SIEMENS

Data sheet 3RW30 37-1BB04

SIRIUS soft starter S2 63 A, 30 kW/400 V, 40 $^{\circ}$ C 200-480 V AC, 24 V AC/DC Screw terminals



General technical data			
Product brand name	SIRIUS		
Product feature			
 integrated bypass contact system 	Yes		
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		
Reference identifier acc. to DIN EN 61346-2	Q		
Reference indentifier acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750	G		

Product designation

Soft starter

Operating current		
• at 40 °C rated value	Α	63
• at 50 °C rated value	Α	58
• at 60 °C rated value	Α	53
Mechanical power output for three-phase motors		
● at 230 V		
— at standard circuit at 40 °C rated value	W	18 500
● at 400 V		
— at standard circuit at 40 °C rated value	W	30 000
Yielded mechanical performance [hp] for three-phase	hp	15
AC motor at 200/208 V at standard circuit at 50 °C		
rated value		
Operating frequency rated value	Hz	50 60
Relative negative tolerance of the operating	%	-10
frequency Relative positive tolerance of the operating frequency	%	10
Operating voltage at standard circuit rated value	70 V	200 480
Relative negative tolerance of the operating voltage		-15
at standard circuit	70	
Relative positive tolerance of the operating voltage at	%	10
standard circuit		
Minimum load [%]	%	10
Continuous operating current [% of le] at 40 °C	%	115
Power loss [W] at operating current at 40 °C during operation typical	W	12
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	%	-10
voltage frequency		
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	%	-10
voltage at AC at 60 Hz		
Relative positive tolerance of the control supply	%	10
voltage at AC at 60 Hz		
Control supply voltage 1 at DC rated value	V	24
Relative negative tolerance of the control supply	%	-10

voltage at DC

Size of engine control device Width mm 55 mm 160 Depth mm 170 Mounting type Mounting position Mith vertical mounting surface +/- 10" rotatable, 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 downwards mm 30 with elength maximum mm 40 Wire length maximum mm 40 Wire length maximum mm 300 Number of poles for main current circuit for auxiliary and control current circuit screw-type terminals Number of NC contacts for auxiliary contacts Number of NO contacts for auxiliary contacts Type of connectable conductor cross-sections for main contacts for box terminal using the front clamping point solid finely stranded with core end processing formain contacts for box terminal using the back clamping point solid finely stranded with core end processing formain contacts for box terminal using the broad clamping point solid finely stranded with core end processing formain contacts for box terminal using the broad clamping point solid finely stranded with core end processing formain contacts for box terminal using the broad clamping point solid finely stranded with core end processing formain contacts for box terminal using the formain contacts for box terminal using the formain contacts for box terminal using the broad clamping point solid finely stranded with core end processing formain contacts for box terminal using both clamping point solid finely stranded with core end processing formain contacts for box terminal using both clamping point formain contacts for box terminal using both clamping point formain contacts for box terminal using both clamping points finely stranded with core end processing formain contacts for box terminal using both clamping points finely stranded with core end processing formal contacts for box terminal using both clamping point formal contacts for box terminal using both clamping point formal contacts for box terminal using both clamping po			
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Size of engine control device Width mm 55 mm 160 Depth mm 170 Mounting type Mounting position Mith vertical mounting surface +/- 10" rotatable, 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 downwards mm 30 with elength maximum mm 40 Wire length maximum mm 40 Wire length maximum mm 300 Number of poles for main current circuit for auxiliary and control current circuit screw-type terminals Number of NC contacts for auxiliary contacts Number of NO contacts for auxiliary contacts Type of connectable conductor cross-sections for main contacts for box terminal using the front clamping point solid finely stranded with core end processing formain contacts for box terminal using the back clamping point solid finely stranded with core end processing formain contacts for box terminal using the broad clamping point solid finely stranded with core end processing formain contacts for box terminal using the broad clamping point solid finely stranded with core end processing formain contacts for box terminal using the broad clamping point solid finely stranded with core end processing formain contacts for box terminal using the formain contacts for box terminal using the formain contacts for box terminal using the broad clamping point solid finely stranded with core end processing formain contacts for box terminal using both clamping point solid finely stranded with core end processing formain contacts for box terminal using both clamping point formain contacts for box terminal using both clamping point formain contacts for box terminal using both clamping points finely stranded with core end processing formain contacts for box terminal using both clamping points finely stranded with core end processing formal contacts for box terminal using both clamping point formal contacts for box terminal using both clamping point formal contacts for box terminal using both clamping po	Display version for fault signal		red
Width	Mechanical data		
Height mm 160 Depth mm 170 Mounting type	Size of engine control device		S2
Depth 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 Mounting surface +/-10* til	Width	mm	55
Mounting type Mounting position With vertical mounting surface +/-10* rotatable, 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 • at the side • downwards Wire length maximum Mumber of poles for main current circuit **Onnections/Terminals** Type of electrical connection • for main current circuit • for auxiliary and control current circuit **Screw-type terminals** Type of Contacts for auxiliary contacts Number of NC contacts for auxiliary contacts Number of NC contacts for auxiliary contacts Type of connectable conductor cross-sections for main contacts for box terminal using the front clamping point • solid • finely stranded with core end processing • stranded Type of connectable conductor cross-sections for main contacts for box terminal using the back clamping point • solid • finely stranded with core end processing • stranded Type of connectable conductor cross-sections for main contacts for box terminal using both clamping point • solid • finely stranded with core end processing • stranded Type of connectable conductor cross-sections for main contacts for box terminal using both clamping point • solid • finely stranded with core end processing • stranded Type of connectable conductor cross-sections for main contacts for box terminal using both clamping points • solid • finely stranded with core end processing • stranded Type of connectable conductor cross-sections for main contacts for box terminal using both clamping points • solid • finely stranded with core end processing • stranded Type of connectable conductor cross-sections for main contacts for box terminal using both clamping points • solid • finely stranded with core end processing	Height	mm	160
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vertical mounting surface +/- 10° tiltable to the front and back Required spacing with side-by-side mounting • upwards • at the side • downwards Wire length maximum Number of poles for main current circuit **Onnections/Terminals** Type of electrical connection • for main current circuit **Or main current circuit **Number of NC contacts for auxiliary contacts Number of NC contacts for auxiliary contacts Type of connectable conductor cross-sections for main contacts for box terminal using the front clamping point • solid • finely stranded with core end processing • stranded Type of connectable conductor cross-sections for main contacts for box terminal using the back clamping point • solid • finely stranded with core end processing • stranded Type of connectable conductor cross-sections for main contacts for box terminal using the back clamping point • solid • finely stranded with core end processing • stranded Type of connectable conductor cross-sections for main contacts for box terminal using the back clamping point • solid • finely stranded with core end processing • stranded Type of connectable conductor cross-sections for main contacts for box terminal using both clamping points • solid • finely stranded with core end processing • stranded Type of connectable conductor cross-sections for main contacts for box terminal using both clamping points • solid • finely stranded with core end processing • stranded Type of connectable conductor cross-sections for main contacts for box terminal using both clamping points • solid • finely stranded with core end processing	Mounting type		screw and snap-on mounting
• upwards • at the side • downwards • downwards • mm 40 Wire length maximum m 300 Number of poles for main current circuit Zonnections/Terminals Type of electrical connection • for main current circuit • for auxiliary and control current circuit screw-type terminals Number of NC contacts for auxiliary contacts Number of NC contacts for auxiliary contacts Type of connectable conductor cross-sections for main contacts for box terminal using the front clamping point • solid • finely stranded with core end processing • stranded Type of connectable conductor cross-sections for main contacts for box terminal using the back clamping point • solid • finely stranded with core end processing • stranded Type of connectable conductor cross-sections for main contacts for box terminal using both clamping point • solid	Mounting position		vertical mounting surface +/- 10° tiltable to the front
at the side downwards mm do man do m	Required spacing with side-by-side mounting		
of downwards	• upwards	mm	60
Wire length maximum Number of poles for main current circuit 200nnections/Terminals Type of electrical connection • for main current circuit • for auxiliary and control current circuit Number of NC contacts for auxiliary contacts Number of NO contacts for auxiliary contacts 1 Number of CO contacts for auxiliary contacts Type of connectable conductor cross-sections for main contacts for box terminal using the front clamping point • solid • finely stranded with core end processing • stranded Type of connectable conductor cross-sections for main contacts for box terminal using the back clamping point • solid • finely stranded with core end processing • stranded Type of connectable conductor cross-sections for main contacts for box terminal using the back clamping point • solid • finely stranded with core end processing • stranded Type of connectable conductor cross-sections for main contacts for box terminal using the back clamping point • solid • finely stranded with core end processing • stranded Type of connectable conductor cross-sections for main contacts for box terminal using both clamping points • solid • solid • finely stranded with core end processing • stranded 2x (1.5 16 mm²) 2x (1.5 16 mm²) 2x (1.5 16 mm²)	• at the side	mm	30
Number of poles for main current circuit Sonnections/Terminals	• downwards	mm	40
Type of electrical connection • for main current circuit • for auxiliary and control current circuit Number of NC contacts for auxiliary contacts Number of CO contacts for auxiliary contacts Type of connectable conductor cross-sections for main contacts for box terminal using the front clamping point • solid • finely stranded with core end processing • stranded Type of connectable conductor cross-sections for main contacts for box terminal using the back clamping point • solid • stranded Type of connectable conductor cross-sections for main contacts for box terminal using the back clamping point • solid • solid • solid • solid • solid • stranded Type of connectable conductor cross-sections for main contacts for box terminal using both clamping points • solid • finely stranded with core end processing • solid • finely stranded with core end processing • solid • finely stranded with core end processing	Wire length maximum	m	300
Type of electrical connection • for main current circuit • for auxiliary and control current circuit Number of NC contacts for auxiliary contacts Number of NO contacts for auxiliary contacts 1 Number of CO contacts for auxiliary contacts 1 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 • finely stranded with core end processing • stranded 1.5 25 mm² 1.5 35 mm² 2x (1.5 16 mm²) • solid • finely stranded with core end processing • finely stranded with core end processing • stranded 1.5 25 mm² 1.5 35 mm² 2x (1.5 16 mm²) • finely stranded with core end processing • stranded 1.5 35 mm² 2x (1.5 16 mm²) • solid • finely stranded with core end processing for main contacts for box terminal using both clamping points • solid • solid • solid • solid • finely stranded with core end processing • stranded 2x (1.5 16 mm²) 2x (1.5 16 mm²) - solid • finely stranded with core end processing • solid • finely stranded with core end processing	Number of poles for main current circuit		3
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Type of connectable conductor cross-sections for main contacts for box terminal using the back clamping point • solid • finely stranded with core end processing • stranded Type of connectable conductor cross-sections for main contacts for box terminal using both clamping points • solid • solid • finely stranded with core end processing 2x (1.5 16 mm²) 2x (1.5 16 mm²) 2x (1.5 16 mm²)	• finely stranded with core end processing		1.5 25 mm²
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 finely stranded with core end processing stranded 1.5 25 mm² Type of connectable conductor cross-sections for main contacts for box terminal using both clamping points solid finely stranded with core end processing 1.5 25 mm² 2.5 35 mm² 2.5 35 mm² 2.5 35 mm² 2.5 16 mm² 2.7 (1.5 16 mm²) 2.7 (1.5 16 mm²) 	main contacts for box terminal using the back		
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Type of connectable conductor cross-sections for main contacts for box terminal using both clamping points • solid • finely stranded with core end processing 2x (1.5 16 mm²) 2x (1.5 16 mm²)	• finely stranded with core end processing		1.5 25 mm²
main contacts for box terminal using both clamping points • solid • finely stranded with core end processing 2x (1.5 16 mm²) 2x (1.5 16 mm²)	• stranded		1.5 35 mm²
 solid finely stranded with core end processing 2x (1.5 16 mm²) 2x (1.5 16 mm²) 	main contacts for box terminal using both clamping		
• finely stranded with core end processing 2x (1.5 16 mm²)			2x (1.5 16 mm²)
	finely stranded with core end processing		
	• stranded		2x (1.5 25 mm²)

Type of connectable conductor cross-sections at	
AWG conductors for main contacts for box terminal	
 using the back clamping point 	16 2
using the front clamping point	18 2
 using both clamping points 	2x (16 2)
Type of connectable conductor cross-sections for auxiliary contacts	
• solid	2x (0.5 2.5 mm²)
 finely stranded with core end processing 	2x (0.5 1.5 mm²)
Type of connectable conductor cross-sections at AWG conductors	
• for auxiliary contacts	2x (20 14)
 for auxiliary contacts finely stranded with core end processing 	2x (20 16)

Ambient conditions			
Installation altitude at height above sea level	m	5 000	
Environmental category			
● during transport acc. to IEC 60721		3K6 (no formation of ice, no condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6	
• during storage acc. to IEC 60721		3K6 (no formation of ice, no condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6	
 during operation acc. to IEC 60721 		3K6 (no formation of ice, no condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6	
Ambient temperature			
during operation	°C	-25 + 60	
during storage	°C	-40 + 80	
Derating temperature	°C	40	
Protection class IP		IP00	

Certificates/approvals

General Product Approval EMC Declaration of Conformity













Test Certificates		other		Railway	
Type Test Certificates/Test	Special Test Certificate	Miscellaneous	Confirmation	Vibration and Shock	
Report					

UL/CSA ratings			
Yielded mechanical performance [hp] for three-phase			
AC motor			
● at 220/230 V			
 at standard circuit at 50 °C rated value 	hp	20	
● at 460/480 V			
— at standard circuit at 50 °C rated value	hp	40	
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=3RW3037-1BB04

Cax online generator

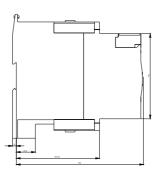
 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RW}\underline{3037-1BB04}$

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

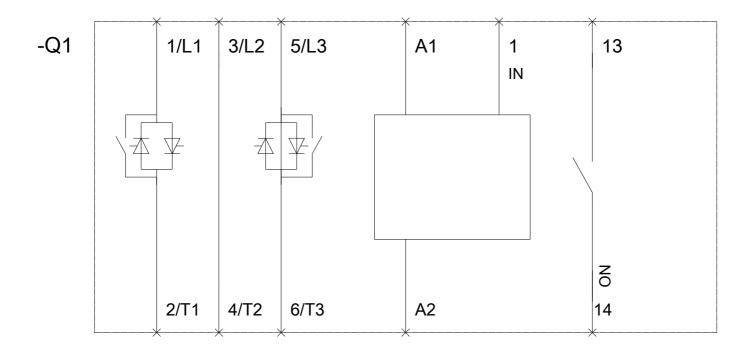
https://support.industry.siemens.com/cs/ww/en/ps/3RW3037-1BB04

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW3037-1BB04&lang=en









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