# **SIEMENS**

### Data sheet

## 3RW40 24-1BB14



SIRIUS SOFT STARTER, S0, 12.5A, 5.5KW/400V, 40 DEGR., AC 200-480V, AC/DC 110-230V, SCREW TERMINALS

General technical data:	
product brand name	SIRIUS
<ul> <li>Product equipment Integrated bypass contact system</li> </ul>	Yes
<ul> <li>Product feature Thyristors</li> </ul>	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
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	А	12.5
• at 50 °C rated value	А	11
• at 60 °C rated value	А	10
Mechanical power output for three-phase motors		
• at 230 V		
— at standard circuit at 40 °C rated value	W	3 000
• at 400 V		
<ul> <li>at 400 v</li> <li>at standard circuit at 40 °C rated value</li> </ul>	W	5 500
Yielded mechanical performance [hp] for three-phase	hp	3
AC motor at 200/208 V at standard circuit at 50 °C rated value	ΠÞ	5
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 [% of IM]	%	20
Adjustable motor current for motor overload protection minimum rated value	A	5
Continuous operating current [% of le] at 40 °C	%	115
Power loss [W] at operating current at 40 °C during operation typical	W	2
Control electronics:	_	
Type of voltage of the control supply voltage		AC/DC
Control supply voltage frequency 1 rated value Control supply voltage frequency 2 rated value	Hz Hz	50 60
Relative negative tolerance of the control supply	H2 %	-10
voltage frequency	70	-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 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	%	10
voltage at DC		
Display version for fault signal		red
Mechanical data:		
Size of engine control device		SO
Width	mm	45
Height	mm	125
Depth	mm	155
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	15
• downwards	mm	40
Installation altitude at height above sea level	m	5 000
Wire length maximum	m	300
Number of poles for main current circuit		3
Connections/ Terminals:		
Type of electrical connection		
<ul> <li>for main current circuit</li> </ul>		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		

• finely stranded with core end processing Type of connectable conductor cross-sections at AWG conductors for main contacts for box terminal

using the front clamping point
 Type of connectable conductor cross-sections for auxiliary contacts

 solid
 finely stranded with core end processing

 Type of connectable conductor cross-sections at

AWG conductors

for auxiliary contacts

• for auxiliary contacts finely stranded with core end processing

2x (1 ... 2.5 mm<sup>2</sup>), 2x (2.5 ... 6 mm<sup>2</sup>)

1x 8, 2x (16 ... 10)

2x (0.5 ... 2.5 mm<sup>2</sup>)

2x (0.5 ... 1.5 mm<sup>2</sup>)

2x (20 ... 14)

2x (20 ... 16)

mbient conditions						
Multimbient temperatur	e					
<ul> <li>during operation</li> </ul>	on	°C	-25 +60			
• during storage		°C	-40 +80	-40 +80		
Derating temperatur	re	°C	40			
Protection class IP			IP20			
ertificates/ approv	vals:					
General Produc				EMC	For use in hazardous locations	
	CSA		EHC	$\bigcirc$	K ATEX	
Declaration of Conformity	Test Certificates		Shipping Appro	oval		
EG-Konf.	spezielle Prüfbescheinigunge <u>n</u>	Typprüfbescheinigu ng/Werkszeugnis	DINV DNV	GL	Lloyd's Register Lrs	
Shipping Approval	other					
PRS	Umweltbestätigung	Bestätigungen				

hp	3
hp	7.5
	B300 / R300

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) http://www.siemens.com/industrymall

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW4024-1BB14

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RW4024-1BB14

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RW4024-1BB14&lang=en





