

SIRIUS SOFT STARTER, S3, 106A, 75KW/500V, 40 DEGR., AC 400-600V, AC/DC 110-230V, SCREW TERMINALS



General technical data:

product brand name		SIRIUS
<ul style="list-style-type: none"> • Product equipment Integrated bypass contact system 		Yes
<ul style="list-style-type: none"> • Product feature 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 		No
<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 		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 starters for standard applications
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Operating current		
• at 40 °C rated value	A	106
• at 50 °C rated value	A	98
• at 60 °C rated value	A	90
Mechanical power output for three-phase motors		
• at 400 V		
— at standard circuit at 40 °C rated value	W	55 000
• at 500 V		
— at standard circuit at 40 °C rated value	W	75 000
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
Minimum load [% of IM]	%	20
Adjustable motor current for motor overload protection minimum rated value	A	46
Continuous operating current [% of I_e] at 40 °C	%	115
Power loss [W] at operating current at 40 °C during operation typical	W	21

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	%	-15
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	%	-15
Relative positive tolerance of the control supply voltage at DC	%	10
Display version for fault signal		red

Mechanical data:

Size of engine control device		S3
Width	mm	70
Height	mm	170
Depth	mm	190
Mounting type		screw and snap-on mounting
Mounting position		With additional fan: With vertical mounting surface +/- 90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back Without additional fan: With vertical mounting surface +/- 10° rotatable, with vertical mounting surface +/- 10° t
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		2
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		
• solid		2x (2.5 ... 16 mm ²)
• finely stranded with core end processing		2.5 ... 35 mm ²
• stranded		4 ... 70 mm ²
Type of connectable conductor cross-sections for main contacts for box terminal using the back clamping point		
• solid		2x (2.5 ... 16 mm ²)
• finely stranded with core end processing		2.5 ... 50 mm ²
• stranded		10 ... 70 mm ²
Type of connectable conductor cross-sections for main contacts for box terminal using both clamping points		
• solid		2x (2.5 ... 16 mm ²)
• finely stranded with core end processing		2x (2.5 ... 35 mm ²)
• stranded		2x (10 ... 50 mm ²)

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 		2x (10 ... 1/0) 2x (10 ... 1/0) 10 ... 2/0
Type of connectable conductor cross-sections for DIN cable lug for main contacts <ul style="list-style-type: none"> • finely stranded • stranded 		2 x (10 ... 50 mm ²) 2x (10 ... 70 mm 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 main contacts • for auxiliary contacts • for auxiliary contacts finely stranded with core end processing 		2x (7 ... 1/0) 2x (20 ... 14) 2x (20 ... 16)

Ambient conditions:

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

Certificates/ approvals:

General Product Approval	EMC	For use in hazardous locations
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Declaration of Conformity	Test Certificates	Shipping Approval
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[Typprüfbescheinigung/Werkszeugnis](#)



Shipping Approval	other
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[Umweltbestätigung](#)

[Bestätigungen](#)

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 	hp	75
<ul style="list-style-type: none"> at 575/600 V <ul style="list-style-type: none"> at standard circuit at 50 °C rated value 	hp	75
Contact rating of auxiliary contacts according to UL		B300 / R300

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=3RW40471BB15>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RW40471BB15>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW40471BB15&lang=en

