# **SIEMENS**

## Data sheet

## 3RW44 47-2BC36



SIRIUS SOFT STARTER, VALUES WITH 575 V, 50 DEG., STANDARD: 385A, 400HP, INSIDE-DELTA CIRCUIT 3: 667A, 750HP, 400-690 V AC, 115 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	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	А	432
• at 50 °C Rated value	А	385
• at 60 °C Rated value	А	335
Operating current for three-phase motors at 3-phase root switching		
• at 40 °C Rated value	А	748

e et 50 °C Deted velve	٨	667
• at 50 °C Rated value	A	667
• at 60 °C Rated value	A	580
Mechanical power output for three-phase motors		
• at 400 V		
— at standard circuit at 40 °C Rated value	W	250 000
— at 3-phase root switching at 40 °C Rated value	W	400 000
● at 500 V		
— at standard circuit at 40 °C Rated value	W	315 000
— at 3-phase root switching at 40 °C Rated value	W	500 000
• at 690 V at standard circuit at 40 °C Rated	W	400 000
value		50 00
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	400 690
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	400 600
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	86
Continuous operating current in % of I_e at 40 °C	%	115
Active power loss at operating current at 40 °C during operation typical	W	232
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	115

• at 60 Hz Rated value	V	115
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 mm <sup>2</sup>
<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	ct Approval			EMC	Declaration of Conformity
	CSA		EHC	С-ТІСК	EG-Konf.
Test Certificate	s	Shipping Ap	proval		
Special Test Certificate	Type Test Certificates/Test Report	ABS	BUREAU VERITAS	ĴŠ DNV DNV	GL

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

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	300
— at 3-phase root switching at 50 °C Rated value	metric hp	600
● at 575/600 V		
— at standard circuit at 50 °C Rated value	metric hp	400
— at 3-phase root switching at 50 °C Rated value	metric hp	750
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=3RW44472BC36

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RW44472BC36/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/index.aspx?attID9=3RW44472BC36&lang=en







