## **SIEMENS**

Data sheet 3RW30 14-2BB04



SIRIUS SOFT STARTER, SIZE S00, 6.5A, 3KW/400V, 40 DEGREES, 200-480V AC, 24V AC/DC, SPRING-LOADED 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>	No		
<ul> <li>motor overload protection</li> </ul>	No		
<ul> <li>Evaluation of thermistor motor protection</li> </ul>	No		
External reset	No		
<ul> <li>Adjustable current limitation</li> </ul>	No		
• inside-delta circuit	No		
Product component Motor brake output	No		
Equipment marking acc. to DIN EN 61346-2	Q		
Equipment marking acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750	G		

Power Electronics:			
Product designation		soft starters for standard applications	
Operating current			
• at 40 °C Rated value	Α	6.5	
● at 50 °C Rated value	Α	6	
● at 60 °C Rated value	Α	5.5	
Mechanical power output for three-phase motors			
● at 230 V			

	14/	4.500	
— at standard circuit at 40 °C Rated value	W	1 500	
● at 400 V			
<ul> <li>at standard circuit at 40 °C Rated value</li> </ul>	W	3 000	
yielded mechanical performance [hp] for three-phase	metric	1	
AC motor at 200/208 V at standard circuit at 50 °C	hp		
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	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 in % of I_M	%	10	
Continuous operating current in % of I_e at 40 °C	%	115	
Active power loss at operating current at 40 °C during	W	0.5	
operation typical			
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	70	.0	
Relative positive tolerance of the control supply	%	10	
voltage frequency			
Control supply voltage 1 with AC			
• at 50 Hz Rated value	V	24	
• at 60 Hz Rated value	V	24	
Relative negative tolerance of the control supply	%	-20	
voltage with AC at 60 Hz			
Relative positive tolerance of the control supply voltage with AC at 60 Hz	%	20	
Control supply voltage 1 for DC Rated value	V	24	
Relative negative tolerance of the control supply voltage for DC	%	-20	
Relative positive tolerance of the control supply voltage for DC	%	20	
Display version for fault signal		red	
Mechanical data:			
Size of engine control device		S00	
Width	mm	45	
Height	mm	120	
		.=.	

Mounting type         screw and snap-on mounting           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         mm         60           • upwards         mm         15           • downwards         mm         40           Installation altitude at height above sea level         m         5 000           Cable length maximum         m         300           Number of poles for main current circuit         spring-loaded terminals           Type of electrical connection         spring-loaded terminals           • for main current circuit         spring-loaded terminals           Number of NC contacts for auxiliary contacts         0           Number of NC contacts for auxiliary contacts         0           Type of connectable conductor cross-section for main contacts or box terminal using the front clamping point         2x (1 2.5 mm²), 2x (2.5 6 mm²)           * solid         2x (1 2.5 mm²), 2x (2.5 6 mm²)           * solid         1 4 mm²           * solid         1 4 mm²           * solid         1 2.5 mm²           * solid         1 2.5 mm²           * solid         1 2.5 mm²	Depth	mm	150
Required spacing with side-by-side mounting  • upwards • at the side • downwards Installation altitude at height above sea level  Cable length maximum  Mumber of poles for main current circuit • for auxiliary and control current circuit  • row contacts for auxiliary contacts  Number of NO contacts for auxiliary contacts  Type of connectable conductor cross-section for awing point  Type of connectable conductor cross-section for awing the front clamping point  • solid • finely stranded with core end processing  Type of connectable conductor cross-section for awing the front clamping point  Type of connectable conductor cross-section for awing the front clamping point  Type of connectable conductor cross-section for awing the front clamping point  Type of connectable conductor cross-section for awing the front clamping point  Type of connectable conductor cross-section for awing the front clamping point  Type of connectable conductor cross-section for awing the front clamping point  Type of connectable conductor cross-section for awing the front clamping point  Type of connectable conductor cross-section for awing the front clamping point  Type of connectable conductor cross-section for awing the front clamping point  Type of connectable conductor cross-section for awing the front clamping point  Type of connectable conductor cross-section for awing the front clamping point  Type of connectable conductor cross-section for awing the front clamping point  Type of connectable conductor cross-section for awing the front clamping point  Type of connectable conductor cross-section for awing the front clamping point  Type of connectable conductor cross-section for awing the front clamping point  Type of connectable conductor cross-section for awing the front clamping point  Type of connectable conductor cross-section for awing the front clamping point  Type of connectable conductor cross-section for awing the front clamping point  Type of connectable conductor cross-section for awing the front clamping point  Type of co	Mounting type		screw and snap-on mounting
• upwards     • at the side     • downwards       mm	mounting position		vertical mounting surface +/- 10° tiltable to the front
• at the side • downwards Installation altitude at height above sea level  Cable length maximum Number of poles for main current circuit  Sonnections/ Terminals:  Type of electrical connection • for auxiliary and control current circuit  Number of NC contacts for auxiliary contacts Number of NC contacts for auxiliary contacts  Type of connectable conductor cross-section for main contacts for box terminal using the front clamping point • solid • finely stranded with core end processing  Type of connectable conductor cross-section for main contacts • solid • finely stranded with core end processing  Type of connectable conductor cross-section for main contacts • solid • finely stranded with core end processing  Type of connectable conductor cross-section for auxiliary contacts • solid • finely stranded with core end processing  Type of connectable conductor cross-section for auxiliary contacts • solid • finely stranded with core end processing  Type of connectable conductor cross-section for auxiliary contacts • solid • finely stranded with core end processing  Type of connectable conductor cross-section for auxiliary contacts • solid • finely stranded with core end processing  Type of connectable conductor cross-section for auxiliary contacts • solid • finely stranded with core end processing  Type of connectable conductor cross-section for auxiliary contacts • solid • finely stranded with core end processing  Type of connectable conductor cross-section for auxiliary contacts • for main contacts • for main contacts	Required spacing with side-by-side mounting		
Installation altitude at height above sea level  Installation altitude at height above specified at section specified at spring-loaded terminals  Inspire of contects for auxiliary contacts  Inspire of contectable conductor cross-section for auxiliary contacts  Installation altitude at height above spring-loaded terminals  Inspire of contectable conductor cross-section for auxiliary contacts  Inspire of connectable conductor cross-section for auxiliary contacts  Inspire of contacts for au	• upwards	mm	60
Installation altitude at height above sea level m 300  Cable length maximum m 300  Number of poles for main current circuit 3  Connections/ Terminals:  Type of electrical connection • for main current circuit spring-loaded terminals spring-loaded	• at the side	mm	15
Cable length maximum Number of poles for main current circuit  2000	• downwards	mm	40
Number of poles for main current circuit  Connections/ 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-section for main contacts for box terminal using the front clamping point  • solid  • finely stranded with core end processing  Type of connectable conductor cross-section for main contacts  • solid  • inely stranded with core end processing  Type of connectable conductor cross-section for main contacts  • solid  • finely stranded with core end processing  Type of connectable conductor cross-section for main contacts  • solid  • finely stranded with core end processing  Type of connectable conductor cross-section for auxiliary contacts  • solid  • finely stranded with core end processing  Type of connectable conductor cross-section for auxiliary contacts  • solid  • finely stranded with core end processing  Type of connectable conductor cross-section for auxiliary contacts  • solid  • finely stranded with core end processing  Type of connectable conductor cross-section for auxiliary contacts  • solid  • finely stranded with core end processing  Type of connectable conductor cross-section for auxiliary contacts  • solid  • finely stranded with core end processing  Type of connectable conductor cross-section for auxiliary contacts  • solid  • finely stranded with core end processing  Type of connectable conductor cross-section for auxiliary contacts  • solid  • finely contacts  • solid  • finely stranded with core end processing  Type of connectable conductor cross-section for auxiliary contacts  • solid  • finely stranded with core end processing  Type of connectable conductor cross-section for auxiliary contacts  • solid  • finely stranded with core end processing	Installation altitude at height above sea level	m	5 000
Type of electrical connection  • for main current circuit  • for auxiliary and control current circuit  Number of NC contacts for auxiliary contacts  Number of NC contacts for auxiliary contacts  Number of CO contacts for auxiliary contacts  Type of connectable conductor cross-section for main contacts for box terminal using the front clamping point  • solid  • finely stranded with core end processing  Type of connectable conductor cross-section for main contacts for main contacts for box terminal  • using the front clamping point  Type of connectable conductor cross-section for main contacts  • solid  • finely stranded with core end processing  Type of connectable conductor cross-section for main contacts  • solid  • finely stranded with core end processing  Type of connectable conductor cross-section for auxiliary contacts  • solid  • finely stranded with core end processing  Type of connectable conductor cross-section for auxiliary contacts  • solid  • finely stranded with core end processing  Type of connectable conductor cross-section for auxiliary contacts  • solid  • finely stranded with core end processing  Type of connectable conductor cross-section for AWG conductors  • for main contacts	Cable 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  Number of CO contacts for auxiliary contacts  Type of connectable conductor cross-section for main contacts for box terminal using the front clamping point  • solid  • finely stranded with core end processing  Type of connectable conductor cross-section for main contacts  • solid  • finely stranded with core end processing  Type of connectable conductor cross-section for main contacts  • solid  • finely stranded with core end processing  Type of connectable conductor cross-section for main contacts  • solid  • finely stranded with core end processing  Type of connectable conductor cross-section for auxiliary contacts  • solid  • finely stranded with core end processing  Type of connectable conductor cross-section for auxiliary contacts  • solid  • finely stranded with core end processing  Type of connectable conductor cross-section for auxiliary contacts  • solid  • finely stranded with core end processing  Type of connectable conductor cross-section for auxiliary contacts  • solid  • finely stranded with core end processing  Type of connectable conductor cross-section for auxiliary contacts  • solid  • finely stranded with core end processing  Type of connectable conductor cross-section for AWG conductors  • for main contacts	Number of poles for main current circuit		3
• for main current circuit     • for auxiliary and control current 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-section for main contacts for box terminal using the front clamping point     • solid     • finely stranded with core end processing  Type of connectable conductor cross-section for AWG conductors for main contacts for box terminal     • using the front clamping point     • solid     • finely stranded with core end processing  Type of connectable conductor cross-section for main contacts     • solid     • finely stranded with core end processing  Type of connectable conductor cross-section for auxiliary contacts     • solid     • finely stranded with core end processing  Type of connectable conductor cross-section for auxiliary contacts     • solid     • finely stranded with core end processing  Type of connectable conductor cross-section for auxiliary contacts     • solid     • finely stranded with core end processing  Type of connectable conductor cross-section for auxiliary contacts     • solid     • finely stranded with core end processing  Type of connectable conductor cross-section for auxiliary contacts     • solid     • finely stranded with core end processing  Type of connectable conductor cross-section for auxiliary contacts     • finely stranded with core end processing  Type of connectable conductor cross-section for auxiliary contacts     • finely stranded with core end processing  Type of connectable conductor cross-section for auxiliary contacts     • finely stranded with core end processing  Type of connectable conductor cross-section for auxiliary contacts     • finely stranded with core end processing  Type of connectable conductor cross-section for auxiliary contacts     • finely stranded with core end processing  Type of connectable conductor cross-section for auxiliary contacts     • finely stranded with core end processing  Type of connect	Connections/ Terminals:		
• 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-section for main contacts for box terminal using the front clamping point      • solid     • finely stranded with core end processing  Type of connectable conductor cross-section for AWG conductors for main contacts for box terminal     • using the front clamping point  Type of connectable conductor cross-section for auxiliary contacts     • solid     • finely stranded with core end processing  Type of connectable conductor cross-section for auxiliary contacts     • solid     • finely stranded with core end processing  Type of connectable conductor cross-section for auxiliary contacts      • solid     • finely stranded with core end processing  Type of connectable conductor cross-section for auxiliary contacts      • solid     • finely stranded with core end processing  Type of connectable conductor cross-section for AWG conductors     • for main contacts	Type of electrical connection		
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-section for main contacts for box terminal using the front clamping point  solid finely stranded with core end processing  Type of connectable conductor cross-section for awain contacts for box terminal finely stranded with core end processing  Type of connectable conductor cross-section for awailiary contacts  solid finely stranded with core end processing  Type of connectable conductor cross-section for auxiliary contacts  solid finely stranded with core end processing  Type of connectable conductor cross-section for auxiliary contacts  solid finely stranded with core end processing  Type of connectable conductor cross-section for auxiliary contacts  solid finely stranded with core end processing  Type of connectable conductor cross-section for AWG conductors  solid finely stranded with core end processing  Type of connectable conductor cross-section for AWG conductors  solid for main contacts  solid for main contacts  16 12	• for main current circuit		spring-loaded terminals
Number of NO contacts for auxiliary contacts  Number of CO contacts for auxiliary contacts  Type of connectable conductor cross-section for main contacts for box terminal using the front clamping point  solid finely stranded with core end processing  Type of connectable conductor cross-section for AWG conductors for main contacts for box terminal using the front clamping point  to solid	<ul> <li>for auxiliary and control current circuit</li> </ul>		spring-loaded terminals
Number of CO contacts for auxiliary contacts  Type of connectable conductor cross-section for main contacts for box terminal using the front clamping point  • solid • finely stranded with core end processing  Type of connectable conductor cross-section for AWG conductors for main contacts for box terminal • using the front clamping point  Type of connectable conductor cross-section for main contacts • solid • finely stranded with core end processing  Type of connectable conductor cross-section for main contacts • solid • finely stranded with core end processing  Type of connectable conductor cross-section for auxiliary contacts • solid • finely stranded with core end processing  Type of connectable conductor cross-section for auxiliary contacts • solid • finely stranded with core end processing  Type of connectable conductor cross-section for AWG conductors • for main contacts • for main contacts  16 12	Number of NC contacts for auxiliary contacts		0
Type of connectable conductor cross-section for main contacts for box terminal using the front clamping point  • solid • finely stranded with core end processing  Type of connectable conductor cross-section for AWG conductors for main contacts for box terminal • using the front clamping point  Type of connectable conductor cross-section for main contacts • solid • finely stranded with core end processing  Type of connectable conductor cross-section for main contacts • solid • finely stranded with core end processing  Type of connectable conductor cross-section for auxiliary contacts • solid • finely stranded with core end processing  Type of connectable conductor cross-section for auxiliary contacts • solid • finely stranded with core end processing  Type of connectable conductor cross-section for AWG conductors • for main contacts  • for main contacts  16 12	Number of NO contacts for auxiliary contacts		1
main contacts for box terminal using the front clamping point  • solid  • finely stranded with core end processing  Type of connectable conductor cross-section for AWG conductors for main contacts for box terminal  • using the front clamping point  Type of connectable conductor cross-section for main contacts  • solid  • finely stranded with core end processing  Type of connectable conductor cross-section for auxiliary contacts  • solid  • finely stranded with core end processing  Type of connectable conductor cross-section for auxiliary contacts  • solid  • finely stranded with core end processing  Type of connectable conductor cross-section for auxiliary contacts  • solid  • finely stranded with core end processing  Type of connectable conductor cross-section for AWG conductors  • for main contacts  • for main contacts  16 12	Number of CO contacts for auxiliary contacts		0
solid     finely stranded with core end processing  Type of connectable conductor cross-section for AWG conductors for main contacts for box terminal     using the front clamping point  Type of connectable conductor cross-section for main contacts     solid     finely stranded with core end processing  Type of connectable conductor cross-section for auxiliary contacts     solid     finely stranded with core end processing  Type of connectable conductor cross-section for auxiliary contacts     solid     finely stranded with core end processing  Type of connectable conductor cross-section for auxiliary contacts     solid     finely stranded with core end processing  Type of connectable conductor cross-section for AWG conductors     for main contacts  16 12	main contacts for box terminal using the front		
Type of connectable conductor cross-section for AWG conductors for main contacts for box terminal  • using the front clamping point  Type of connectable conductor cross-section for main contacts  • solid  • finely stranded with core end processing  Type of connectable conductor cross-section for auxiliary contacts  • solid  • finely stranded with core end processing  Type of connectable conductor cross-section for auxiliary contacts  • solid  • finely stranded with core end processing  Type of connectable conductor cross-section for AWG conductors  • for main contacts  16 12			2x (1 2.5 mm²), 2x (2.5 6 mm²)
AWG conductors for main contacts for box terminal  • using the front clamping point  Type of connectable conductor cross-section for main contacts  • solid  • finely stranded with core end processing  Type of connectable conductor cross-section for auxiliary contacts  • solid  • solid  • solid  2x (16 10)  1 4 mm²  1 2.5 mm²  Type of connectable conductor cross-section for auxiliary contacts  • solid  2x (0.25 2.5 mm²)  2x (0.25 1.5 mm²)  Type of connectable conductor cross-section for AWG conductors  • for main contacts  16 12	• finely stranded with core end processing		2x (1.5 2.5 mm²), 2x (2.5 6 mm²)
Type of connectable conductor cross-section for main contacts  • solid • finely stranded with core end processing  Type of connectable conductor cross-section for auxiliary contacts • solid • finely stranded with core end processing  2x (0.25 2.5 mm²)  2x (0.25 1.5 mm²)  Type of connectable conductor cross-section for AWG conductors • for main contacts  16 12	•		
main contacts  • solid  • finely stranded with core end processing  Type of connectable conductor cross-section for auxiliary contacts  • solid  • finely stranded with core end processing  2x (0.25 2.5 mm²)  2x (0.25 1.5 mm²)  Type of connectable conductor cross-section for AWG conductors  • for main contacts  16 12	<ul><li>using the front clamping point</li></ul>		2x (16 10)
<ul> <li>finely stranded with core end processing</li> <li>Type of connectable conductor cross-section for auxiliary contacts</li> <li>solid</li> <li>finely stranded with core end processing</li> <li>Type of connectable conductor cross-section for AWG conductors</li> <li>for main contacts</li> <li>1 2.5 mm²</li> <li>2x (0.25 2.5 mm²)</li> <li>2x (0.25 1.5 mm²)</li> <li>16 12</li> </ul>			
Type of connectable conductor cross-section for auxiliary contacts  • solid  • finely stranded with core end processing  Type of connectable conductor cross-section for AWG conductors  • for main contacts  16 12	• solid		1 4 mm²
auxiliary contacts	<ul> <li>finely stranded with core end processing</li> </ul>		1 2.5 mm²
<ul> <li>finely stranded with core end processing</li> <li>Type of connectable conductor cross-section for AWG conductors</li> <li>for main contacts</li> <li>2x (0.25 1.5 mm²)</li> <li>16 12</li> </ul>	• •		
Type of connectable conductor cross-section for  AWG conductors  • for main contacts  16 12	• solid		2x (0.25 2.5 mm²)
AWG conductors  ● for main contacts  16 12	<ul> <li>finely stranded with core end processing</li> </ul>		2x (0.25 1.5 mm²)
• for auxiliary contacts 2x (24 14)	• for main contacts		16 12
	for auxiliary contacts		2x (24 14)

Ambi	ent t	emp	erature

nbient temperature		
• during operation	°C	-25 <b>+</b> 60
during storage	°C	-40 +80

Derating temperature	°C	40
Protection class IP		IP20

## Certificates/ approvals:

General Product Approval EMC Test
Certificates











Type Test
Certificates/Test
Report

## other

Declaration of Conformity

other

Environmental Confirmations

UL/CSA ratings:		
yielded mechanical performance [hp] for three-phase		
AC motor		
● at 220/230 V		
— at standard circuit at 50 °C Rated value	metric hp	1
● at 460/480 V		
— at standard circuit at 50 °C Rated value	metric hp	3
Contact rating of the auxiliary contacts acc. to UL		B300 / R300

## Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

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

Industry Mall (Online ordering system)

http://www.siemens.com/industrymall

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW30142BB04

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

http://support.automation.siemens.com/WW/view/en/3RW30142BB04/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <a href="http://www.automation.siemens.com/bilddb/index.aspx?attID9=3RW30142BB04&lang=en">http://www.automation.siemens.com/bilddb/index.aspx?attID9=3RW30142BB04&lang=en</a>







