

SIRIUS SOFT STARTER, VALUES WITH 500 V, 40 DEG., STANDARD: 162A, 110KW, INSIDE-DELTA CIRCUIT 3: 281A, 200KW, 400-600 V AC, 230 V AC, CAGE CLAMP TERMINALS

General technical data:

product brand name		SIRIUS
• Product equipment Integrated bypass contact system		Yes
• Product feature Thyristors		Yes
Product function		
• Intrinsic device protection		Yes
• motor overload protection		Yes
• Evaluation of thermistor motor protection		Yes
• External reset		Yes
• Adjustable current limitation		Yes
• 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		
• at 40 °C rated value	A	162
• at 50 °C rated value	A	145
• at 60 °C rated value	A	125
Operating current for three-phase motors at inside-delta circuit		
• at 40 °C rated value	A	281
• at 50 °C rated value	A	251
• at 60 °C rated value	A	217
Mechanical power output for three-phase motors		
• at 400 V		
— at standard circuit at 40 °C rated value	W	90 000
— at inside-delta circuit at 40 °C rated value	W	160 000
• at 500 V		
— at standard circuit at 40 °C rated value	W	110 000
— at inside-delta circuit at 40 °C rated value	W	200 000

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 ... 600
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 inside-delta circuit rated value	V	400 ... 600
Relative negative tolerance of the operating voltage at inside-delta circuit	%	-15
Relative positive tolerance of the operating voltage at inside-delta circuit	%	10
Minimum load [% of IM]	%	8
Adjustable motor current for motor overload protection minimum rated value	A	32
Continuous operating current [% of I _e] at 40 °C	%	115
Power loss [W] at operating current at 40 °C during operation typical	W	95

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 at AC - at 50 Hz rated value - at 60 Hz rated value	V V	230 230
Relative negative tolerance of the control supply voltage at AC at 60 Hz	%	-15
Relative positive tolerance of the control supply voltage at AC at 60 Hz	%	10
Display version for fault signal		Display

Mechanical data:

Width	mm	170
Height	mm	200
Depth	mm	270
Mounting type		screw fixing
Mounting position		with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back

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
Wire length maximum	m	500
Number of poles for main current circuit		3

Connections/ Terminals:

Type of electrical connection		
• for main current circuit		busbar connection
• for auxiliary and control current circuit		spring-loaded 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-sections 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-sections 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-sections 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-sections at 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-sections for DIN cable lug for main contacts		
• finely stranded		16 ... 95 mm ²
• stranded		25 ... 120 mm ²
Type of connectable conductor cross-sections for auxiliary contacts		

• solid • finely stranded with core end processing	2x (0.25 ... 1.5 mm ²) 2x (0.25 ... 1.5 mm ²)
Type of connectable conductor cross-sections at AWG conductors • for main contacts • for auxiliary contacts	4 ... 250 kcmil 2x (24 ... 16)

Ambient conditions:

Ambient temperature		
• during operation • during storage	°C	60 -25 ... +80
Derating temperature	°C	40
Protection class IP		IP00

Certificates/ approvals:

General Product Approval	EMC	Declaration of Conformity
 CCC	 EAC	 EG-Konf.
 CSA	 UL	 C-Tick

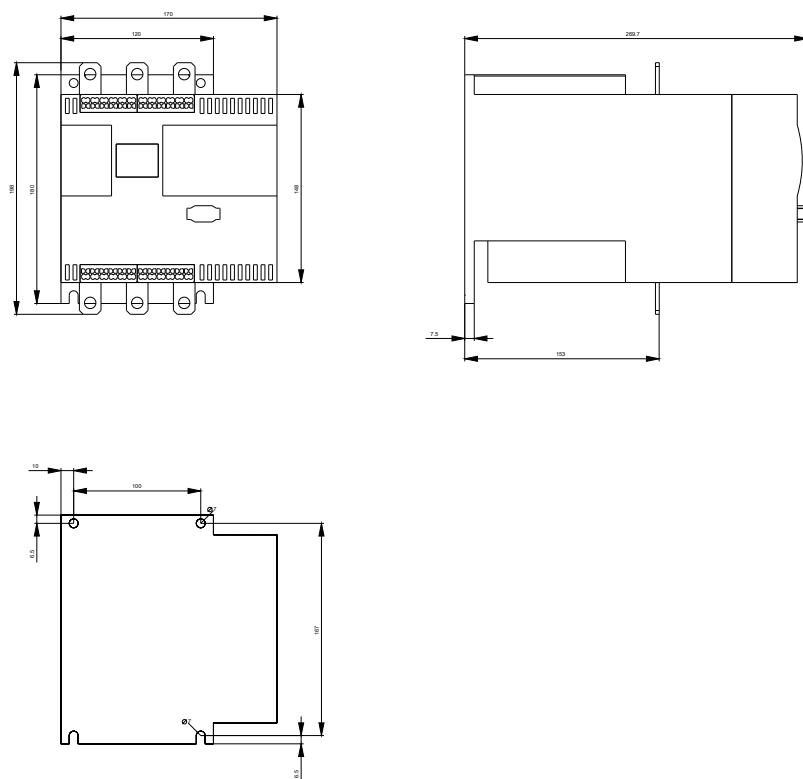
Test Certificates	Shipping Approval
spezielle Prüfbescheinigungen Typprüfbescheinigung/Werkszeugnis	 ABS  BUREAU VERITAS  DNV  GL

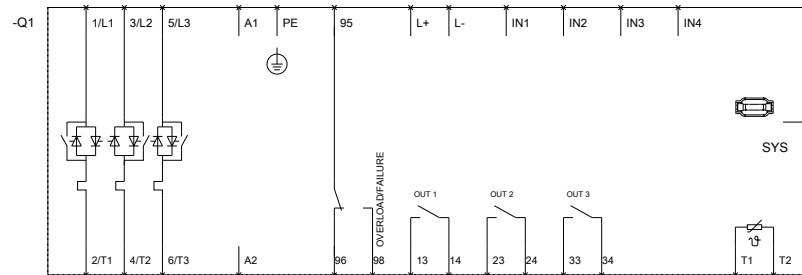
Shipping Approval	other
 LRS  PRS	Umweltbestätigung Bestätigungen

UL/CSA ratings:

Yielded mechanical performance [hp] for three-phase AC motor		
• at 460/480 V — at standard circuit at 50 °C rated value — at inside-delta circuit at 50 °C rated value • at 575/600 V — at standard circuit at 50 °C rated value — at inside-delta circuit at 50 °C rated value	hp hp hp hp	100 200 125 250

Further information

Simulation Tool for Soft Starters (STS)<https://support.industry.siemens.com/cs/ww/en/view/101494917>**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=3RW4436-2BC45>**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**<https://support.industry.siemens.com/cs/ww/en/ps/3RW4436-2BC45>**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)**http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW4436-2BC45&lang=en



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