



SIRIUS SOFT STARTER, VALUES WITH 500 V,
40 DEG., STANDARD: 29A, 18,5KW,
INSIDE-DELTA CIRCUIT 3: 50A, 30KW,
400-600 V AC, 230 V AC, SCREW TERMINALS

General details:

product brand name		SIRIUS
Product equipment		
<ul style="list-style-type: none"> integrated bridging 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 thermal resistor motor protection 		Yes
<ul style="list-style-type: none"> reset external 		Yes
<ul style="list-style-type: none"> adjustable current limitation 		Yes
<ul style="list-style-type: none"> inside-delta circuit 		Yes
Product component / outlet for enine brake		Yes
Item designation		
<ul style="list-style-type: none"> according to DIN EN 61346-2 		Q
<ul style="list-style-type: none"> 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		

• at 40 °C / rated value	A	29
• at 50 °C / rated value	A	26
• at 60 °C / rated value	A	23
• for three-phase servomotors / at 3-phase root switching		
• at 40 °C / rated value	A	50
• at 50 °C / rated value	A	45
• at 60 °C / rated value	A	40
Emitted mechanical power / for three-phase servomotors		
• at 400 V / at standard switching / at 40 °C		
• rated value	W	15,000
• at 500 V / at standard switching / at 40 °C		
• rated value	W	18,500
• at 400 V / at 3-phase root switching / at 40 °C		
• rated value	W	22,000
• at 500 V / at 3-phase root switching / at 40 °C		
• rated value	W	30,000
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 / 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
Operating voltage / at 3-phase root switching / rated value	V	400 ... 600
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	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	8
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	170
Height	mm	192
Depth	mm	270
Type of mounting		screw fixing
mounting position		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
Installation altitude / 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		box 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		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		
• solid		2.5 ... 16 mm ²
• finely stranded / with conductor end processing		2.5 ... 35 mm ²
• finely stranded / without conductor end processing		4 ... 50 mm ²
• stranded		4 ... 70 mm ²

<p>Type of the connectable conductor cross-section / for main contacts / for box terminal / when using the back clamping point</p> <ul style="list-style-type: none"> • solid • finely stranded / with conductor end processing • without conductor final cutting / without conductor end processing • stranded 		<p>2,5 ... 16 mm²</p> <p>2.5 ... 50 mm²</p> <p>10 ... 50 mm²</p> <p>10 ... 70 mm²</p>
<p>Type of the connectable conductor cross-section / for main contacts / for box terminal / when using both clamping points</p> <ul style="list-style-type: none"> • solid • finely stranded / with conductor end processing • without conductor final cutting / without conductor 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 the connectable conductor cross-section / for AWG conductors / for main contacts / for box terminal</p> <ul style="list-style-type: none"> • when using the back cl • when using the front c • when using both clampi 		<p>10 ... 2/0</p> <p>10 ... 2/0</p> <p>2x (10 ... 1/0)</p>
<p>Type of the connectable conductor cross-section</p> <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 <ul style="list-style-type: none"> • finely stranded / with wire end proc 		<p>2x (0.5 ... 2.5 mm²)</p> <p>2x (0.5 ... 1.5 mm²)</p> <p>2x (20 ... 14)</p> <p>2x (20 ... 16)</p>

Ambient conditions:

<p>Ambient temperature</p> <ul style="list-style-type: none"> • during operating • 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	Test Certificates	
 CSA	 GOST	 UL	 C-TICK	Special Test Certificate	Type Test Certificates/Test Report
Shipping Approval					
 BUREAU VERITAS	 DNV	 GL	 LRS	 PRS	
other					
Declaration of Conformity		Environmental Confirmations			

UL/CSA ratings		
yielded mechanical performance (hp) / for three-phase squirrel cage motors		
<ul style="list-style-type: none"> at 460/480 V / at standard circuit <ul style="list-style-type: none"> at 50 °C / rated value at 575/600 V / at standard circuit <ul style="list-style-type: none"> at 50 °C / rated value at 460/480 V / at inside-delta circuit / at 50 °C / rated value at 575/600 V / at inside-delta circuit / at 50 °C / rated value 	hp	15
	hp	20
	hp	30
	hp	40
Contact rating designation / for auxiliary contacts / according to UL		B300 / R300

Further information:

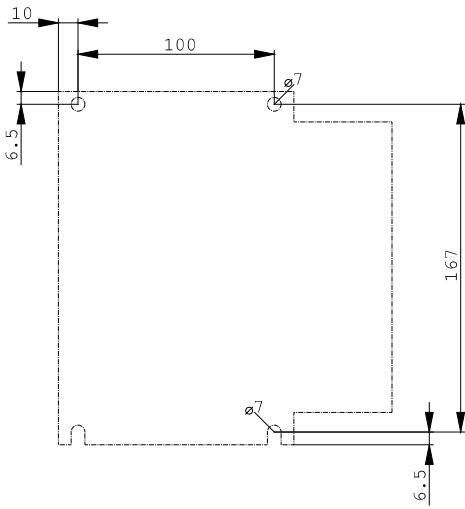
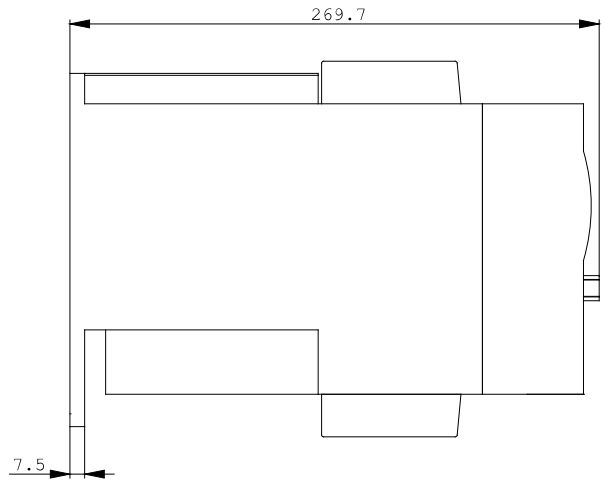
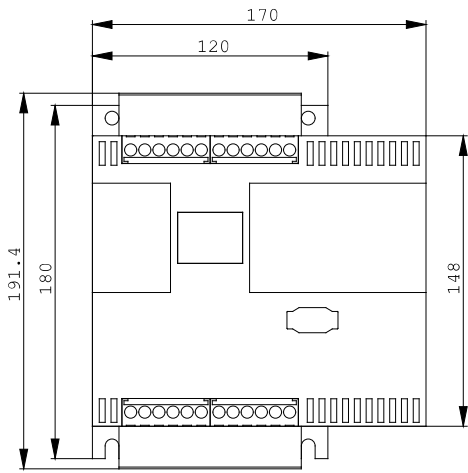
Information- and Downloadcenter (Catalogs, Brochures,...)
<http://www.siemens.com/industrial-controls/catalogs>

Industry Mall (Online ordering system)
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<http://support.automation.siemens.com/WW/view/en/3RW4422-1BC45/all>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RW4422-1BC45



last change:

Feb 7, 2013