



SIRIUS SOFT STARTER, S0, 12.5A,  
5.5KW/400V, 40 DEGR., AC 200-480V,  
AC/DC 24V, SCREW TERMINALS

General details:		
<b>Product brand name</b>		SIRIUS
<b>Product equipment</b>		
<ul style="list-style-type: none"> <li>integrated bridging 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 thermal resistor motor protection</li> </ul>		No
<ul style="list-style-type: none"> <li>reset external</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 / outlet for enine brake</b>		No
<b>Item designation</b>		
<ul style="list-style-type: none"> <li>according to DIN EN 61346-2</li> </ul>		Q
<ul style="list-style-type: none"> <li>according to DIN 40719 extendable after IEC 204-2 / according to IEC 750</li> </ul>		G
Power Electronics:		
<b>product designation</b>		soft starters for standard applications
Operating current		

• at 40 °C / rated value	A	12.5
• at 50 °C / rated value	A	11
• at 60 °C / rated value	A	10
<b>Emitted mechanical power / for three-phase servomotors</b>		
• at 230 V / at standard switching / at 40 °C		
• rated value	W	3,000
• at 400 V / at standard switching / at 40 °C		
• rated value	W	5,500
<b>yielded mechanical performance (hp) / for three-phase squirrel cage motors / at 200/208 V / at standard circuit / at 50 °C / rated value</b>	hp	3
<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 / with standard circuit / rated value</b>	V	200 ... 480
<b>Relative negative tolerance / of the operating voltage / with standard circuit</b>	%	-15
<b>Relative positive tolerance / of the operating voltage / with standard circuit</b>	%	10
<b>Minimum load in % of I<sub>M</sub></b>	%	20
<b>Adjustable rated current / of the motor / for motor overload protection / minimum</b>	A	5
<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 operating phase / typical</b>	W	2

#### Control electronics:

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

Relative negative tolerance / of the control supply voltage / for DC	%	-20
Relative positive tolerance / of the control supply voltage / for DC	%	20
Type of display / for fault signal		red

#### Mechanical design:

Size of the engine control device		S0
Width	mm	45
Height	mm	125
Depth	mm	155
Type of mounting		screw and snap-on mounting
Built in orientation		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
Distance, to be maintained, to the ranks assembly		
• upwards	mm	60
• sideways	mm	15
• downwards	mm	40
Altitude of installation site / at a height over 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		screw-type terminals
Number of NC contacts / for auxiliary contacts		0
Number of NO contacts / for auxiliary contacts		2
Number of change-over switches / for auxiliary contacts		1
Type of the connectable conductor cross section / for main contacts / for box terminal / when 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 conductor end processing		2x (1.5 ... 2.5 mm <sup>2</sup> ), 2x (2.5 ... 6 mm <sup>2</sup> )
Type of the connectable conductor cross-section / for AWG conductors / for main contacts / for box terminal		
• when using the front clamping point		1x 8, 2x (16 ... 10)
Type of the connectable conductor cross-section		
• for auxiliary contacts		
• solid		2x (0.5 ... 2.5 mm <sup>2</sup> )

- finely stranded / with conductor end processing
- for AWG conductors / for auxiliary contacts
- finely stranded / with wire end processing

2x (0.5 ... 1.5 mm<sup>2</sup>)  
 2x (20 ... 14)  
 2x (20 ... 16)

#### Ambient conditions:

##### Ambient temperature

- during operating
- during storage

°C -25 ... 60  
 °C -40 ... 80

##### Derating temperature

°C 40

##### Protection class IP

IP20

#### Certificates/approvals:

##### General Product Approval

For use in hazardous locations

##### Test Certificates



CQC



CSA

[ROSTEST](#)



UL

[DEKRA EXAM, DMT](#)

[Manufacturer](#)

##### Shipping Approval

other



DNV



GL



LRS



PRS

[Manufacturer](#)

#### UL/CSA ratings

##### yielded mechanical performance (hp) / for three-phase squirrel cage motors

- at 220/230 V / at standard circuit
  - at 50 °C / rated value
- at 460/480 V / at standard circuit
  - at 50 °C / rated value

hp 3  
 hp 7.5

#### 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

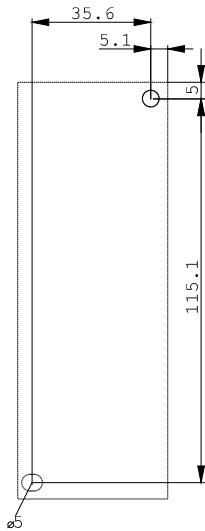
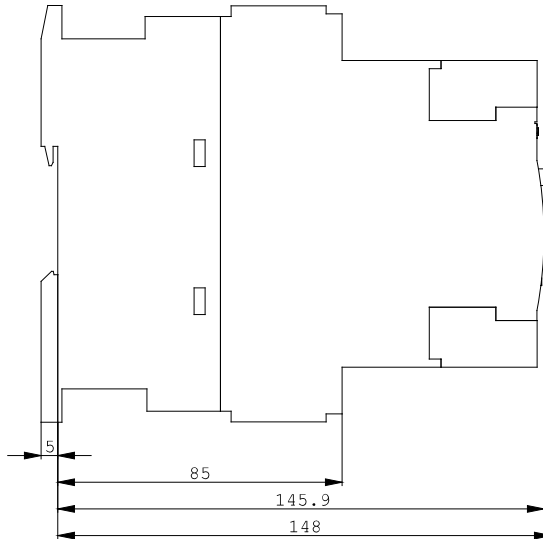
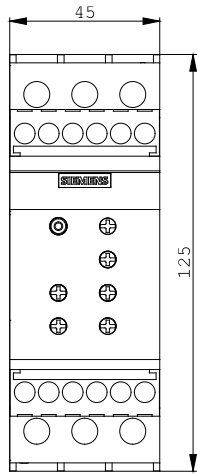
<http://www.siemens.com/cax>

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

<http://support.automation.siemens.com/VW/view/en/3RW4024-1BB04/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RW4024-1BB04](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RW4024-1BB04)



last change:

Oct 24, 2011