# **SIEMENS**

Data sheet 3RW44 23-1BC44



SIRIUS SOFT STARTER, VALUES WITH 400 V, 40 DEG., STANDARD: 36A, 18,5KW, INSIDE-DELTA CIRCUIT 3: 62A, 30KW, 200-460 V AC, 230 V AC, 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>		Yes	
External reset		Yes	
<ul> <li>Adjustable current limitation</li> </ul>		Yes	
• inside-delta circuit		Yes	
Product component Motor brake output		Yes	
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 high feature applications
Operating current		
• at 40 °C Rated value	Α	36
• at 50 °C Rated value	Α	32
• at 60 °C Rated value	Α	29
Operating current for three-phase motors at 3-phase root switching		
• at 40 °C Rated value	Α	62

● at 50 °C Rated value	Α	55
● at 60 °C Rated value	Α	50
Mechanical power output for three-phase motors		
● at 230 V		
— at standard circuit at 40 °C Rated value	W	7 500
— at 3-phase root switching at 40 °C Rated	W	18 500
value		
● at 400 V		
<ul> <li>at standard circuit at 40 °C Rated value</li> </ul>	W	18 500
<ul> <li>— at 3-phase root switching at 40 °C Rated value</li> </ul>	W	30 000
yielded mechanical performance [hp] for three-phase	metric	10
AC motor at 200/208 V at standard circuit at 50 °C	hp	
Rated value	11-	5000
Operating frequency Rated value  Relative negative tolerance of the operating	Hz %	50 60 -10
frequency		
Relative positive tolerance of the operating frequency	%	10
Operating voltage at standard circuit Rated value	V	200 460
Relative negative tolerance of the operating voltage at standard circuit	%	-15
Relative positive tolerance of the operating voltage at standard circuit	%	10
Operating voltage at 3-phase root switching Rated value	V	200 460
Relative negative tolerance of the operating voltage at 3-phase root switching	%	-15
Relative positive tolerance of the operating voltage at 3-phase root switching	%	10
Minimum load in % of I_M	%	8
Adjustable motor current for motor overload protection minimum rated value	А	7
Continuous operating current [% of le] at 40 °C	%	115
Active power loss at operating current at 40 °C during operation typical	W	10
Control electronics:		
Type of voltage of the control supply voltage		AC
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 Rated value	٧	230

● at 60 Hz Rated value	V	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
Display version for fault signal		Display

Mechanical data:			
Width	mm	170	
Height	mm	192	
Depth	mm	270	
Mounting type		screw fixing	
mounting position		bei senkrechter Montageebene +/-90° drehbar, bei senkrechter Montageebene +/- 22,5° nach vorne und hinten kippbar	
Required spacing with side-by-side mounting			
● upwards	mm	100	
• at the side	mm	5	
<ul><li>downwards</li></ul>	mm	75	
Installation altitude at height above sea level	m	5 000	
Cable length maximum	m	500	
Number of poles for main current circuit		3	

Connections/ Terminals:			
Type of electrical connection			
• for main current circuit		box 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		3	
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		2.5 16 mm²	
<ul> <li>finely stranded with core end processing</li> </ul>		2.5 35 mm²	
<ul> <li>finely stranded without core end processing</li> </ul>		4 50 mm²	
<ul><li>stranded</li></ul>		4 70 mm²	
Type of connectable conductor cross-section for main contacts for box terminal using the back clamping point			
• solid		2,5 16 mm²	
<ul> <li>finely stranded with core end processing</li> </ul>		2.5 50 mm²	
<ul> <li>finely stranded without core end processing</li> </ul>		10 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)
<ul> <li>finely stranded without core end processing</li> </ul>	2x (4 35 mm²)
• stranded	2x (4 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>	10 2/0
<ul> <li>using the front clamping point</li> </ul>	10 2/0
<ul> <li>using both clamping points</li> </ul>	2x (10 1/0)
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 auxiliary contacts	2x (20 14)
<ul> <li>for auxiliary contacts finely stranded with core</li> </ul>	2x (20 16)
end processing	
Ambient conditions:	
Amhient temperature	

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

## Certificates/ approvals:

**EMC Declaration of General Product Approval** Test Conformity Certificates











**Special Test** Certificate

lest	
Certific	ates

### **Shipping Approval**

Type Test Certificates/Test Report











Shipping **Approval**  other



Environmental Confirmations

UL/CSA ratings:		
yielded mechanical performance [hp] for three-phase AC motor		
● at 200/208 V		
— at 3-phase root switching at 50 °C Rated value	metric hp	15
● at 220/230 V		
— at standard circuit at 50 °C Rated value	metric hp	10
<ul> <li>at 3-phase root switching at 50 °C Rated value</li> </ul>	metric hp	20
● at 460/480 V		
— at standard circuit at 50 °C Rated value	metric hp	20
<ul> <li>— at 3-phase root switching at 50 °C Rated value</li> </ul>	metric hp	40
Contact rating of the auxiliary contacts acc. to UL		B300 / R300

Information- and Downloadcenter (Catalogs, Brochures,...) http://www.siemens.com/industrial-controls/catalogs

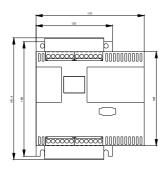
Industry Mall (Online ordering system) http://www.siemens.com/industrymall

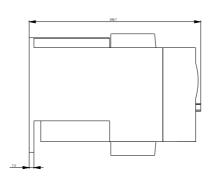
#### Cax online generator

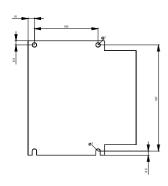
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW44231BC44

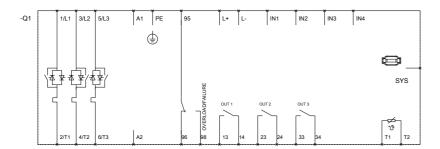
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RW44231BC44

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RW44231BC44&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RW44231BC44&lang=en</a>









**last modified:** 27.04.2015