# **SIEMENS**

### Data sheet

### 3RW44 46-2BC44



SIRIUS SOFT STARTER, VALUES WITH 400 V, 40 DEG., STANDARD: 356A, 200KW, INSIDE-DELTA CIRCUIT 3: 617A, 355KW, 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
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	А	356
• at 50 °C Rated value	А	315
• at 60 °C Rated value	А	280
Operating current for three-phase motors at 3-phase root switching		
• at 40 °C Rated value	А	617

• at 50 °C Rated value	А	546
	A	485
• at 60 °C Rated value	~	403
Mechanical power output for three-phase motors		
• at 230 V	14/	110 000
— at standard circuit at 40 °C Rated value	W	110 000
— at 3-phase root switching at 40 °C Rated value	W	200 000
• at 400 V		
— at standard circuit at 40 °C Rated value	W	200 000
— at 3-phase root switching at 40 °C Rated value	W	355 000
yielded mechanical performance [hp] for three-phase AC motor at 200/208 V at standard circuit at 50 °C Rated value	metric hp	100
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	A	71
Continuous operating current in % of I_e at 40 °C	%	115
Active power loss at operating current at 40 °C during operation typical	W	174
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	%	-10
voltage frequency		
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	210
Height	mm	230
Depth	mm	298
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
downwards	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	busbar connection
<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	
<ul> <li>finely stranded with core end processing</li> </ul>	70 240 mm²
<ul> <li>finely stranded without core end processing</li> </ul>	70 240 mm²
• stranded	95 300 mm²
Type of connectable conductor cross-section for main contacts for box terminal using the back clamping point	
<ul> <li>finely stranded with core end processing</li> </ul>	120 185 mm²
<ul> <li>finely stranded without core end processing</li> </ul>	120 185 mm²
• stranded	120 240 mm²
Type of connectable conductor cross-section for main contacts for box terminal using both clamping points	

<ul> <li>finely stranded with core end processing</li> </ul>		min. 2x 50 mm², max. 2x 185 mm²
<ul> <li>finely stranded without core end processing</li> </ul>		min. 2x 50 mm², max. 2x 185 mm²
• stranded		max. 2x 70 mm <sup>2</sup> , max. 2x 240 mm <sup>2</sup>
Type of connectable conductor cross-section for		
AWG conductors for main contacts for box terminal		
<ul> <li>using the back clamping point</li> </ul>		250 500 kcmil
<ul> <li>using the front clamping point</li> </ul>		3/0 600 kcmil
<ul> <li>using both clamping points</li> </ul>		min. 2x 2/0, max. 2x 500 kcmil
Type of connectable conductor cross-section for DIN		
cable lug for main contacts		
<ul> <li>finely stranded</li> </ul>		50 240 mm²
• stranded		70 240 mm²
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		
<ul> <li>for main contacts</li> </ul>		2/0 500 kcmil
<ul> <li>for auxiliary contacts</li> </ul>		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 Produc	t Approval			EMC	Declaration of Conformity
	CSA		EHC	С-тіск	EG-Konf.
Test Certificates	3	Shipping Ap	proval		
Type Test Certificates/Test Report	Special Test Certificate	ABS	BUREAU VERITAS	DNV DNV	GL

Shipping App	oroval	other	
Lloyd's Register		Environmental Confirmations	
LRS	PRS		

yielded mechanical performance [hp] for three-phase		
AC motor		
● at 200/208 V		
— at 3-phase root switching at 50 °C Rated	metric	150
value	hp	
● at 220/230 V		
— at standard circuit at 50 °C Rated value	metric	125
	hp	
— at 3-phase root switching at 50 °C Rated	metric	200
value	hp	
● at 460/480 V		
— at standard circuit at 50 °C Rated value	metric	250
	hp	
— at 3-phase root switching at 50 °C Rated	metric	450
value	hp	
Contact rating of the auxiliary contacts acc. to UL		B300 / R300

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Cax online generator http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW44462BC44

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http://support.automation.siemens.com/WW/view/en/3RW44462BC44/all

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