# **SIEMENS**

Data sheet 3RW40 37-1BB14

SIRIUS soft starter S2 63 A, 30 kW/400 V, 40  $^{\circ}$ C 200-480 V AC, 110-230 V AC/DC Screw terminals



General technical data		
Product brand name		SIRIUS
Product feature		
<ul> <li>integrated bypass contact system</li> </ul>		Yes
Thyristors		Yes
Product function		
<ul> <li>Intrinsic device protection</li> </ul>		Yes
<ul> <li>motor overload protection</li> </ul>		Yes
<ul> <li>Evaluation of thermistor motor protection</li> </ul>		No
External reset		Yes
<ul> <li>Adjustable current limitation</li> </ul>		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 according to IEC 204-2 acc. to IEC 750		G

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	%	-10
frequency	%	10
Relative positive tolerance of the operating frequency  Operating voltage at standard circuit rated value	70 V	200 480
Relative negative tolerance of the operating voltage		-15
at standard circuit	%	-15
Relative positive tolerance of the operating voltage at standard circuit	%	10
Minimum load [%]	%	20
Adjustable motor current for motor overload	Α	26
protection minimum rated value		
Continuous operating current [% of le] at 40 °C	%	115
Power loss [W] at operating current at 40 °C during	W	12
operation typical		
Control circuit/ Control		
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	%	10
voltage frequency	V	110 230
Control supply voltage 1 at AC at 50 Hz  Control supply voltage 1 at AC at 60 Hz	V	110 230
Relative negative tolerance of the control supply		-15
voltage at AC at 50 Hz		-10
Relative positive tolerance of the control supply voltage at AC at 50 Hz	%	10

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		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
<ul><li>downwards</li></ul>	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
<ul> <li>for auxiliary and control current circuit</li> </ul>	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)
<ul> <li>finely stranded with core end processing</li> </ul>	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)

<ul> <li>finely stranded with core end processing</li> </ul>	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)
<ul> <li>finely stranded with core end processing</li> </ul>	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> <li>using the back clamping point</li> </ul>	16 2
<ul> <li>using the front clamping point</li> </ul>	18 2
<ul><li>using both clamping points</li></ul>	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			
<ul> <li>during transport acc. to IEC 60721</li> </ul>		2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m)	
<ul> <li>during storage acc. to IEC 60721</li> </ul>		1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get inside the devices), 1M4	
<ul> <li>during operation acc. to IEC 60721</li> </ul>		3K6 (no formation of ice, no condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6	
Ambient temperature			
<ul> <li>during operation</li> </ul>	°C	-25 <b>+</b> 60	
<ul><li>during storage</li></ul>	°C	-40 <b>+</b> 80	
Derating temperature	°C	40	
Protection class IP		IP00	

## Certificates/ approvals

#### **General Product Approval**

**EMC** 

For use in hazardous locations













**Declaration of Conformity** 

**Test Certificates** 

Marine / Shipping



Miscellaneous

Special Test Certificate

Type Test Certificates/Test Report



LRS



ping	Marine / Ship-	other	Railway
	ping		



Confirmation Vibration and Shock

### UL/CSA ratings

Yielded mechanical performance [hp] for three-phase AC motor		
● at 220/230 V		
<ul> <li>— at standard circuit at 50 °C rated value</li> </ul>	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,...)

www.siemens.com/sirius/catalogs

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RW4037-1BB14

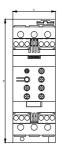
Cax online generator

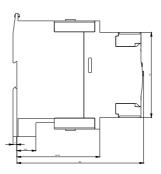
 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RW4037-1BB1440037-1BB1440037-1BB144003-1BB144000-1BB144000-1BB14400-1BB1400-1BB1400-1BB1400-1BB14000-1BB1$ 

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

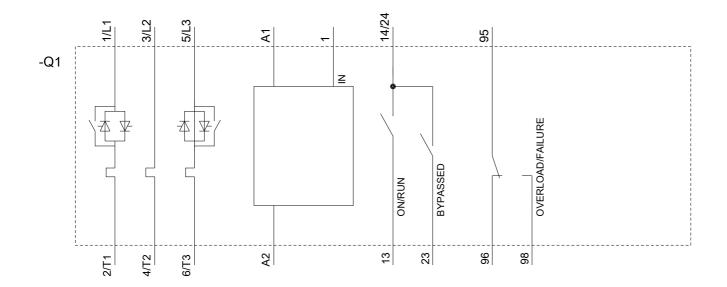
https://support.industry.siemens.com/cs/ww/en/ps/3RW4037-1BB14

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RW4037-1BB14&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RW4037-1BB14&lang=en</a>









last modified: 01/08/2020