



SIRIUS SOFT STARTER, S6, 145 A, 100 HP/460 V, 50 DEG., 200-460 V AC, 115 V AC, SCREW TERMINALS

General technical data:

product brand name		SIRIUS
Product feature		
<ul style="list-style-type: none"> integrated bypass contact system 		Yes
<ul style="list-style-type: none"> Thyristors 		Yes
Product function		
<ul style="list-style-type: none"> Intrinsic device protection 		Yes
<ul style="list-style-type: none"> motor overload protection 		Yes
<ul style="list-style-type: none"> Evaluation of thermistor motor protection 		No
<ul style="list-style-type: none"> External reset 		Yes
<ul style="list-style-type: none"> Adjustable current limitation 		Yes
<ul style="list-style-type: none"> inside-delta circuit 		No
Product component Motor brake output		No
Equipment marking acc. to DIN EN 61346-2		Q
Equipment marking acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750		G

Power Electronics:

Product designation		soft starters for standard applications
Operating current		
<ul style="list-style-type: none"> at 40 °C Rated value 	A	162
<ul style="list-style-type: none"> at 50 °C Rated value 	A	145
<ul style="list-style-type: none"> at 60 °C Rated value 	A	125
Mechanical power output for three-phase motors		
<ul style="list-style-type: none"> at 230 V 		

— at standard circuit at 40 °C Rated value	W	45 000
• at 400 V		
— at standard circuit at 40 °C Rated value	W	90 000
yielded mechanical performance [hp] for three-phase AC motor at 200/208 V at standard circuit at 50 °C Rated value	metric hp	40
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 ... 460
Relative negative tolerance of the operating voltage at standard circuit	%	-15
Relative positive tolerance of the operating voltage at standard circuit	%	10
Minimum load in % of I _M	%	20
Adjustable motor current for motor overload protection minimum rated value	A	87
Continuous operating current in % of I _e at 40 °C	%	115
Active power loss at operating current at 40 °C during operation typical	W	75

Control electronics:

Type of voltage of the control supply voltage		AC
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 with AC		
• at 50 Hz Rated value	V	115
• at 60 Hz Rated value	V	115
Relative negative tolerance of the control supply voltage with AC at 60 Hz	%	-15
Relative positive tolerance of the control supply voltage with AC at 60 Hz	%	10
Display version for fault signal		red

Mechanical data:

Size of engine control device		S6
Width	mm	120
Height	mm	198
Depth	mm	250
Mounting type		screw fixing

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
Required spacing with side-by-side mounting		
• upwards	mm	100
• at the side	mm	5
• downwards	mm	75
Installation altitude at height above sea level	m	5 000
Cable length maximum	m	300
Number of poles for main current circuit		3

Connections/ Terminals:

Type of electrical connection		busbar connection screw-type terminals
• for main current circuit		
• for auxiliary and control current circuit		
Number of NC contacts for auxiliary contacts		0
Number of NO contacts for auxiliary contacts		2
Number of CO contacts for auxiliary contacts		1
Type of connectable conductor cross-section for main contacts for box terminal using the front clamping point		
• finely stranded with core end processing		16 ... 70 mm ²
• finely stranded without core end processing		16 ... 70 mm ²
• stranded		16 ... 70 mm ²
Type of connectable conductor cross-section for main contacts for box terminal using the back clamping point		
• finely stranded with core end processing		16 ... 70 mm ²
• finely stranded without core end processing		16 ... 70 mm ²
• stranded		16 ... 70 mm ²
Type of connectable conductor cross-section for main contacts for box terminal using both clamping points		
• finely stranded with core end processing		max. 1x 50 mm ² , 1x 70 mm ²
• finely stranded without core end processing		max. 1x 50 mm ² , 1x 70 mm ²
• stranded		max. 2x 70 mm ²
Type of connectable conductor cross-section for AWG conductors for main contacts for box terminal		
• using the back clamping point		6 ... 2/0
• using the front clamping point		6 ... 2/0
• using both clamping points		max. 2x 1/0
Type of connectable conductor cross-section for DIN cable lug for main contacts		

<ul style="list-style-type: none"> finely stranded stranded 	16 ... 95 mm ² 25 ... 120 mm ²
Type of connectable conductor cross-section for auxiliary contacts <ul style="list-style-type: none"> solid finely stranded with core end processing 	2x (0.5 ... 2.5 mm ²) 2x (0.5 ... 1.5 mm ²)
Type of connectable conductor cross-section for AWG conductors <ul style="list-style-type: none"> for main contacts for auxiliary contacts for auxiliary contacts finely stranded with core end processing 	4 ... 250 kcmil 2x (20 ... 14) 2x (20 ... 16)

Ambient conditions:		
Ambient temperature		
<ul style="list-style-type: none"> during operation during storage 	°C	-25 ... +60 -40 ... +80
Derating temperature	°C	40
Protection class IP		IP00

Certificates/ approvals:

General Product Approval	EMC	For use in hazardous locations	Test Certificates
--------------------------	-----	--------------------------------	-------------------



[Special Test Certificate](#)

Shipping Approval	other
-------------------	-------



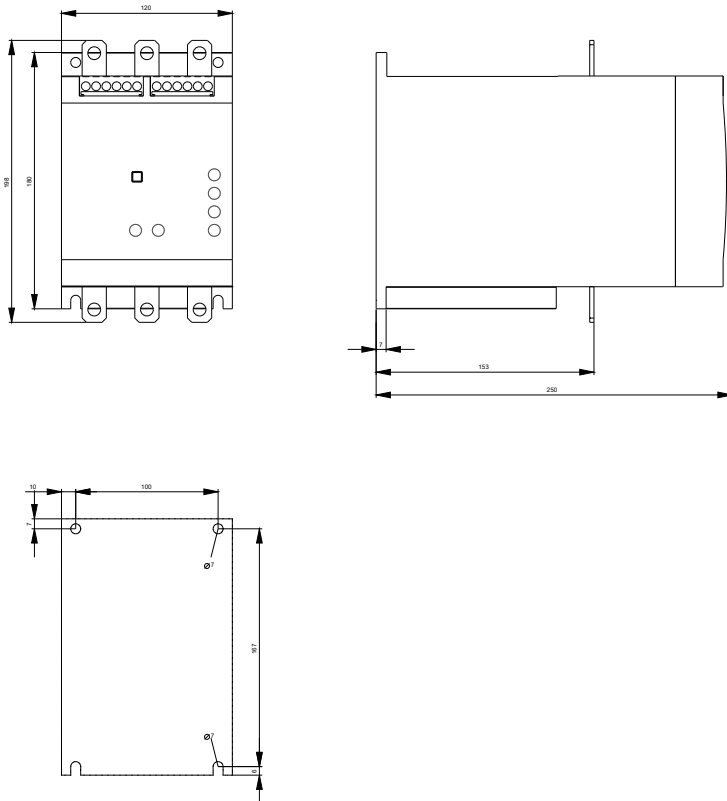
[Declaration of Conformity](#)

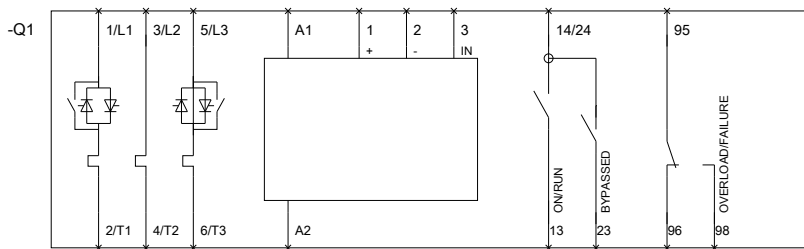
[Environmental Confirmations](#)

UL/CSA ratings:

yielded mechanical performance [hp] for three-phase AC motor		
<ul style="list-style-type: none"> at 220/230 V <ul style="list-style-type: none"> at standard circuit at 50 °C Rated value 	metric hp	50
<ul style="list-style-type: none"> at 460/480 V <ul style="list-style-type: none"> at standard circuit at 50 °C Rated value 	metric hp	100

Further information

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&mlfb=3RW40566BB34>**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**<http://support.automation.siemens.com/WW/view/en/3RW40566BB34/all>**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)**<http://www.automation.siemens.com/bilddb/index.aspx?attID9=3RW40566BB34&lang=en>



last modified:

15.01.2015