# **SIEMENS**

Data sheet 3RW30 27-1BB14



SIRIUS SOFT STARTER, SIZE S0, 32A, 15KW/400V, 40 DEGREES, 200-480V AC, 110-230V 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>	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	32
• at 50 °C Rated value	Α	29
• at 60 °C Rated value	Α	26
Mechanical power output for three-phase motors		
● at 230 V		

<ul> <li>— at standard circuit at 40 °C Rated value</li> </ul>	W	7 500
● at 400 V		
— at standard circuit at 40 °C Rated value	W	15 000
yielded mechanical performance [hp] for three-phase	metric	7.5
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	%	-15
at standard circuit		
Relative positive tolerance of the operating voltage at	%	10
standard circuit		
Minimum load in % of I_M	%	10
Continuous operating current [% of le] at 40 °C	%	115
Active power loss at operating current at 40 °C during	W	13
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 i fraced value	112	30
Control supply voltage frequency 2 Rated value	Hz	60
Control supply voltage frequency 2 Rated value	Hz	60
Control supply voltage frequency 2 Rated value  Relative negative tolerance of the control supply	Hz	60
Control supply voltage frequency 2 Rated value  Relative negative tolerance of the control supply voltage frequency	Hz %	60 -10
Control supply voltage frequency 2 Rated value Relative negative tolerance of the control supply voltage frequency Relative positive tolerance of the control supply voltage frequency Control supply voltage 1 with AC at 50 Hz	Hz %	60 -10
Control supply voltage frequency 2 Rated value Relative negative tolerance of the control supply voltage frequency Relative positive tolerance of the control supply voltage frequency	Hz %	60 -10 10
Control supply voltage frequency 2 Rated value Relative negative tolerance of the control supply voltage frequency Relative positive tolerance of the control supply voltage frequency Control supply voltage 1 with AC at 50 Hz Control supply voltage 1 with AC at 60 Hz Relative negative tolerance of the control supply	Hz %	60 -10 10 110 230
Control supply voltage frequency 2 Rated value Relative negative tolerance of the control supply voltage frequency Relative positive tolerance of the control supply voltage frequency Control supply voltage 1 with AC at 50 Hz Control supply voltage 1 with AC at 60 Hz Relative negative tolerance of the control supply voltage with AC at 60 Hz	Hz %  %  V V V %	60 -10 10 110 230 110 230
Control supply voltage frequency 2 Rated value Relative negative tolerance of the control supply voltage frequency Relative positive tolerance of the control supply voltage frequency Control supply voltage 1 with AC at 50 Hz Control supply voltage 1 with AC at 60 Hz Relative negative tolerance of the control supply voltage with AC at 60 Hz Relative positive tolerance of the control supply	Hz %  %  V	60 -10 10 110 230 110 230
Control supply voltage frequency 2 Rated value Relative negative tolerance of the control supply voltage frequency Relative positive tolerance of the control supply voltage frequency Control supply voltage 1 with AC at 50 Hz Control supply voltage 1 with AC at 60 Hz Relative negative tolerance of the control supply voltage with AC at 60 Hz Relative positive tolerance of the control supply voltage with AC at 60 Hz	Hz %  %  V V %	60 -10 10 110 230 110 230 -15
Control supply voltage frequency 2 Rated value Relative negative tolerance of the control supply voltage frequency Relative positive tolerance of the control supply voltage frequency Control supply voltage 1 with AC at 50 Hz Control supply voltage 1 with AC at 60 Hz Relative negative tolerance of the control supply voltage with AC at 60 Hz Relative positive tolerance of the control supply voltage with AC at 60 Hz Control supply voltage 1 for DC	Hz % % V V V %	60 -10 10 110 230 110 230 -15 10 110 230
Control supply voltage frequency 2 Rated value Relative negative tolerance of the control supply voltage frequency Relative positive tolerance of the control supply voltage frequency Control supply voltage 1 with AC at 50 Hz Control supply voltage 1 with AC at 60 Hz Relative negative tolerance of the control supply voltage with AC at 60 Hz Relative positive tolerance of the control supply voltage with AC at 60 Hz Control supply voltage 1 for DC Relative negative tolerance of the control supply	Hz %  %  V V %	60 -10 10 110 230 110 230 -15
Control supply voltage frequency 2 Rated value Relative negative tolerance of the control supply voltage frequency Relative positive tolerance of the control supply voltage frequency Control supply voltage 1 with AC at 50 Hz Control supply voltage 1 with AC at 60 Hz Relative negative tolerance of the control supply voltage with AC at 60 Hz Relative positive tolerance of the control supply voltage with AC at 60 Hz Control supply voltage 1 for DC Relative negative tolerance of the control supply voltage for DC	Hz % % V V V %	60 -10 10 110 230 110 230 -15 10 110 230 -15
Control supply voltage frequency 2 Rated value Relative negative tolerance of the control supply voltage frequency Relative positive tolerance of the control supply voltage frequency Control supply voltage 1 with AC at 50 Hz Control supply voltage 1 with AC at 60 Hz Relative negative tolerance of the control supply voltage with AC at 60 Hz Relative positive tolerance of the control supply voltage with AC at 60 Hz Control supply voltage 1 for DC Relative negative tolerance of the control supply	Hz % % V V V %	60 -10 10 110 230 110 230 -15 10 110 230
Control supply voltage frequency 2 Rated value Relative negative tolerance of the control supply voltage frequency Relative positive tolerance of the control supply voltage frequency Control supply voltage 1 with AC at 50 Hz Control supply voltage 1 with AC at 60 Hz Relative negative tolerance of the control supply voltage with AC at 60 Hz Relative positive tolerance of the control supply voltage with AC at 60 Hz Control supply voltage 1 for DC Relative negative tolerance of the control supply voltage for DC Relative positive tolerance of the control supply	Hz % % V V V %	60 -10 10 110 230 110 230 -15 10 110 230 -15
Control supply voltage frequency 2 Rated value Relative negative tolerance of the control supply voltage frequency Relative positive tolerance of the control supply voltage frequency Control supply voltage 1 with AC at 50 Hz Control supply voltage 1 with AC at 60 Hz Relative negative tolerance of the control supply voltage with AC at 60 Hz Relative positive tolerance of the control supply voltage with AC at 60 Hz Control supply voltage 1 for DC Relative negative tolerance of the control supply voltage for DC Relative positive tolerance of the control supply voltage for DC Display version for fault signal	Hz % % V V V %	60 -10 10 110 230 110 230 -15 10 110 230 -15
Control supply voltage frequency 2 Rated value Relative negative tolerance of the control supply voltage frequency Relative positive tolerance of the control supply voltage frequency Control supply voltage 1 with AC at 50 Hz Control supply voltage 1 with AC at 60 Hz Relative negative tolerance of the control supply voltage with AC at 60 Hz Relative positive tolerance of the control supply voltage with AC at 60 Hz Control supply voltage 1 for DC Relative negative tolerance of the control supply voltage for DC Relative positive tolerance of the control supply voltage for DC Display version for fault signal  Mechanical data:	Hz % % V V V %	60 -10  10  110 230 110 230 -15  10  110 230 -15  10  red
Control supply voltage frequency 2 Rated value Relative negative tolerance of the control supply voltage frequency Relative positive tolerance of the control supply voltage frequency Control supply voltage 1 with AC at 50 Hz Control supply voltage 1 with AC at 60 Hz Relative negative tolerance of the control supply voltage with AC at 60 Hz Relative positive tolerance of the control supply voltage with AC at 60 Hz Control supply voltage 1 for DC Relative negative tolerance of the control supply voltage for DC Relative positive tolerance of the control supply voltage for DC Display version for fault signal  Mechanical data: Size of engine control device	Hz % % V V % % %	60 -10  10  110 230 110 230 -15  10  110 230 -15  10  red
Control supply voltage frequency 2 Rated value Relative negative tolerance of the control supply voltage frequency Relative positive tolerance of the control supply voltage frequency Control supply voltage 1 with AC at 50 Hz Control supply voltage 1 with AC at 60 Hz Relative negative tolerance of the control supply voltage with AC at 60 Hz Relative positive tolerance of the control supply voltage with AC at 60 Hz Control supply voltage 1 for DC Relative negative tolerance of the control supply voltage for DC Relative positive tolerance of the control supply voltage for DC Display version for fault signal  Mechanical data:	Hz % % V V V %	60 -10  10  110 230 110 230 -15  10  110 230 -15  10  red

Depth

150

mm

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	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		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-section for main contacts for box terminal using the front clamping point	
• solid	2x (1 2.5 mm²), 2x (2.5 6 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	2x (1 2.5 mm²), 2x (2.5 6 mm²)
Type of connectable conductor cross-section for AWG conductors for main contacts for box terminal	
<ul> <li>using the front clamping point</li> </ul>	1x 8, 2x (16 10)
Type of connectable conductor cross-section for auxiliary contacts	
• solid	2x (0.5 2.5 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	2x (0.5 1.5 mm²)
Type of connectable conductor cross-section for AWG conductors	
<ul> <li>for auxiliary contacts</li> </ul>	2x (20 14)
<ul> <li>for auxiliary contacts finely stranded with core end processing</li> </ul>	2x (20 16)

Ambient conditions:		
Ambient temperature		
<ul><li>during operation</li></ul>	°C	-25 +60
during storage	°C	-40 <b>+</b> 80
Derating temperature	°C	40
Protection class IP		IP20

# Certificates/ approvals:

# **General Product Approval**

**EMC** 

Test Certificates











Type Test
Certificates/Test
Report

#### other

other

Environmental Confirmations

Declaration of Conformity

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	7.5
● at 460/480 V		
— at standard circuit at 50 °C Rated value	metric hp	20
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=3RW30271BB14

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

https://support.industry.siemens.com/cs/ww/en/ps/3RW30271BB14

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RW30271BB14&lang=en







