# **SIEMENS**

Data sheet 3RW44 24-3BC44



SIRIUS SOFT STARTER, VALUES WITH 400 V, 40 DEG., STANDARD: 47A, 22KW, INSIDE-DELTA CIRCUIT 3: 81A, 45KW, 200-460 V AC, 230 V AC, CAGE CLAMP TERMINALS

General technical data:		
product brand name		SIRIUS
Product feature		
<ul> <li>integrated bypass contact system</li> </ul>		Yes
<ul><li>Thyristors</li></ul>		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		G
according to IEC 204-2 acc. to IEC 750		

Power Electronics:		
Product designation		soft starters for high feature applications
Operating current		
• at 40 °C Rated value	Α	47
• at 50 °C Rated value	Α	42
• at 60 °C Rated value	Α	37
Operating current for three-phase motors at 3-phase root switching		
• at 40 °C Rated value	Α	81

at 50 °C Rated value	Α	73
● at 60 °C Rated value	Α	64
Mechanical power output for three-phase motors		
● at 230 V		
— at standard circuit at 40 °C Rated value	W	11 000
— at 3-phase root switching at 40 °C Rated	W	22 000
value		
● at 400 V		
— at standard circuit at 40 °C Rated value	W	22 000
— at 3-phase root switching at 40 °C Rated value	W	45 000
yielded mechanical performance [hp] for three-phase	metric	10
AC motor at 200/208 V at standard circuit at 50 °C	hp	
Rated value		
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	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	9
Continuous operating current in % of I_e at 40 °C	%	115
Active power loss at operating current at 40 °C during operation typical	W	32
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	V	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>	spring-loaded 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	
• stranded	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 mm <sup>2</sup>	
<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 (0.25 1.5 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 auxiliary contacts	2x (24 16)

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

## Certificates/ approvals:

#### **General Product Approval**

**EMC** 

**Declaration of** Conformity













#### **Test Certificates**

#### **Shipping Approval**

**Special Test** Certificate

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		
<ul> <li>— at 3-phase root switching at 50 °C Rated</li> </ul>	metric	20
value	hp	
● at 220/230 V		
<ul> <li>— at standard circuit at 50 °C Rated value</li> </ul>	metric	15
	hp	
<ul> <li>— at 3-phase root switching at 50 °C Rated</li> </ul>	metric	25
value	hp	
● at 460/480 V		
<ul> <li>at standard circuit at 50 °C Rated value</li> </ul>	metric	25
	hp	
<ul> <li>— at 3-phase root switching at 50 °C Rated</li> </ul>	metric	50
value	hp	
Contact rating of the auxiliary contacts acc. to UL		B300 / R300

#### Further information

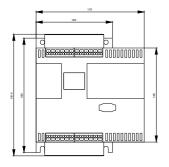
Information- and Downloadcenter (Catalogs, Brochures,...) http://www.siemens.com/industrial-controls/catalogs

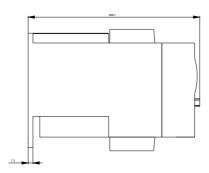
Industry Mall (Online ordering system)

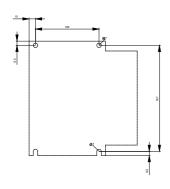
http://www.siemens.com/industrymall

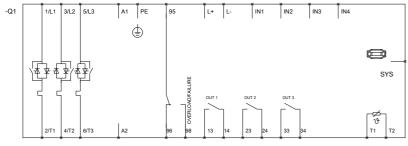
Cax online generator http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW44243BC44

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=3RW44243BC44&lang=en">http://www.automation.siemens.com/bilddb/index.aspx?attID9=3RW44243BC44&lang=en</a>









15.01.2015 last modified: