounting surface +/- 90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back Without additional fan: With vertical mounting surface +/- 10° rotatable, with vertical mounting surface +/- 10° t
Required spacing with side-by-side mounting		
• upwards	mm	60
• at the side	mm	15
• downwards	mm	40
Installation altitude at height above sea level	m	5 000
Wire length maximum	m	300
Number of poles for main current circuit		3

#### Connections/ Terminals:

Type of electrical connection		
• for main current circuit		screw-type terminals
• for auxiliary and control current circuit		screw-type terminals
Number of NC contacts for auxiliary contacts		0
Number of NO contacts for auxiliary contacts		2
Number of CO contacts for auxiliary contacts		1
Type of connectable conductor cross-sections for main contacts for box terminal using the front clamping point		
• solid		2x (1.5 ... 2.5 mm <sup>2</sup> ), 2x (2.5 ... 6 mm <sup>2</sup> ), max. 1x 10 mm <sup>2</sup>
• finely stranded with core end processing		2x (1.5 ... 2.5 mm <sup>2</sup> ), 2x (2.5 ... 6 mm <sup>2</sup> )
Type of connectable conductor cross-sections at AWG conductors for main contacts for box terminal		
• using the front clamping point		1x 8, 2x (16 ... 10)
Type of connectable conductor cross-sections 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-sections at AWG conductors		
• for auxiliary contacts		2x (20 ... 14)

- for auxiliary contacts finely stranded with core end processing

2x (20 ... 16)

#### Ambient conditions:

<b>Ambient temperature</b>		
• during operation	°C	-25 ... +60
• during storage	°C	-40 ... +80
<b>Derating temperature</b>	°C	40
<b>Protection class IP</b>		IP20

#### Certificates/ approvals:

<b>General Product Approval</b>	<b>EMC</b>	<b>For use in hazardous locations</b>
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<b>Declaration of Conformity</b>	<b>Test Certificates</b>	<b>Shipping Approval</b>
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<b>Shipping Approval</b>	<b>other</b>
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[Umweltbestätigung](#)

#### UL/CSA ratings:

<b>Yielded mechanical performance [hp] for three-phase AC motor</b>		
• at 220/230 V		
— at standard circuit at 50 °C rated value	hp	3
• at 460/480 V		
— at standard circuit at 50 °C rated value	hp	7.5
<b>Contact rating of auxiliary contacts according to UL</b>		B300 / R300

#### Further information

**Simulation Tool for Soft Starters (STS)**

<https://support.industry.siemens.com/cs/ww/en/view/101494917>

**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**

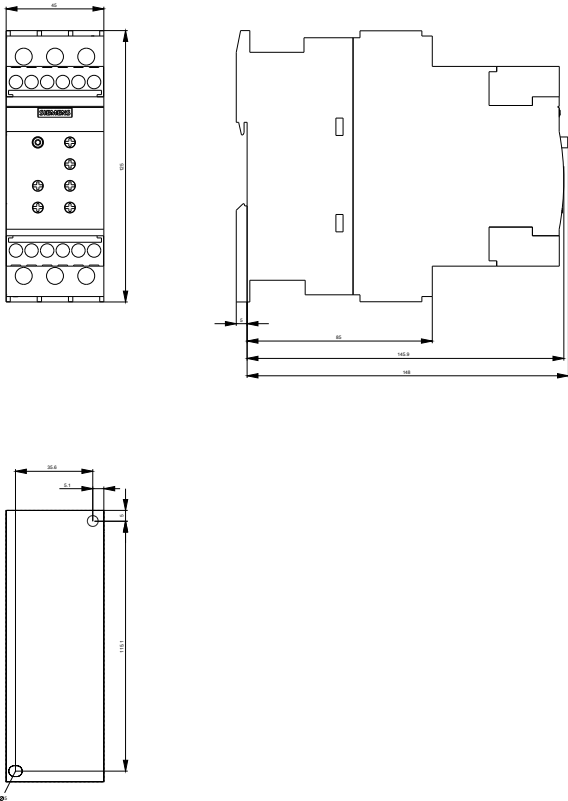
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mfb=3RW40241BB14>

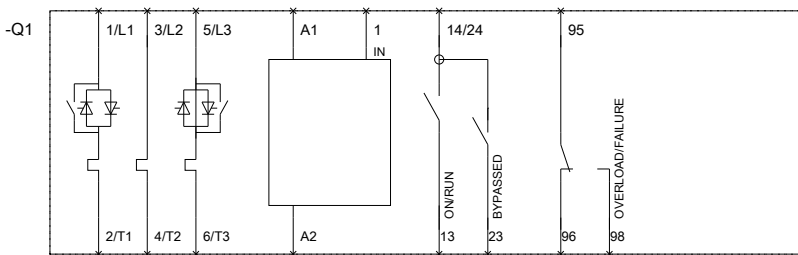
**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**

<https://support.industry.siemens.com/cs/ww/en/ps/3RW40241BB14>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mfb=3RW40241BB14&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mfb=3RW40241BB14&lang=en)





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