

SIRIUS soft starter S00 9 A, 4 kW/400 V, 40 °C 200-460 V AC, 24 V 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>Insulation voltage rated value</b>	V	600
<b>Degree of pollution</b>		3, acc. to IEC 60947-4-2
<b>Reference code acc. to DIN EN 61346-2</b>		Q
<b>Reference code acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750</b>		G

## Power Electronics

<b>Product designation</b>		Soft starter
<b>Operating current</b>		
• at 40 °C rated value	A	9
• at 50 °C rated value	A	8
• at 60 °C rated value	A	7
<b>Mechanical power output for three-phase motors</b>		
• at 230 V		
— at standard circuit at 40 °C rated value	W	2 200
• at 400 V		
— at standard circuit at 40 °C rated value	W	4 000
<b>Yielded mechanical performance [hp] for three-phase AC motor at 200/208 V at standard circuit at 50 °C rated value</b>	hp	2
<b>Operating frequency rated value</b>	Hz	50 ... 60
<b>Operating voltage at standard circuit rated value</b>	V	200 ... 460
<b>Relative negative tolerance of the operating voltage at standard circuit</b>	%	-10
<b>Relative positive tolerance of the operating voltage at standard circuit</b>	%	10
<b>Minimum load [%]</b>	%	9
<b>Continuous operating current [% of I<sub>e</sub>] at 40 °C</b>	%	100
<b>Power loss [W] at operating current at 40 °C during operation typical</b>	W	1

## Control circuit/ Control

<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 at AC</b>		
• at 50 Hz rated value	V	24
• at 60 Hz rated value	V	24
<b>Relative negative tolerance of the control supply voltage at AC at 50 Hz</b>	%	-20
<b>Relative positive tolerance of the control supply voltage at AC at 50 Hz</b>	%	20
<b>Relative negative tolerance of the control supply voltage at AC at 60 Hz</b>	%	-20
<b>Relative positive tolerance of the control supply voltage at AC at 60 Hz</b>	%	20
<b>Control supply voltage 1 at DC rated value</b>	V	24

Relative negative tolerance of the control supply voltage at DC	%	-20
Relative positive tolerance of the control supply voltage at DC	%	20
Display version for fault signal		red

#### Mechanical data

Size of engine control device		S00
Width	mm	45
Height	mm	98
Depth	mm	98
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	15
• downwards	mm	40
Wire length maximum	m	100
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		0
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 ... 2.5 mm <sup>2</sup> ), 2x (2.5 ... 6 mm <sup>2</sup> )
• finely stranded with core end processing		2x (1 ... 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		2x (16 ... 10)
Type of connectable conductor cross-sections for auxiliary contacts		
• solid		2x (0.25 ... 2.5 mm <sup>2</sup> )
• finely stranded with core end processing		2x (0.25 ... 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>Installation altitude at height above sea level</b>	m	5 000
<b>Environmental category</b>		
<ul style="list-style-type: none"> <li>• during transport acc. to IEC 60721</li> <li>• during storage acc. to IEC 60721</li> <li>• during operation acc. to IEC 60721</li> </ul>		2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m) 1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get inside the devices), 1M4 3K6 (no formation of ice, no condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6
<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>		IP20

### Certificates/ approvals

General Product Approval	EMC	Declaration of Conformity
 CCC	 EAC	 EG-Konf.
 CSA	 RCM	
 UL		

Declaration of Conformity	other

[Miscellaneous](#)

[Miscellaneous](#)

[Confirmation](#)

### 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	2
	hp	5

### Further information

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

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

**Information- and Downloadcenter (Catalogs, Brochures,...)**

[www.siemens.com/sirius/catalogs](http://www.siemens.com/sirius/catalogs)

**Industry Mall (Online ordering system)**

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RW3016-1CB04>

**Cax online generator**

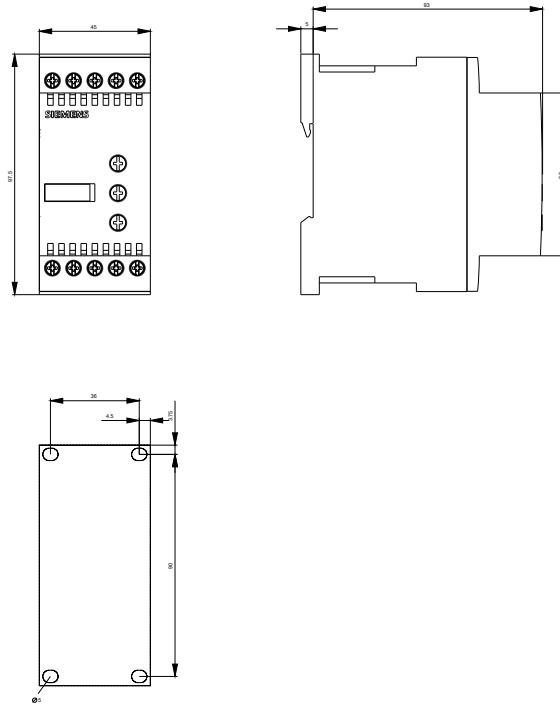
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW3016-1CB04>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RW3016-1CB04>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RW3016-1CB04&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW3016-1CB04&lang=en)



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