

SIRIUS SOFT STARTER, SIZE S2, 45A, 22KW/400V,
40 DEGREES, 200-480V AC, 110-230V AC/DC,
SCREW TERMINALS



General technical data

product brandname		SIRIUS
• Product equipment Integrated bypass contact system		Yes
• Product feature Thyristors		Yes
Product function		
• Intrinsic device protection		No
• motor overload protection		No
• Evaluation of thermistor motor protection		No
• External reset		No
• Adjustable current limitation		No
• 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 starter
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Operating current		
• at 40 °C rated value	A	45
• at 50 °C rated value	A	42
• at 60 °C rated value	A	39
Mechanical power output for three-phase motors		
• at 230 V		
— at standard circuit at 40 °C rated value	W	11 000
• at 400 V		
— at standard circuit at 40 °C rated value	W	22 000
Yielded mechanical performance [hp] for three-phase AC motor at 200/208 V at standard circuit at 50 °C rated value	hp	10
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 ... 480
Relative negative tolerance of the operating voltage at standard circuit	%	-15
Relative positive tolerance of the operating voltage at standard circuit	%	10
Minimum load [% of IM]	%	10
Continuous operating current [% of I _e] at 40 °C	%	115
Power loss [W] at operating current at 40 °C during operation typical	W	6

Control electronics		
Type of voltage of the control supply voltage		AC/DC
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	V	110 ... 230
Control supply voltage 1 at AC at 60 Hz	V	110 ... 230
Relative negative tolerance of the control supply voltage at AC at 60 Hz	%	-10
Relative positive tolerance of the control supply voltage at AC at 60 Hz	%	10
Control supply voltage 1 at DC	V	110 ... 230
Relative negative tolerance of the control supply voltage at DC	%	-10
Relative positive tolerance of the control supply voltage at DC	%	10

Display version for fault signal		red
Mechanical data		
Size of engine control device		S2
Width	mm	55
Height	mm	160
Depth	mm	170
Mounting type		screw and snap-on mounting
Mounting position		With vertical mounting surface +/-10° rotatable, with vertical mounting surface +/- 10° tiltable to the front and back
Required spacing with side-by-side mounting		
• upwards	mm	60
• at the side	mm	30
• downwards	mm	40
Installation altitude at height above sea level	m	5 000
Wire length maximum	m	300
Number of poles for main current circuit		3
Connections/Terminals		
Type of electrical connection		
• for main current circuit		screw-type 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		1
Number of CO contacts for auxiliary contacts		0
Type of connectable conductor cross-sections for main contacts for box terminal using the front clamping point		
• solid		2x (1.5 ... 16 mm²)
• finely stranded with core end processing		1.5 ... 25 mm²
• stranded		1.5 ... 35 mm²
Type of connectable conductor cross-sections for main contacts for box terminal using the back clamping point		
• solid		2x (1.5 ... 16 mm²)
• finely stranded with core end processing		1.5 ... 25 mm²
• stranded		1.5 ... 35 mm²
Type of connectable conductor cross-sections for main contacts for box terminal using both clamping points		
• solid		2x (1.5 ... 16 mm²)
• finely stranded with core end processing		2x (1.5 ... 16 mm²)
• stranded		2x (1.5 ... 25 mm²)

Type of connectable conductor cross-sections at AWG conductors for main contacts for box terminal <ul style="list-style-type: none"> • using the back clamping point • using the front clamping point • using both clamping points 		16 ... 2 18 ... 2 2x (16 ... 2)
Type of connectable conductor cross-sections 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-sections at AWG conductors <ul style="list-style-type: none"> • for auxiliary contacts • for auxiliary contacts finely stranded with core end processing 		2x (20 ... 14) 2x (20 ... 16)

Ambient conditions

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

Certificates/approvals

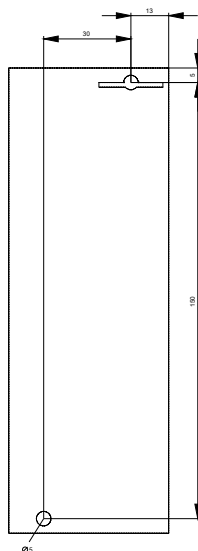
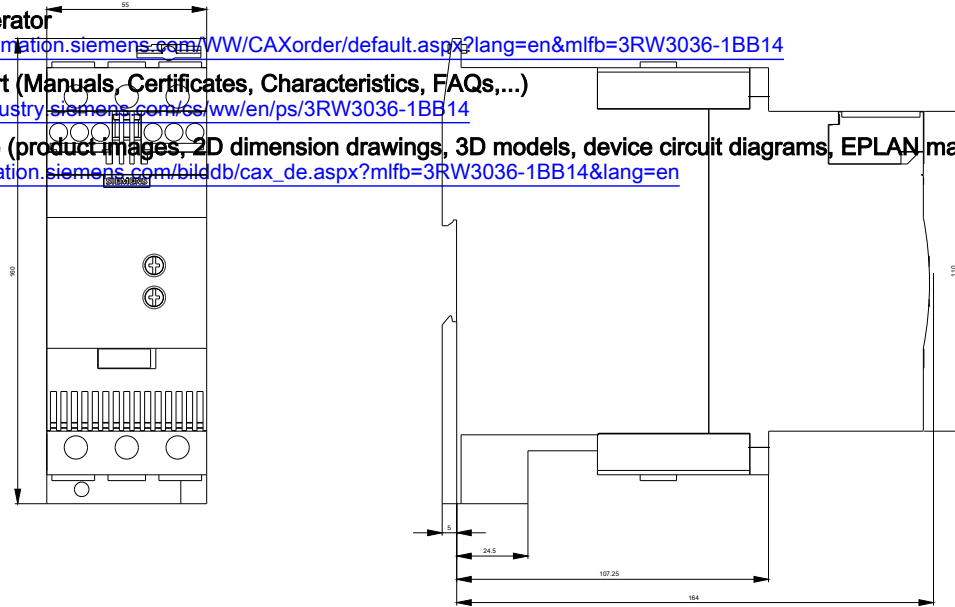
General Product Approval	EMC	Declaration of Conformity
 CCC	 EAC	 EG-Konf.
 CSA	 UL	 C-Tick

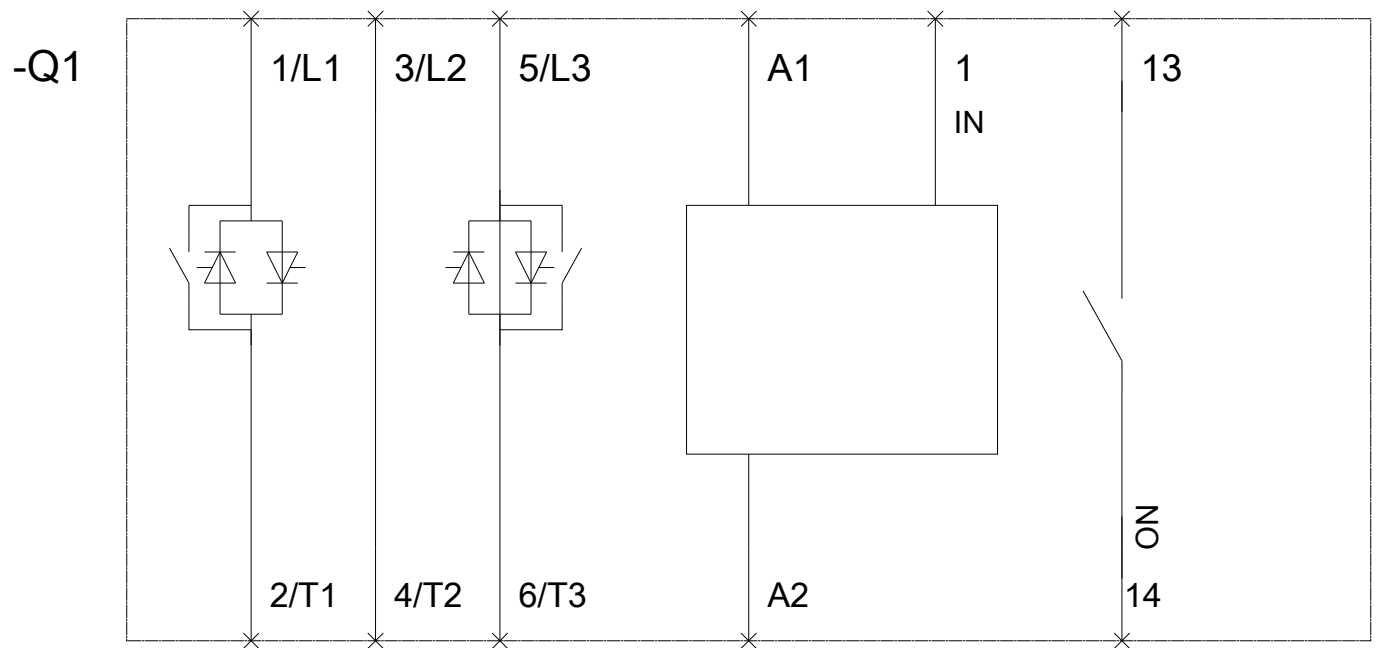
Test Certificates	other
Typprüfbescheinigung/Werkszeugnis	sonstige
spezielle Prüfbescheinigungen	Bestätigungen
n	Umweltbestätigung

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 • at 460/480 V <ul style="list-style-type: none"> — at standard circuit at 50 °C rated value 	hp	15
	hp	30

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)**<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RW3036-1BB14>**Cax online generator**<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW3036-1BB14>**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**<https://support.industry.siemens.com/cs/ww/en/ps/3RW3036-1BB14>**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)**http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW3036-1BB14&lang=en



last modified:

02/10/2017