## **SIEMENS**

## Data sheet

## 3RW40 47-1BB14



SIRIUS SOFT STARTER, S3, 106A, 55KW/400V, 40 DEGR., AC 200-480V, AC/DC 110-230V, SCREW TERMINALS

General technical data:			
SIRIUS			
Yes			
Yes			
Yes			
Yes			
No			
Yes			
Yes			
No			
No			
Q			
G			

Power Electronics:

Product designation

soft starters for standard applications

Operating current		
• at 40 °C Rated value	А	106
• at 50 °C Rated value	А	98
• at 60 °C Rated value	А	90
Mechanical power output for three-phase motors		
• at 230 V		
— at standard circuit at 40 °C Rated value	W	30 000
● at 400 V		
— at standard circuit at 40 °C Rated value	W	55 000
yielded mechanical performance [hp] for three-phase	hp	30
AC motor at 200/208 V at standard circuit at 50 °C		
Rated value		
Operating frequency Rated value	Hz	50 60
Relative negative tolerance of the operating	%	-10
frequency	0/	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
standard circuit		
Minimum load [% of IM]	%	20
Adjustable motor current for motor overload protection minimum rated value	A	46
Continuous operating current [% of le] at 40 °C	%	115
Active power loss at operating current at 40 °C during	W	21
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		
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	%	-15
voltage at AC at 60 Hz		
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		S3
Width	mm	70
Height	mm	170
Depth	mm	190
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	30
<ul> <li>downwards</li> </ul>	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		
<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-section for main contacts for box terminal using the front clamping point		
• solid		2x (2.5 16 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>		2.5 35 mm²
• stranded		4 70 mm²

Type of connectable conductor cross-section for main contacts for box terminal using the back clamping point • solid

• finely stranded with core end processing

stranded

Type of connectable conductor cross-section for main contacts for box terminal using both clamping points 2x (2.5 ... 16 mm<sup>2</sup>)

2.5 ... 50 mm<sup>2</sup>

10 ... 70 mm²

• solid		2x (2.5 16 mm²)		
<ul> <li>finely stranded with core end processing</li> </ul>		2x (2.5 35 mm <sup>2</sup> )		
stranded		2x (10 50 mm²)		
Type of connectable conductor cross-section for				
AWG conductors for main contacts for box terminal				
<ul> <li>using the back clamping point</li> </ul>		2x (10 1/0)		
<ul> <li>using the front clamping point</li> </ul>		2x (10 1/0)		
<ul> <li>using both clamping points</li> </ul>		10 2/0		
Type of connectable conductor cross-section for DIN				
cable lug for main contacts				
<ul> <li>finely stranded</li> </ul>		2 x (10 50 mm²)		
• stranded		2x (10 70 mm²)		
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				
• for main contacts		2x (7 1/0)		
<ul> <li>for auxiliary contacts</li> </ul>		2x (20 14)		
<ul> <li>for auxiliary contacts finely stranded with core</li> </ul>		2x (20 16)		
end processing				
Ambient conditions:	Ambient conditions:			
Ambient temperature				
<ul> <li>during operation</li> </ul>	°C	-25 +60		
<ul> <li>during storage</li> </ul>	°C	-40 +80		
Derating temperature	°C	40		
Protection class IP		IP00		
Certificates/ approvals:				

General Produc	t Approval			EMC	For use in hazardous locations
	(SA)		EHC	C-TICK	X ATEX
Declaration of Conformity	Test Certificates		Shipping App		
CE	spezielle Prüfbescheinigunge <u>n</u>	Typprüfbescheinigu ng/Werkszeugnis	JÅ DNV	GL	Lloyd's Register

Shipping Approval	other
Approval	
	Umweltbestätigung

UL/CSA ratings:			
yielded mechanical performance [hp] for three-phase			
AC motor			
● at 220/230 V			
— at standard circuit at 50 °C Rated value	hp	30	
● at 460/480 V			
— at standard circuit at 50 °C Rated value	hp	75	
Contact rating of the auxiliary contacts acc. 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) http://www.siemens.com/industrymall

Cax online generator

PRS

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW40471BB14

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RW40471BB14

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RW40471BB14&lang=en





