# **SIEMENS**

## Data sheet

## 3RW40 47-1BB15



SIRIUS SOFT STARTER, S3, 106A, 75KW/500V, 40 DEGR., AC 400-600V, AC/DC 110-230V, 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>	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	G
according to IEC 204-2 acc. to IEC 750	

Power Electronics:				
	soft starters for standard applications			
А	106			
А	98			
А	90			
	A			

— at standard circuit at 40 °C Rated value	W	55 000
• at 500 V		
— at standard circuit at 40 °C Rated value	W	75 000
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	400 600
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	%	20
Adjustable motor current for motor overload	A	46
protection minimum rated value	0/	445
Continuous operating current in % of I_e at 40 °C	%	115
Active power loss at operating current at 40 °C during operation typical	W	21
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	%	10
voltage frequency		
Control supply voltage 1 with AC at 50 Hz	V	110 230
Control supply voltage 1 with AC at 60 Hz	V	110 230
Relative negative tolerance of the control supply	%	-15
voltage with AC at 60 Hz		
Relative positive tolerance of the control supply voltage with AC at 60 Hz	%	10
Control supply voltage 1 for DC	V	110 230
	~%	
Relative negative tolerance of the control supply voltage for DC	70	-15
Relative positive tolerance of the control supply	%	10
voltage for DC	70	
Display version for fault signal		red
Mechanical data:		
Size of engine control device		S3
Width	mm	70
Height	mm	170
		100
Depth	mm	190

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 $+/-10^{\circ}$ rotatable, with
	_	vertical mounting surface +/- 10° t
Required spacing with side-by-side mounting		60
• upwards	mm	60
• at the side	mm	30
• 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		
<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 mm <sup>2</sup> )
<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		
		2x (2.5 16 mm²)
solid     finally stranded with care and processing		· · · · ·
• finely stranded with core end processing		2.5 50 mm <sup>2</sup>
• stranded		10 70 mm²
Type of connectable conductor cross-section for		
main contacts for box terminal using both clamping points		
• 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 mm <sup>2</sup> )
Type of connectable conductor cross-section for		
AWG conductors for main contacts for box terminal		

AWG conductors for main contacts for box terminal • using the back clamping point

• using the back clamping poin

• using the front clamping point

using both clamping points

Type of connectable conductor cross-section for DIN cable lug for main contacts

2x (10 ... 1/0)

2x (10 ... 1/0)

10 ... 2/0

Type of connectable of auxiliary contacts	conductor cross-sec					
• solid				2x (0.5 2.5	5 mm²)	
<ul> <li>finely stranded v</li> </ul>	with core end proce	ssing		2x (0.5 1.5	5 mm²)	
Type of connectable of AWG conductors	conductor cross-sec	tion for				
<ul> <li>for main contact</li> </ul>	ts			2x (7 1/0)		
<ul> <li>for auxiliary con</li> </ul>	tacts			2x (20 14)		
-	tacts finely stranded	d with core		2x (20 16)		
end processing						
Ambient conditions:						
Ambient temperature						
<ul> <li>during operation</li> </ul>	ו		°C	-25 +60		
<ul> <li>during storage</li> </ul>			°C	-40 +80		
Derating temperature			°C	40		
Protection class IP				IP00		
Certificates/ approva	ls:					
General Product	Approval				EMC	For use in hazardous locations
			E I	76	C	(Ex)
ccc	CSA	UL	LI		C-TICK	ATEX
CCC Test Certificates	CSA	UL Shipping A	<b>L</b> I	IL	с-тіск	ATEX
	Type Test Certificates/Test Report	Shipping A	L I		C-TICK	ATEX
Test Certificates Special Test	Certificates/Test	ĴÅ DNV	L I		Llovd's Kegister	

UL/CSA ratings:	
yielded mechanical performance [hp] for three-phase	
AC motor	

<ul> <li>at 460/480 V</li> <li>— at standard circuit at 50 °C Rated value</li> </ul>	metric hp	75
<ul> <li>at 575/600 V</li> <li>— at standard circuit at 50 °C Rated value</li> </ul>	metric hp	75
Contact rating of the auxiliary contacts acc. to UL		B300 / R300

#### <sup>-</sup>urther 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=3RW40471BB15

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RW40471BB15/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/index.aspx?attID9=3RW40471BB15&lang=en







