



SIRIUS SOFT STARTER, VALUES WITH 400 V,
40 DEG., STANDARD: 313A, 160KW,
INSIDE-DELTA CIRCUIT 3: 542A, 315KW,
200-460 V AC, 230 V AC,
CAGE CLAMP TERMINALS

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		Yes
Product component / outlet for engine brake		Yes
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 high feature applications
Operating current		

<ul style="list-style-type: none"> • at 40 °C / rated value • at 50 °C / rated value • at 60 °C / rated value • for three-phase servomotors / at 3-phase root switching <ul style="list-style-type: none"> • at 40 °C / rated value • at 50 °C / rated value • at 60 °C / rated value 	A	313
	A	280
	A	250
	A	542
	A	485
	A	433
Emitted mechanical power / for three-phase servomotors		
<ul style="list-style-type: none"> • at 230 V / at standard switching / at 40 °C <ul style="list-style-type: none"> • rated value • at 400 V / at standard switching / at 40 °C <ul style="list-style-type: none"> • rated value • at 230 V / at 3-phase root switching / at 40 °C <ul style="list-style-type: none"> • rated value • at 400 V / at 3-phase root switching / at 40 °C <ul style="list-style-type: none"> • rated value 	W	90,000
	W	160,000
	W	160,000
	W	315,000
yielded mechanical performance (hp) / for three-phase squirrel cage motors / at 200/208 V / at standard circuit / at 50 °C / rated value	hp	75
Operating frequency		
<ul style="list-style-type: none"> • 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	200 ... 460
Relative negative tolerance / of the operating voltage / with standard circuit	%	-15
Relative positive tolerance / of the operating voltage / with standard circuit	%	10
Operating voltage / at 3-phase root switching / rated value	V	200 ... 460
Relative negative tolerance / of the operating voltage / with inside-delta circuit	%	-15
Relative positive tolerance / of the operating voltage / with inside-delta circuit	%	10
Minimum load in % of I_M	%	8
Adjustable rated current / of the motor / for motor overload protection / minimum	A	62
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	145
Control electronics:		
Type of voltage / of the controlled 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 50 Hz / for AC	V	230
• at 60 Hz / for AC	V	230
Relative negative tolerance / of the control supply voltage / at 60 Hz / for AC	%	-15
Relative positive tolerance / of the control supply voltage / at 60 Hz / for AC	%	10
Type of display / for fault signal		Display

Mechanical design:		
Width	mm	210
Height	mm	230
Depth	mm	298
Type of mounting		screw fixing
Built in orientation		bei senkrechter Montageebene +/-90° drehbar, bei senkrechter Montageebene +/- 22,5° nach vorne und hinten kippbar
Distance, to be maintained, to the ranks assembly		
• upwards	mm	100
• sideways	mm	5
• downwards	mm	75
Altitude of installation site / at a height over sea level	m	5,000
Cable length / maximum	m	500
Number of poles / for main current circuit		3

Electrical connections:		
Design of the 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 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		
• finel		70 ... 240 mm ²
y stranded / with conductor end processing		

<ul style="list-style-type: none"> finely stranded / without conductor end processing stranded 		70 ... 240 mm ² 95 ... 300 mm ²
Type of the connectable conductor cross-section / for main contacts / for box terminal / when using the back clamping point <ul style="list-style-type: none"> finely stranded / with conductor end processing without conductor final cutting / without conductor end processing stranded 		120 ... 185 mm ² 120 ... 185 mm ² 120 ... 240 mm ²
Type of the connectable conductor cross-section / for main contacts / for box terminal / when using both clamping points <ul style="list-style-type: none"> finely stranded / with conductor end processing without conductor final cutting / without conductor end processing stranded 		min. 2x 50 mm ² , max. 2x 185 mm ² min. 2x 50 mm ² , max. 2x 185 mm ² max. 2x 70 mm ² , max. 2x 240 mm ²
Type of the connectable conductor cross-section / for AWG conductors / for main contacts / for box terminal <ul style="list-style-type: none"> when using the back clamping point when using the front clamping point when using both clamping points 		250 ... 500 kcmil 3/0 ... 600 kcmil min. 2x 2/0, max. 2x 500 kcmil
Type of the connectable conductor cross-section / for DIN cable lug / for main contacts <ul style="list-style-type: none"> finely stranded stranded 		50 ... 240 mm ² 70 ... 240 mm ²
Type of the connectable conductor cross-section <ul style="list-style-type: none"> for AWG conductors / for main contacts 		2/0 ... 500 kcmil
Type of the connectable conductor cross-section <ul style="list-style-type: none"> for auxiliary contacts <ul style="list-style-type: none"> solid finely stranded / with conductor end processing for AWG conductors / for auxiliary contacts 		2x (0.25 ... 1.5 mm ²) 2x (0.25 ... 1.5 mm ²) 2x (24 ... 16)

Ambient conditions:

Ambient temperature		
<ul style="list-style-type: none"> during operating during storage 	/ °C °C	60 -25 ... 80
Derating temperature	°C	40

Protection class IP

IP00

Certificates/approvals:

General Product Approval

[CQC](#)



[ROSTEST](#)



[Manufacturer](#)

Shipping Approval



GL

[PRS](#)

other

[Manufacturer](#)

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
- at 200/208 V / at inside-delta circuit / at 50 °C / rated value
- at 220/230 V / at inside-delta circuit / at 50 °C / rated value
- at 460/480 V / at inside-delta circuit / at 50 °C / rated value

hp	100
hp	200
hp	150
hp	200
hp	400

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

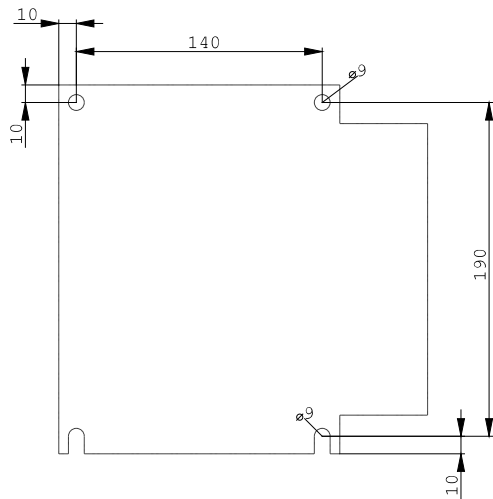
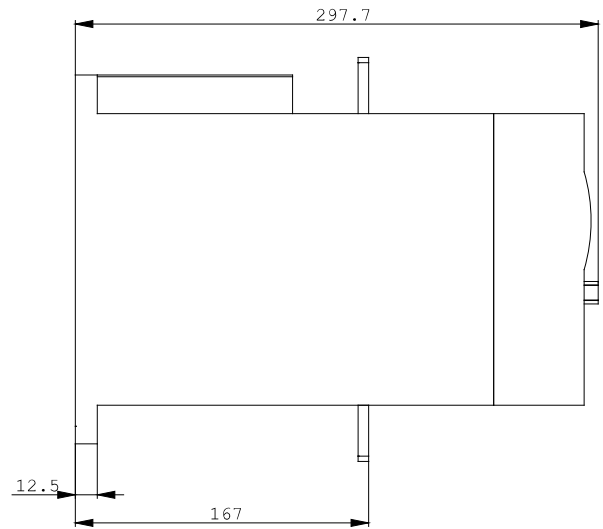
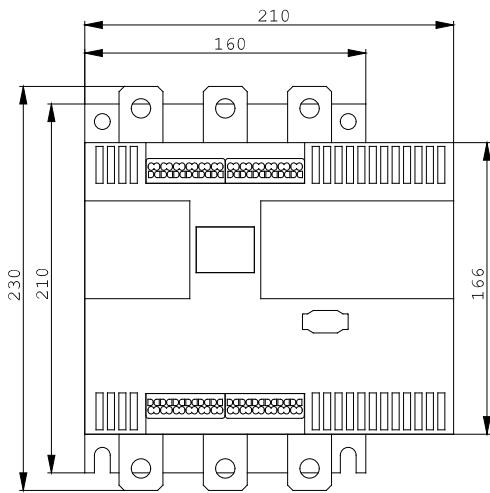
<http://www.siemens.com/cax>

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

<http://support.automation.siemens.com/WW/view/en/3RW4445-2BC44/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RW4445-2BC44



last change:

Aug 22, 2011