# **SIEMENS**

Data sheet 3RW40 46-2BB15



SIRIUS SOFT STARTER, S3, 80A, 55KW/500V, 40 DEGR., AC 400-600V, AC/DC 110-230V, 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>		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	Α	80	
• at 50 °C Rated value	Α	73	
• at 60 °C Rated value	Α	66	
Mechanical power output for three-phase motors			
● at 400 V			

<ul> <li>— at standard circuit at 40 °C Rated value</li> <li>● at 500 V</li> </ul>	W	45 000
— at standard circuit at 40 °C Rated value	W	55 000
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	400 600
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	%	20
Adjustable motor current for motor overload protection minimum rated value	Α	43
Continuous operating current in % of I_e at 40 °C	%	115
Active power loss at operating current at 40 °C during operation typical	W	12

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 voltage frequency	%	-10
Relative positive tolerance of the control supply voltage frequency	%	10
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 voltage with AC at 60 Hz	%	-15
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	%	-15
Relative positive tolerance of the control supply voltage for DC	%	10
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
• 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>	spring-loaded 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	2x (2.5 16 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	2.5 50 mm²
• 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 mm²)
• 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)
using both clamping points	10 2/0
Type of connectable conductor cross-section for DIN cable lug for main contacts	

• finely stranded	2 x (10 50 mm²)
• stranded	2x (10 70 mm²)
Type of connectable conductor cross-section for auxiliary contacts	
• solid	2x (0.25 2.5 mm²)
• finely stranded with core end processing	2x (0.25 1.5 mm²)
Type of connectable conductor cross-section for AWG conductors	
• for main contacts	2x (7 1/0)
• for auxiliary contacts	2x (24 14)
,	

Ambient conditions:		
Ambient temperature		
<ul><li>during operation</li></ul>	°C	-25 +60
during storage	°C	-40 +80
Derating temperature	°C	40
Protection class IP		IP00

Certificat	tes/ a	appr	ovals:

General Product Approval	EMC	For use in
		hazardous
		locations













#### **Test Certificates**

## **Shipping Approval**

Type Test
Certificates/Test
Report

Special Test Certificate





GL

<u>Kegrs</u>



## other

Environmental Confirmations

Declaration of Conformity

## UL/CSA ratings:

yielded mechanical performance [hp] for three-phase AC motor

• at 460/480 V

— at standard circuit at 50 °C Rated value	metric hp	50
● at 575/600 V		
<ul> <li>at standard circuit at 50 °C Rated value</li> </ul>	metric	60
	hp	
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

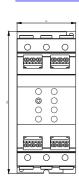
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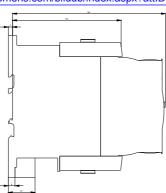
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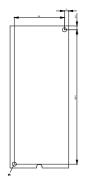
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

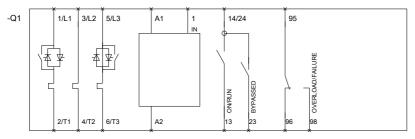
http://support.automation.siemens.com/WW/view/en/3RW40462BB15/all

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=3RW40462BB15&lang=en">http://www.automation.siemens.com/bilddb/index.aspx?attID9=3RW40462BB15&lang=en</a>









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