

SIRIUS SOFT STARTER, S0, 38A, 22KW/500V, 40 DEGR., AC 400-600V, AC/DC 24V, SCREW TERMINALS

General technical data

product brandname		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 starter
Operating current		
<ul style="list-style-type: none"> at 40 °C rated value 	A	38
<ul style="list-style-type: none"> at 50 °C rated value 	A	34
<ul style="list-style-type: none"> at 60 °C rated value 	A	31
Mechanical power output for three-phase motors		
<ul style="list-style-type: none"> at 400 V <ul style="list-style-type: none"> — at standard circuit at 40 °C rated value 	W	18 500
<ul style="list-style-type: none"> at 500 V <ul style="list-style-type: none"> — at standard circuit at 40 °C rated value 	W	22 000
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	23
Continuous operating current [% of I _e] at 40 °C	%	115
Power loss [W] at operating current at 40 °C during operation typical	W	19

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 rated value	V	24
• at 60 Hz rated value	V	24
Relative negative tolerance of the control supply voltage at AC at 60 Hz	%	-20
Relative positive tolerance of the control supply voltage at AC at 60 Hz	%	20
Control supply voltage 1 at DC rated value	V	24
Relative negative tolerance of the control supply voltage at DC	%	-20
Relative positive tolerance of the control supply voltage at DC	%	20
Display version for fault signal		red

Mechanical data

Size of engine control device		S0
Width	mm	45
Height	mm	125
Depth	mm	155
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	15
• 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		
<ul style="list-style-type: none"> • for main current circuit • for auxiliary and control current circuit 		screw-type terminals 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		
<ul style="list-style-type: none"> • solid • finely stranded with core end processing 		2x (1 ... 2.5 mm ²), 2x (2.5 ... 6 mm ²), max. 1x 10 mm ² 2x (1 ... 2.5 mm ²), 2x (2.5 ... 6 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 front clamping point 		1x 8, 2x (16 ... 10)
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 -40 ... +80
Derating temperature	°C	40
Protection class IP		IP20

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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other

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[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 • at 575/600 V <ul style="list-style-type: none"> — at standard circuit at 50 °C rated value 	hp	25
	hp	30
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)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RW4028-1BB05>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW4028-1BB05>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RW4028-1BB05>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW4028-1BB05&lang=en

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