# **SIEMENS**

Data sheet 3RW40 24-2BB15



SIRIUS SOFT STARTER, S0, 12.5A, 7.5KW/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	12.5
• at 50 °C Rated value	Α	11
• at 60 °C Rated value	Α	10
Mechanical power output for three-phase motors		
● at 400 V		

— at standard circuit at 40 °C Rated value	W	5 500
<ul><li>at 500 V</li><li>at standard circuit at 40 °C Rated value</li></ul>	W	7 500
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	5
Continuous operating current in % of I_e at 40 °C	%	115
Active power loss 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	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		S0	
Width	mm	45	
Height	mm	150	
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
<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		
• for main current circuit		spring-loaded 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 (1.5 2.5 mm²), 2x (2.5 6 mm²), max. 1x 10 mm²
<ul><li>finely stranded with core end processing</li></ul>		2x (1.5 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 main contacts		
• solid		1 10 mm²
<ul> <li>finely stranded with core end processing</li> </ul>		1 6 mm²
Type of connectable conductor cross-section for auxiliary contacts		
• solid		2x (0.25 2.5 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>		2x (0.25 1.5 mm²)
Type of connectable conductor cross-section for AWG conductors		
• for main contacts		16 10, 1x 8
• for auxiliary contacts		2x (24 14)
Ambient conditions:		
Ambient temperature		

Ambient Conditions.			
Ambient temperature			
during operation	°C	-25 <b>+</b> 60	

during storage	°C	-40 <b>+</b> 80
Derating temperature	°C	40
Protection class IP		IP20

## Certificates/ approvals:

General Product Approval	EMC	For use in
		hazardous
		locations













## **Test Certificates**

## **Shipping Approval**

**Special Test** Certificate

Type Test Certificates/Test Report





GL





## other

Declaration of Environmental Conformity Confirmations

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	7.5
● at 575/600 V		
— at standard circuit at 50 °C Rated value	metric hp	10
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

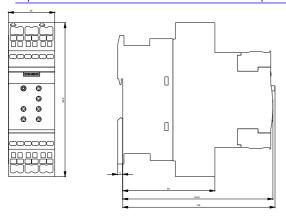
Industry Mall (Online ordering system) http://www.siemens.com/industrymall

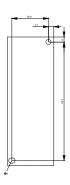
Cax online generator

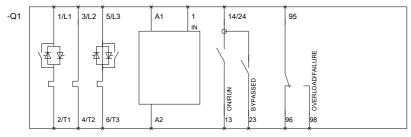
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW40242BB15

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RW40242BB15/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=3RW40242BB15&lang=en">http://www.automation.siemens.com/bilddb/index.aspx?attID9=3RW40242BB15&lang=en</a>







last modified: 15.01.2015