## SIEMENS

## Data sheet

## 3RW4037-1BB14



SIRIUS soft starter S2 63 A, 30 kW/400 V, 40  $^{\circ}\text{C}$  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		
operational current				
<ul> <li>at 40 °C rated value</li> </ul>	А	63		
<ul> <li>at 50 °C rated value</li> </ul>	А	58		
• at 60 °C rated value	А	53		
yielded mechanical performance for 3-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 3-phase AC motor at 200/208 V at standard circuit at 50 °C rated value	hp	15		
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	%	10		
relative positive tolerance of the operating voltage at	/0	10		

	_	
standard circuit		22
minimum load [%]	- %	20
adjustable motor current for motor overload protection minimum rated value	A	26
continuous operating current [% of le] at 40 °C	%	115
power loss [W] at operational current at 40 °C during	- 70 W	12
operation typical	٧V	12
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 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 50 Hz	%	-15
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		
Mechanical Gata		
size of engine control device	_	\$2
	mm	S2 55
size of engine control device	mm	
size of engine control device width	-	55
size of engine control device width height	mm	55 160
size of engine control device width height depth	mm	55 160 170
size of engine control device width height depth fastening method	mm	<ul> <li>55</li> <li>160</li> <li>170</li> <li>screw and snap-on mounting</li> <li>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</li> </ul>
size of engine control device width height depth fastening method mounting position	mm	<ul> <li>55</li> <li>160</li> <li>170</li> <li>screw and snap-on mounting</li> <li>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</li> </ul>
size of engine control device width height depth fastening method mounting position	mm	55 160 170 screw and snap-on mounting 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
size of engine control device width height depth fastening method mounting position required spacing with side-by-side mounting • upwards • at the side • downwards	mm	55         160         170         screw and snap-on mounting         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         60
size of engine control device width height depth fastening method mounting position required spacing with side-by-side mounting • upwards • at the side • downwards wire length maximum	mm mm mm mm	<ul> <li>55</li> <li>160</li> <li>170</li> <li>screw and snap-on mounting</li> <li>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</li> <li>60</li> <li>30</li> <li>40</li> <li>300</li> </ul>
size of engine control device         width         height         depth         fastening method         mounting position         required spacing with side-by-side mounting         • upwards         • at the side         • downwards         wire length maximum         number of poles for main current circuit	mm mm mm mm	55         160         170         screw and snap-on mounting         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         60         30         40
size of engine control device width height depth fastening method mounting position required spacing with side-by-side mounting • upwards • at the side • downwards wire length maximum	mm mm mm mm	<ul> <li>55</li> <li>160</li> <li>170</li> <li>screw and snap-on mounting</li> <li>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</li> <li>60</li> <li>30</li> <li>40</li> <li>300</li> </ul>
size of engine control device width height depth fastening method mounting position required spacing with side-by-side mounting • upwards • at the side • downwards wire length maximum number of poles for main current circuit Connections/ Terminals type of electrical connection	mm mm mm mm	55         160         170         screw and snap-on mounting         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         60         30         40         300         3
size of engine control device width height depth fastening method mounting position required spacing with side-by-side mounting • upwards • at the side • downwards wire length maximum number of poles for main current circuit Connections/ Terminals type of electrical connection • for main current circuit	mm mm mm mm	55         160         170         screw and snap-on mounting         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         60         30         40         300         3
size of engine control device width height depth fastening method mounting position required spacing with side-by-side mounting • upwards • at the side • downwards wire length maximum number of poles for main current circuit Connections/ Terminals type of electrical connection • for main current circuit • for auxiliary and control circuit	mm mm mm mm	55         160         170         screw and snap-on mounting         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         60         30         40         300         3         screw-type terminals         screw-type terminals
size of engine control device width height depth fastening method mounting position required spacing with side-by-side mounting • upwards • at the side • downwards wire length maximum number of poles for main current circuit Connections/ Terminals type of electrical connection • for main current circuit • for auxiliary and control circuit number of NC contacts for auxiliary contacts	mm mm mm mm	55         160         170         screw and snap-on mounting         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         60         30         40         300         3         screw-type terminals         screw-type terminals         0
size of engine control device width height depth fastening method mounting position required spacing with side-by-side mounting • upwards • at the side • downwards wire length maximum number of poles for main current circuit Connections/ Terminals type of electrical connection • for main current circuit • for auxiliary and control circuit number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts	mm mm mm mm	55         160         170         screw and snap-on mounting         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         60         30         40         300         3         screw-type terminals         screw-type terminals         0         2
size of engine control device width height depth fastening method mounting position required spacing with side-by-side mounting • upwards • at the side • downwards wire length maximum number of poles for main current circuit Connections/ Terminals type of electrical connection • for main current circuit • for auxiliary and control circuit number of NC contacts for auxiliary contacts number of CO contacts for auxiliary contacts number of CO contacts for auxiliary contacts	mm mm mm mm	55         160         170         screw and snap-on mounting         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         60         30         40         300         3         screw-type terminals         screw-type terminals         0
size of engine control device width height depth fastening method mounting position required spacing with side-by-side mounting • upwards • at the side • downwards wire length maximum number of poles for main current circuit Connections/ Terminals type of electrical connection • for main current circuit • for auxiliary and control circuit number of NC contacts for auxiliary contacts number of CO 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	mm mm mm mm	55         160         170         screw and snap-on mounting         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         60         30         40         300         3         screw-type terminals         screw-type terminals         0         2         1
size of engine control device width height depth fastening method mounting position required spacing with side-by-side mounting • upwards • at the side • downwards wire length maximum number of poles for main current circuit Connections/ Terminals type of electrical connection • for main current circuit • for auxiliary and control circuit number of NC contacts for auxiliary contacts number of NO 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	mm mm mm mm	55         160         170         screw and snap-on mounting         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         60         30         40         300         3         screw-type terminals         screw-type terminals         0         2         1         2x (1.5 16 mm²)
size of engine control device width height depth fastening method mounting position required spacing with side-by-side mounting • upwards • at the side • downwards wire length maximum number of poles for main current circuit Connections/ Terminals type of electrical connection • for main current circuit • for auxiliary and control circuit number of NC contacts for auxiliary contacts number of CO 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	mm mm mm mm	55         160         170         screw and snap-on mounting         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         60         30         40         300         3         screw-type terminals         screw-type terminals         0         2         1

main contacts for box terminal using the	hack				
clamping point	buok				
• solid			2x (1.5 16 m	nm²)	
<ul> <li>finely stranded with core end processi</li> </ul>	ng		1.5 25 mm²		
stranded			1.5 35 mm²		
type of connectable conductor cross-sec main contacts for box terminal using bot points					
solid			2x (1.5 16 m	nm²)	
<ul> <li>finely stranded with core end processi</li> </ul>	ng		2x (1.5 16 m	nm²)	
stranded			2x (1.5 25 m	nm²)	
type of connectable conductor cross-sec cables 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-sec auxiliary contacts	tions for				
• solid			2x (0.5 2.5 r	,	
<ul> <li>finely stranded with core end processi</li> </ul>			2x (0.5 1.5 r	nm²)	
type of connectable conductor cross-sec cables	tions at AWG				
<ul> <li>for auxiliary contacts</li> </ul>			2x (20 14)		
<ul> <li>for auxiliary contacts finely stranded w processing</li> </ul>	ith core end		2x (20 16)		
Ambient conditions			-		
installation altitude at height above sea le	evel	m	5 000		
environmental category					
<ul> <li>during transport acc. to IEC 60721</li> </ul>			2K2, 2C1, 2S1	, 2M2 (max. fall heigh	t 0.3 m)
• during storage acc. to IEC 60721			1S2 (sand mus	isional condensation), st not get inside the de	evices), 1M4
during operation acc. to IEC 60721				tion of ice, no condens nd must not get into th	
ambient temperature					
<ul> <li>during operation</li> </ul>		°C	-25 +60		
during storage		°C	-40 +80		
derating temperature		°C	40		
protection class IP on the front acc. to IE			IP20		
touch protection on the front acc. to IEC	60529		finger-safe, for	vertical contact from	the front
Certificates/ approvals					
General Product Approval				EMC	For use in hazard- ous locations
	<b></b>			<b>A</b>	Ē
	৻৻৻		EHE		(Ex)
can UL	01			i na m	ATEA
Declaration of Conformity	Test Certificat	es		Marine / Shipping	
				and a mpping	
CE <u>Miscellaneous</u>	<u>Special Test Ce</u> <u>ate</u>		<u>pe Test Certific-</u> tes/Test Report	Lloyd's Register	$(\mathfrak{T})$
EG-Konf.				LRS	PRS
Marine / Shipping other	Railway				



UL/CSA ratings		
yielded mechanical performance [hp] for 3-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		
<ul> <li>— at standard circuit at 50 °C rated value</li> </ul>	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,...)

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

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

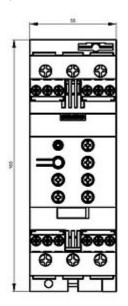
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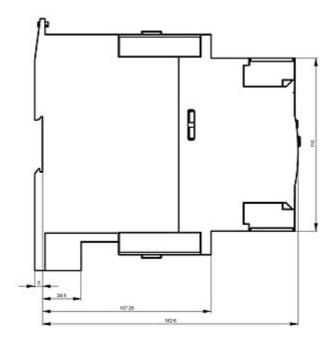
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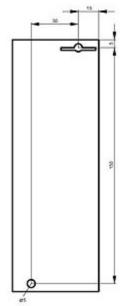
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

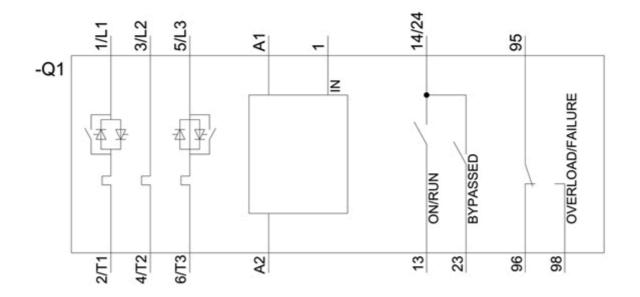
https://support.industry.siemens.com/cs/ww/en/ps/3RW4037-1BB14

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









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