## SIEMENS

## **Product data sheet**

## 3RW4447-2BC44



SIRIUS SOFT STARTER, VALUES WITH 400 V, 40 DEG., STANDARD: 432A, 250KW, INSIDE-DELTA CIRCUIT 3: 748A, 400KW, 200-460 V AC, 230 V AC, CAGE CLAMP TERMINALS

Ga	noral	det	e ·

General details:				
product brand name	SIRIUS			
Product feature				
<ul> <li>integrated bypass contact system</li> </ul>	Yes			
Thyristors	Yes			
Product function				
Intrinsic device protection	Yes			
motor overload protection	Yes			
Evaluation of thermistor motor protection	Yes			
External reset	Yes			
Adjustable current limitation	Yes			
inside-delta circuit	Yes			
Product component / Motor brake output	Yes			
Reference code				
• acc. to DIN EN 61346-2	Q			
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	432
• at 50 °C / Rated value	А	385
• at 60 °C / Rated value	А	335
<ul> <li>for three-phase motors / at 3-phase root switching</li> </ul>		
• at 40 °C / Rated value	А	748
• at 50 °C / Rated value	А	667
• at 60 °C / Rated value	А	580
Mechanical power output / for three-phase motors	-	
• at 230 V / at standard circuit / at 40 °C		
Rated value	W	132,000
• at 400 V / at standard circuit / at 40 °C		
Rated value	W	250,000
• at 230 V / at 3-phase root switching / at 40 °C		
Rated value	W	250,000
<ul> <li>at 400 V / at 3-phase root switching / at 40 °C</li> </ul>		
Rated value	W	400,000
yielded mechanical performance [hp] / for three-phase AC motor / at 200/208 V / at standard circuit / at 50 °C / Rated value	hp	125
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	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	V	230
• with AC / at 60 Hz	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

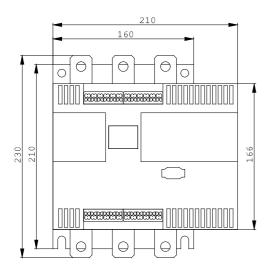
Mechanical design:		
Width	mm	210
Height	mm	230
Depth	mm	298
Mounting type		screw fixing
mounting position		bei senkrechter Montageebene +/-90° drehbar, bei senkrechter Montageebene +/- 22,5° nach vorne und hinten kippbar
Spacing required		
with side-by-side mounting	mm	100
with side-by-side mounting	mm	5
with side-by-side mounting	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

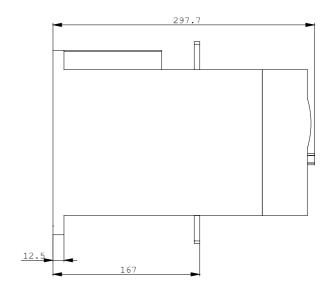
## Electrical connections:

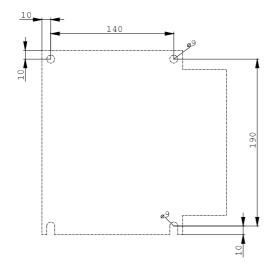
Design of the electrical connection	
for main current circuit	busbar connection
<ul> <li>for auxiliary and control current circuit</li> </ul>	spring-loaded terminals
Number of NC contacts / for auxiliary contacts	0
Number of NO contacts / for auxiliary contacts	3
Number of CO contacts / for auxiliary 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

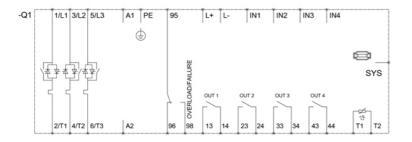
Type of connectable conductor cross-section / for main contacts / for box terminal / using the back clamping point		
<ul> <li>finely stranded / with core end processing</li> </ul>		120 185 mm²
<ul> <li>finely stranded / without core end processing</li> </ul>		120 185 mm²
• stranded		120 240 mm²
Type 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	_	
finely stranded		50 240 mm²
• stranded		70 240 mm²
Type of connectable conductor cross-section		
for AWG conductors / for main contacts		2/0 500 kcmil
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)
<ul> <li>for AWG conductors / for auxiliary contacts</li> </ul>		2x (24 16)
Ambient conditions:		
Ambient temperature		
during operation	/ °C	60
during storage	°C	-25 +80
Derating temperature	°C	40
Protection class IP		IP00

General Product Ap	proval			EMC	Declaration of Conformity
	(SA)	EHC		С-тіск	EG-Konf.
Test Certificates					
Special Test Certificate	<u>Type Test</u> Certificates/Test Report				
Shipping Approval					
ABS	B UR E A U VERITAS		GL GL	Lloyd's Kegister	PRS
other					
Environmental Confirmations					
UL/CSA ratings					
yielded mechanical po motor	erformance [hp] / f	or three-phase AC			
• at 220/230 V / at st	andard circuit				
• at 50 °C / Rated	value		hp	150	
• at 460/480 V / at st	andard circuit				
• at 50 °C / Rated	value		hp	300	
• at 200/208 V / at 3-	phase root switchin	g / at 50 °C / Rated value	hp	200	
• at 220/230 V / at 3-	-phase root switchin	g / at 50 °C / Rated value	hp	250	
• at 460/480 V / at 3-	-phase root switchin	g / at 50 °C / Rated value	hp	600	
Contact rating / of the	auxiliary contacts	/ acc. to UL		B300 / R300	
Further information	1:				
Information- and Dow http://www.siemens.com	•	-			
Industry Mall (Online ordering system) http://www.siemens.com/industrial-controls/mall					
CAx-Online-Generator http://www.siemens.com/cax					
Service&Support (Manuals, Certificates, Characteristics, FAQs,) http://support.automation.siemens.com/WW/view/en/3RW4447-2BC44/all					
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams,) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RW4447-2BC44					









last change:

Sep 29, 2014