



SIRIUS SOFT STARTER, VALUES WITH 690 V, 40 DEG., STANDARD: 93A, 90KW, INSIDE-DELTA CIRCUIT 3: ONLY UP TO 600V, 400-690 V AC, 230 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 		Yes
<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 		Yes
Product component Motor brake output		Yes
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 high feature applications
Operating current		
<ul style="list-style-type: none"> at 40 °C Rated value 	A	93
<ul style="list-style-type: none"> at 50 °C Rated value 	A	82
<ul style="list-style-type: none"> at 60 °C Rated value 	A	72
Operating current for three-phase motors at 3-phase root switching		
<ul style="list-style-type: none"> at 40 °C Rated value 	A	161

• at 50 °C Rated value	A	142
• at 60 °C Rated value	A	125
Mechanical power output for three-phase motors		
• at 400 V		
— at standard circuit at 40 °C Rated value	W	45 000
— at 3-phase root switching at 40 °C Rated value	W	90 000
• at 500 V		
— at standard circuit at 40 °C Rated value	W	55 000
— at 3-phase root switching at 40 °C Rated value	W	110 000
• at 690 V at standard circuit at 40 °C Rated value	W	90 000
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	400 ... 690
Relative negative tolerance of the operating voltage at standard circuit	%	-15
Relative positive tolerance of the operating voltage at standard circuit	%	10
Operating voltage at 3-phase root switching Rated value	V	400 ... 600
Relative negative tolerance of the operating voltage at 3-phase root switching	%	-15
Relative positive tolerance of the operating voltage at 3-phase root switching	%	10
Minimum load in % of I_M	%	8
Adjustable motor current for motor overload protection minimum rated value	A	18
Continuous operating current in % of I_e at 40 °C	%	115
Active power loss at operating current at 40 °C during operation typical	W	55

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	230

<ul style="list-style-type: none"> • at 60 Hz Rated value 	V	230
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		Display

Mechanical data:		
Width	mm	170
Height	mm	192
Depth	mm	270
Mounting type		screw fixing
mounting position		bei senkrechter Montageebene +/-90° drehbar, bei senkrechter Montageebene +/- 22,5° nach vorne und hinten kippbar
Required spacing with side-by-side mounting		
<ul style="list-style-type: none"> • upwards 	mm	100
<ul style="list-style-type: none"> • at the side 	mm	5
<ul style="list-style-type: none"> • downwards 	mm	75
Installation altitude at height above sea level	m	5 000
Cable length maximum	m	500
Number of poles for main current circuit		3






Connections/ Terminals:		
Type of electrical connection		
<ul style="list-style-type: none"> • for main current circuit 		box terminals
<ul style="list-style-type: none"> • for auxiliary and control current circuit 		screw-type terminals
Number of NC contacts for auxiliary contacts		0
Number of NO contacts for auxiliary contacts		3
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		
<ul style="list-style-type: none"> • solid 		2.5 ... 16 mm ²
<ul style="list-style-type: none"> • finely stranded with core end processing 		2.5 ... 35 mm ²
<ul style="list-style-type: none"> • finely stranded without core end processing 		4 ... 50 mm ²
<ul style="list-style-type: none"> • stranded 		4 ... 70 mm ²
Type of connectable conductor cross-section for main contacts for box terminal using the back clamping point		
<ul style="list-style-type: none"> • solid 		2,5 ... 16 mm ²
<ul style="list-style-type: none"> • finely stranded with core end processing 		2.5 ... 50 mm ²
<ul style="list-style-type: none"> • finely stranded without core end processing 		10 ... 50 mm ²
<ul style="list-style-type: none"> • stranded 		10 ... 70 mm ²






<p>Type of connectable conductor cross-section for main contacts for box terminal using both clamping points</p> <ul style="list-style-type: none"> • solid • finely stranded with core end processing • finely stranded without core end processing • stranded 		<p>2x (2.5 ... 16 mm²)</p> <p>2x (2.5 ... 35 mm²)</p> <p>2x (4 ... 35 mm²)</p> <p>2x (4 ... 50 mm²)</p>
<p>Type of connectable conductor cross-section for AWG conductors for main contacts for box terminal</p> <ul style="list-style-type: none"> • using the back clamping point • using the front clamping point • using both clamping points 		<p>10 ... 2/0</p> <p>10 ... 2/0</p> <p>2x (10 ... 1/0)</p>
<p>Type of connectable conductor cross-section for auxiliary contacts</p> <ul style="list-style-type: none"> • solid • finely stranded with core end processing 		<p>2x (0.5 ... 2.5 mm²)</p> <p>2x (0.5 ... 1.5 mm²)</p>
<p>Type of connectable conductor cross-section for AWG conductors</p> <ul style="list-style-type: none"> • for auxiliary contacts • for auxiliary contacts finely stranded with core end processing 		<p>2x (20 ... 14)</p> <p>2x (20 ... 16)</p>


Ambient conditions:

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

Certificates/ approvals:

General Product Approval			EMC	Declaration of Conformity	Test Certificates
 CSA	 UL		 C-TICK	 EG-Konf.	Type Test Certificates/Test Report

Test Certificates	Shipping Approval				
Special Test Certificate	 ABS	 BUREAU VERITAS	 DNV	 GL	 LRS

Shipping Approval	other
 PRS	Environmental Confirmations

UL/CSA ratings:

yielded mechanical performance [hp] for three-phase AC motor		
<ul style="list-style-type: none"> • at 460/480 V <ul style="list-style-type: none"> — at standard circuit at 50 °C Rated value — at 3-phase root switching at 50 °C Rated value • at 575/600 V <ul style="list-style-type: none"> — at standard circuit at 50 °C Rated value — at 3-phase root switching at 50 °C Rated value 	metric hp	60
	metric hp	100
	metric hp	75
	metric hp	125
Contact rating of the auxiliary contacts acc. to UL		B300 / R300

Further information

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

<http://www.siemens.com/industrial-controls/catalogs>

Industry Mall (Online ordering system)

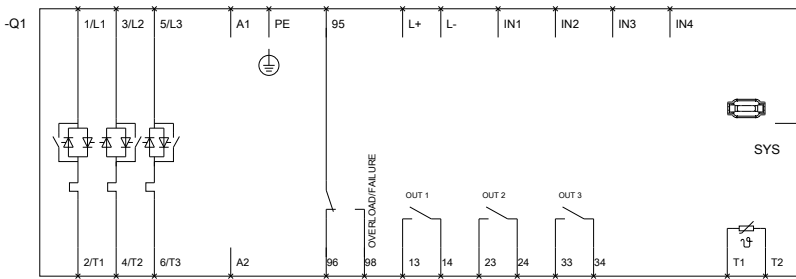
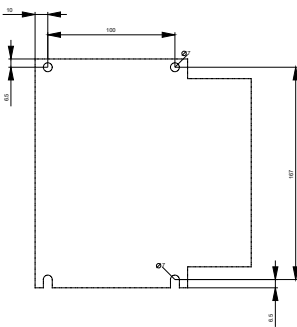
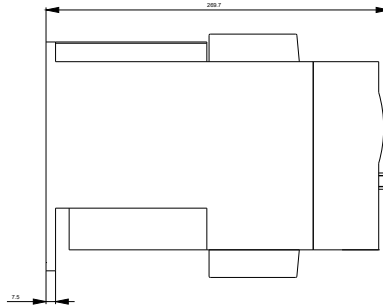
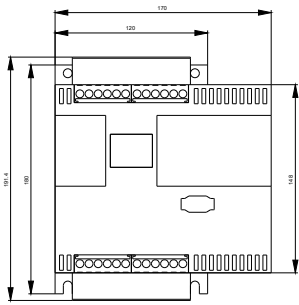
<http://www.siemens.com/industrymall>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW44271BC46>

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

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