



SIRIUS SOFT STARTER, S0, 12.5A,
7.5KW/500V, 40 DEGR., AC 400-600V,
AC/DC 24V, SCREW TERMINALS,
THERMISTOR MOTOR PROTECTION

General details:

product brand name		SIRIUS
Product equipment		
• integrated bridging contact system		Yes
• thyristors		Yes
Product function		
• intrinsic device protection		Yes
• motor overload protection		Yes
• evaluation of thermal resistor motor protection		Yes
• reset external		Yes
• adjustable current limitation		Yes
• inside-delta circuit		No
Product component / outlet for enine brake		No
Item designation		
• according to DIN EN 61346-2		Q
• according to DIN 40719 extendable after IEC 204-2 / according to IEC 750		G

Power Electronics:

product designation		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
Emitted mechanical power / for three-phase servomotors		
• at 400 V / at standard switching / at 40 °C		
• rated value	W	5,500
• at 500 V / at standard switching / at 40 °C		
• rated value	W	7,500
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 / with standard circuit / rated value	V	400 ... 600
Relative negative tolerance / of the operating voltage / with standard circuit	%	-15
Relative positive tolerance / of the operating voltage / with standard circuit	%	10
Minimum load in % of I_M	%	20
Adjustable rated current / of the motor / for motor overload protection / minimum	A	5
Continuous operating current in % of I_e / at 40°C	%	115
Active power loss / at operating current / at 40°C / during operating phase / typical	W	2

Control electronics:		
Type of voltage / of the controlled 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 50 Hz / for AC	V	24
• at 60 Hz / for AC	V	24
Relative negative tolerance / of the control supply voltage / at 60 Hz / for AC	%	-20
Relative positive tolerance / of the control supply voltage / at 60 Hz / for AC	%	20
Control supply voltage / 1 / for DC / rated value	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
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
Distance, to be maintained, to the ranks assembly		
• upwards	mm	60
• sideways	mm	15
• downwards	mm	40
Installation altitude / 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 ²), 2x (2.5 ... 6 mm ²), max. 1x 10 mm ²
• finely stranded / with conductor end processing		2x (1.5 ... 2.5 mm ²), 2x (2.5 ... 6 mm ²)
Type of the connectable conductor cross-section / for AWG conductors / for main contacts / for box terminal		
• when using the front c		1x 8, 2x (16 ... 10)
Type of the connectable conductor cross-section		
• for auxiliary contacts		
• solid		2x (0.5 ... 2.5 mm ²)
• finely stranded / with conductor end processing		2x (0.5 ... 1.5 mm ²)
• 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



GOST



UL



C-TICK



ATEX

Test Certificates

Shipping Approval

other

[Type Test Certificates/Test Report](#)



GL



LRS



PRS

[Declaration of Conformity](#)

[Environmental Confirmations](#)

UL/CSA ratings

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

- at 460/480 V / at standard circuit
 - at 50 °C / rated v alue
- at 575/600 V / at standard circuit
 - at 50 °C / rated v alue

hp

7.5

hp

10

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

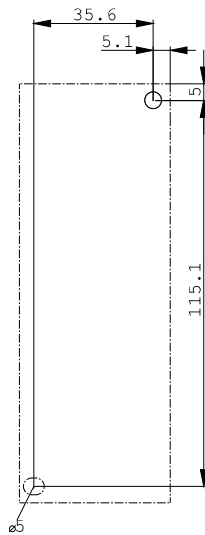
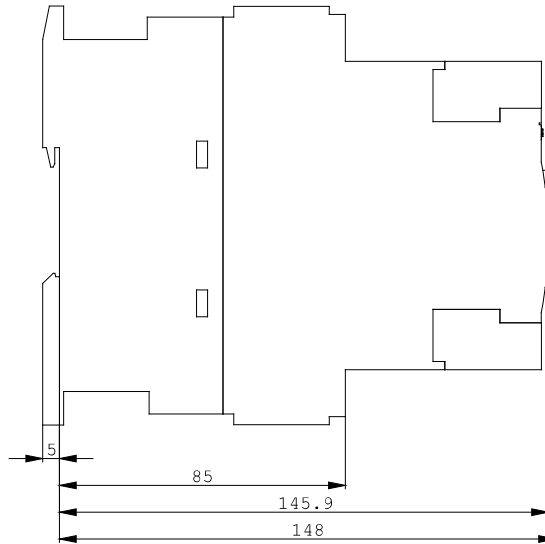
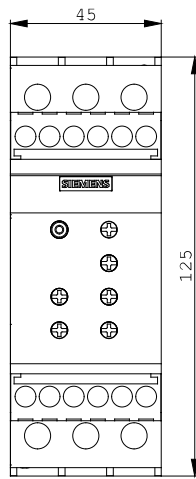
<http://www.siemens.com/cax>

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

<http://support.automation.siemens.com/WW/view/en/3RW4024-1TB05/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RW4024-1TB05



last change:

Feb 7, 2013