SIEMENS

Data sheet 3RW40 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 		Yes
 motor overload protection 		Yes
 Evaluation of thermistor motor protection 		No
External reset		Yes
 Adjustable current limitation 		Yes
• inside-delta circuit		No
Product component Motor brake output		No
Insulation voltage rated value	V	600
Degree of pollution		3, acc. to IEC 60947-4-2
Reference code acc. to DIN EN 61346-2		Q
Reference code acc. to DIN 40719 extended		G
according to IEC 204-2 acc. to IEC 750		

Power Electronics		
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 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 [%]	%	20
Adjustable motor current for motor overload protection minimum rated value	Α	26
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 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 50 Hz	%	-20
Relative positive tolerance of the control supply voltage at AC at 50 Hz	%	20

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		S2
Width	mm	55
(height)	mm	160
Depth	mm	170
(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
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 (1.5 16 mm²)
 finely stranded with core end processing 	0.75 25 mm²
• stranded	0.75 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	
 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	2x (20 16)
end processing	

Ambient conditions		
Installation altitude at height above sea level	m	5 000
Environmental category		
 during transport acc. to IEC 60721 		2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m)
• during storage acc. to IEC 60721		1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get inside the devices), 1M4
 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

General Product Approval

EMC

For use in hazardous locations













Declaration of Conformity

Test Certificates

Shipping Approval



Miscellaneous

Special Test Certificate

Type Test Certificates/Test Report





other Railway

<u>Confirmation</u> <u>Vibration and Shock</u>

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=3RW4037-1BB04

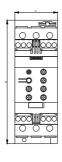
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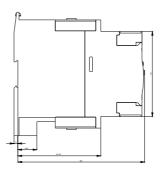
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW4037-1BB04

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

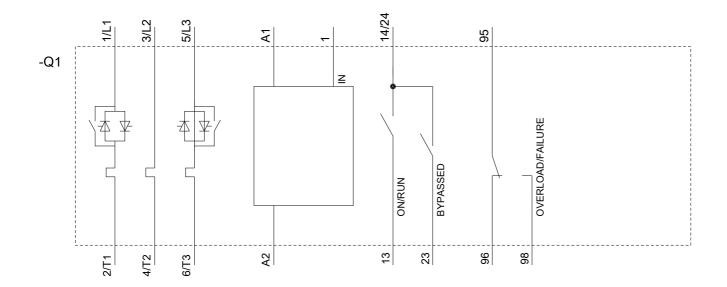
https://support.industry.siemens.com/cs/ww/en/ps/3RW4037-1BB04

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW4037-1BB04&lang=en









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