## **SIEMENS**

Data sheet 3RW30 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



Product feature  integrated bypass contact system Thyristors  Product function Intrinsic device protection Thoristor overload protection Evaluation of thermistor motor protection External reset Adjustable current limitation Thoristor overload protection  Adjustable current limitation Thoristor overload protection  No  External reset No  Adjustable current limitation Inside-delta circuit  Product component Motor brake output Insulation voltage rated value  V  600  Degree of pollution  SIRIUS  Yes  Yes  No  No  No  No  No  No  No  O  O  O  O  O  O  O  O  O  O  O  O  O	General technical data				
<ul> <li>integrated bypass contact system</li> <li>Thyristors</li> <li>Product function</li> <li>Intrinsic device protection</li> <li>motor overload protection</li> <li>Evaluation of thermistor motor protection</li> <li>External reset</li> <li>Adjustable current limitation</li> <li>inside-delta circuit</li> <li>Product component Motor brake output</li> <li>Insulation voltage rated value</li> </ul> Yes Yes Yes Yes Yes Yes Yes Yes Yes Yo No No No No Product component Motor brake output No Insulation voltage rated value V 600	Product brand name		SIRIUS		
Thyristors  Product function  Intrinsic device protection  Insulation voltage rated value  Tyes  Yes  Yes  Yes  Yes  Yes  Yes  No  No  No  No  No  No  No  No  No  N	Product feature				
Product function  Intrinsic device protection  motor overload protection  Evaluation of thermistor motor protection  External reset  Adjustable current limitation  inside-delta circuit  No  Product component Motor brake output  Insulation voltage rated value	<ul> <li>integrated bypass contact system</li> </ul>		Yes		
<ul> <li>Intrinsic device protection</li> <li>motor overload protection</li> <li>Evaluation of thermistor motor protection</li> <li>External reset</li> <li>Adjustable current limitation</li> <li>inside-delta circuit</li> <li>Product component Motor brake output</li> <li>Insulation voltage rated value</li> <li>No</li> <li>No</li> <li>600</li> </ul>	<ul><li>Thyristors</li></ul>		Yes		
<ul> <li>motor overload protection</li> <li>Evaluation of thermistor motor protection</li> <li>External reset</li> <li>Adjustable current limitation</li> <li>inside-delta circuit</li> <li>Product component Motor brake output</li> <li>Insulation voltage rated value</li> </ul>	Product function				
<ul> <li>Evaluation of thermistor motor protection</li> <li>External reset</li> <li>Adjustable current limitation</li> <li>inside-delta circuit</li> <li>Product component Motor brake output</li> <li>Insulation voltage rated value</li> <li>V</li> <li>600</li> </ul>	<ul> <li>Intrinsic device protection</li> </ul>		No		
<ul> <li>External reset</li> <li>Adjustable current limitation</li> <li>inside-delta circuit</li> <li>Product component Motor brake output</li> <li>Insulation voltage rated value</li> <li>V</li> <li>600</li> </ul>	<ul> <li>motor overload protection</li> </ul>		No		
● Adjustable current limitation  ● inside-delta circuit  Product component Motor brake output  Insulation voltage rated value  No  V 600	<ul> <li>Evaluation of thermistor motor protection</li> </ul>		No		
● inside-delta circuit  Product component Motor brake output  Insulation voltage rated value  No  V 600	External reset		No		
Product component Motor brake output Insulation voltage rated value  V 600	<ul> <li>Adjustable current limitation</li> </ul>		No		
Insulation voltage rated value V 600	• inside-delta circuit		No		
	Product component Motor brake output		No		
Degree of pollution 3, acc. to IEC 60947-4-2	Insulation voltage rated value	V	600		
	Degree of pollution		3, acc. to IEC 60947-4-2		
Reference code acc. to DIN EN 61346-2	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		
<ul> <li>at standard circuit at 40 °C rated value</li> </ul>	W	18 500
● at 400 V		
— at standard circuit at 40 °C rated value	W	30 000
Yielded mechanical performance [hp] for three-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 standard circuit	%	10
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 voltage frequency	%	-10
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	%	-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	%	-10

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	%	-10
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 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	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
<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	1
Number of CO contacts for auxiliary contacts	0
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>	1.5 25 mm²
• stranded	1.5 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)
<ul> <li>for auxiliary contacts finely stranded with core</li> </ul>	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)	
• during storage acc. to IEC 60721		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	
during storage	°C	-40 <b>+</b> 80	
(derating temperature)	°C	40	
Protection class IP		IP00	

## Certificates/approvals

## **General Product Approval EMC Declaration of** Conformity













Declaration of Conformity	Test Certificates	•	other		Railway
Miscellaneous	Type Test Certificates/Test Report	Special Test Certificate	Miscellaneous	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,...)

http://www.siemens.com/industrial-controls/catalogs

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RW3037-1BB14

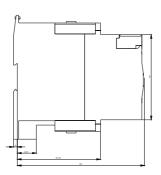
Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW3037-1BB14

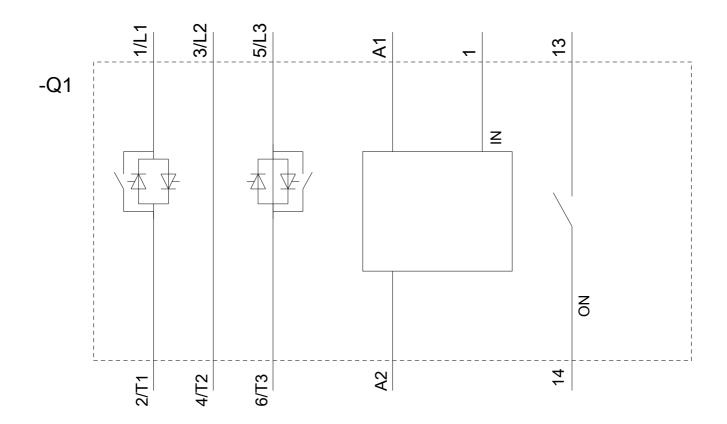
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RW3037-1BB14

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RW3037-1BB14&lang=en









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