



SIRIUS SOFT STARTER, S0, 12.5A,  
5.5KW/400V, 40 DEGR., AC 200-480V,  
AC/DC 110-230V, SCREW TERMINALS

General details:		
<b>product brand name</b>		SIRIUS
<b>Product equipment</b>		
• integrated bridging contact system		Yes
• thyristors		Yes
<b>Product function</b>		
• intrinsic device protection		Yes
• motor overload protection		Yes
• evaluation of thermal resistor motor protection		No
• reset external		Yes
• adjustable current limitation		Yes
• inside-delta circuit		No
<b>Product component / outlet for enine brake</b>		No
<b>Item designation</b>		
• according to DIN EN 61346-2		Q
• according to DIN 40719 extendable after IEC 204-2 / according to IEC 750		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 / at 50 Hz / for AC</b>	V	110 ... 230
<b>Control supply voltage / 1 / at 60 Hz / for AC</b>	V	110 ... 230
<b>Relative negative tolerance / of the control supply voltage / at 60 Hz / for AC</b>	%	-15
<b>Relative positive tolerance / of the control supply voltage / at 60 Hz / for AC</b>	%	10
<b>Control supply voltage / 1 / for DC</b>	V	110 ... 230
<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
<b>Type of display / for fault signal</b>		red

#### Mechanical design:

<b>Size of the engine control device</b>		S0
<b>Width</b>	mm	45
<b>Height</b>	mm	125
<b>Depth</b>	mm	155
<b>Type of mounting</b>		screw and snap-on mounting
<b>mounting position</b>		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
<b>Distance, to be maintained, to the ranks assembly</b>		
• upwards	mm	60
• sideways	mm	15
• downwards	mm	40
<b>Installation altitude / at a height over sea level</b>	m	5,000
<b>Cable length / maximum</b>	m	300
<b>Number of poles / for main current circuit</b>		3

#### Electrical connections:

<b>Design of the 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>		2
<b>Number of changeover contacts / for auxiliary contacts</b>		1
<b>Type of the connectable conductor cross-section / for main contacts / for box terminal / when using the front clamping point</b>		
• 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> )
<b>Type of the connectable conductor cross-section / for AWG conductors / for main contacts / for box terminal</b>		
• when using the front c		1x 8, 2x (16 ... 10)
<b>Type of the connectable conductor cross-section</b>		
• for auxiliary contacts		
• solid		2x (0.5 ... 2.5 mm <sup>2</sup> )
• finely stranded / with conductor end processing		2x (0.5 ... 1.5 mm <sup>2</sup> )
• for AWG conductors / for auxiliary contacts		2x (20 ... 14)

• finely stranded / with wire end proc

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

EMC

For use in hazardous locations



CCC



CSA



UL



C-TICK



ATEX

#### Test Certificates

#### Shipping Approval

[Type Test Certificates/Test Report](#)



DNV



GL



LRS



PRS

#### other

[Declaration of Conformity](#)

[Environmental Confirmations](#)

### 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

#### Contact rating designation / for auxiliary contacts / according to UL

B300 / R300

### 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

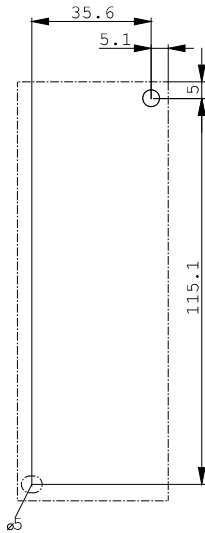
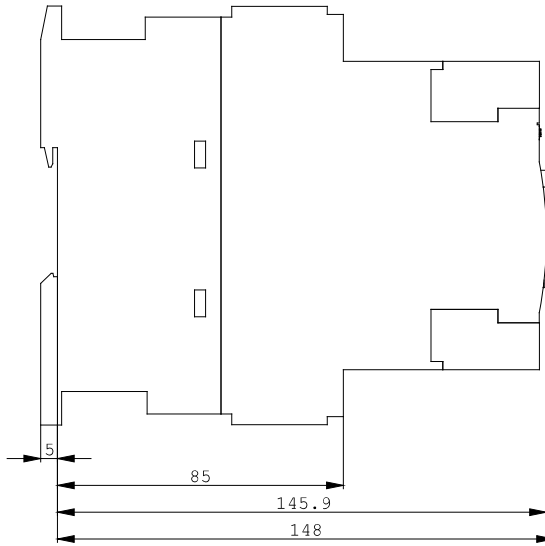
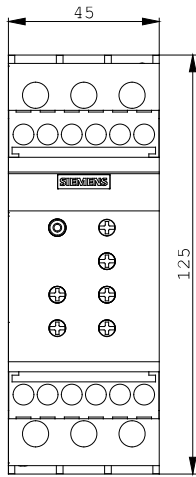
<http://www.siemens.com/cax>

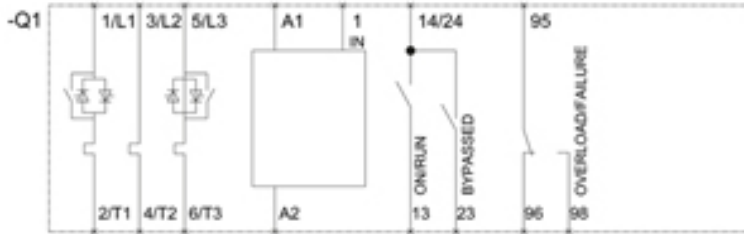
#### Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<http://support.automation.siemens.com/WW/view/en/3RW4024-1BB14/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RW4024-1BB14](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RW4024-1BB14)





last change:

Oct 28, 2013