

SIRIUS SOFT STARTER, SIZE S2, 45A, 22KW/400V,  
40 DEGREES, 200-480V AC, 110-230V AC/DC,  
SCREW TERMINALS



General technical data:

<b>product brand name</b>		SIRIUS
<ul style="list-style-type: none"> <li>• Product equipment Integrated bypass contact system</li> </ul>		Yes
<ul style="list-style-type: none"> <li>• Product feature 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>		
• at 40 °C rated value	A	45
• at 50 °C rated value	A	42
• at 60 °C rated value	A	39
<b>Mechanical power output for three-phase motors</b>		
• at 230 V		
— at standard circuit at 40 °C rated value	W	11 000
• at 400 V		
— at standard circuit at 40 °C rated value	W	22 000
<b>Yielded mechanical performance [hp] for three-phase AC motor at 200/208 V at standard circuit at 50 °C rated value</b>	hp	10
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]	%	10
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	6

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
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	%	-10
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	%	-10
Relative positive tolerance of the control supply voltage at DC	%	10

Display version for fault signal		red
----------------------------------	--	-----

### Mechanical data:

Size of engine control device		S2
Width	mm	55
Height	mm	160
Depth	mm	170
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
Required spacing with side-by-side mounting		
• upwards	mm	60
• at the side	mm	30
• 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		1
Number of CO contacts for auxiliary contacts		0
Type of connectable conductor cross-sections for main contacts for box terminal using the front clamping point		
• solid		2x (1.5 ... 16 mm <sup>2</sup> )
Type of connectable conductor cross-sections for main contacts for box terminal using the back clamping point		
• solid		2x (1.5 ... 16 mm <sup>2</sup> )
• finely stranded with core end processing		1.5 ... 25 mm <sup>2</sup>
• stranded		1.5 ... 35 mm <sup>2</sup>
Type of connectable conductor cross-sections for main contacts for box terminal using both clamping points		
• solid		2x (1.5 ... 16 mm <sup>2</sup> )
• finely stranded with core end processing		2x (1.5 ... 16 mm <sup>2</sup> )
• stranded		2x (1.5 ... 25 mm <sup>2</sup> )
Type of connectable conductor cross-sections at AWG conductors for main contacts for box terminal		
• using the back clamping point		16 ... 2

<ul style="list-style-type: none"> <li>• using the front clamping point</li> <li>• using both clamping points</li> </ul>	18 ... 2 2x (16 ... 2)
<b>Type of connectable conductor cross-sections for auxiliary contacts</b> <ul style="list-style-type: none"> <li>• solid</li> <li>• finely stranded with core end processing</li> </ul>	2x (0.5 ... 2.5 mm <sup>2</sup> ) 2x (0.5 ... 1.5 mm <sup>2</sup> )
<b>Type of connectable conductor cross-sections at AWG conductors</b> <ul style="list-style-type: none"> <li>• for auxiliary contacts</li> <li>• for auxiliary contacts finely stranded with core end processing</li> </ul>	2x (20 ... 14) 2x (20 ... 16)

#### Ambient conditions:

<b>Ambient temperature</b> <ul style="list-style-type: none"> <li>• during operation</li> <li>• during storage</li> </ul>	°C	-25 ... +60 -40 ... +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>
 CCC	 UL	 EG-Konf.
 CSA		

<b>Test Certificates</b>	<b>other</b>
<a href="#">Typprüfbescheinigung/Werkszeugnis</a>	<a href="#">Umweltbestätigung</a>
<a href="#">spezielle Prüfbescheinigungen</a>	<a href="#">sonstige Bestätigungen</a>
<a href="#">n</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           <ul style="list-style-type: none"> <li>— at standard circuit at 50 °C rated value</li> </ul> </li> <li>• at 460/480 V           <ul style="list-style-type: none"> <li>— at standard circuit at 50 °C rated value</li> </ul> </li> </ul>	hp	15 30
<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**

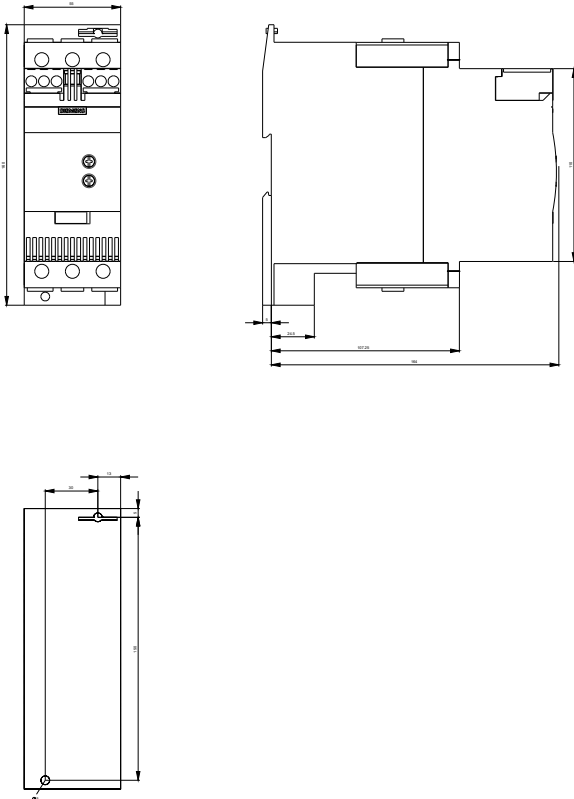
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mfb=3RW3036-1BB14>

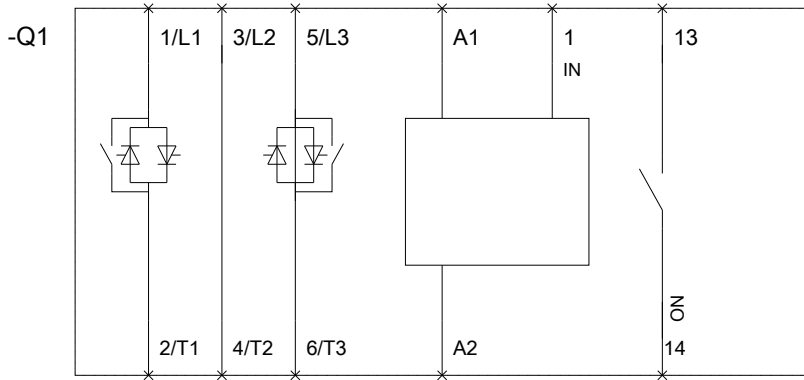
**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**

<https://support.industry.siemens.com/cs/ww/en/ps/3RW3036-1BB14>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mfb=3RW3036-1BB14&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mfb=3RW3036-1BB14&lang=en)





last modified:

07/22/2016