# **SIEMENS**

Data sheet 3RW44 34-6BC46



SIRIUS SOFT STARTER, VALUES WITH 690 V, 40 DEG., STANDARD: 113A, 110KW, INSIDE-DELTA CIRCUIT 3: ONLY UP TO 600V, 400-690 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	113	
● at 50 °C Rated value	Α	100	
• at 60 °C Rated value	Α	88	
Operating current for three-phase motors at 3-phase root switching			
• at 40 °C Rated value	Α	196	

● at 50 °C Rated value	Α	173
• at 60 °C Rated value	Α	152
Mechanical power output for three-phase motors		
● at 400 V		
— at standard circuit at 40 °C Rated value	W	55 000
— at 3-phase root switching at 40 °C Rated	W	110 000
value		
● at 500 V		
— at standard circuit at 40 °C Rated value	W	75 000
<ul> <li>— at 3-phase root switching at 40 °C Rated value</li> </ul>	W	132 000
<ul> <li>at 690 V at standard circuit at 40 °C Rated value</li> </ul>	W	110 000
Operating frequency Rated value	Hz	50 60
Relative negative tolerance of the operating	%	-10
frequency		
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	А	22
Continuous operating current in % of I_e at 40 °C	%	115
Active power loss at operating current at 40 °C during operation typical	W	64
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	200
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		busbar connection	
<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			
<ul> <li>finely stranded with core end processing</li> </ul>		16 70 mm²	
<ul> <li>finely stranded without core end processing</li> </ul>		16 70 mm²	
• stranded		16 70 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>		16 70 mm²	
<ul> <li>finely stranded without core end processing</li> </ul>		16 70 mm²	
• stranded		16 70 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>	max. 1x 50 mm², 1x 70 mm²
<ul> <li>finely stranded without core end processing</li> </ul>	max. 1x 50 mm², 1x 70 mm²
• stranded	max. 2x 70 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>	6 2/0
<ul> <li>using the front clamping point</li> </ul>	6 2/0
<ul> <li>using both clamping points</li> </ul>	max. 2x 1/0
Type of connectable conductor cross-section for DIN	
cable lug for main contacts	
• finely stranded	16 95 mm²
• stranded	25 120 mm²
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 main contacts	4 250 kcmil
• for auxiliary contacts	2x (20 14)
• for auxiliary contacts finely stranded with core	2x (20 16)
end processing	

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









GL

### **Shipping Approval**

## other





Environmental Confirmations

# UL/CSA ratings:

# yielded mechanical performance [hp] for three-phase AC motor

#### • at 460/480 V

<ul> <li>at standard circuit at 50 °C Rated value</li> </ul>	metric	75
	hp	
— at 3-phase root switching at 50 °C Rated	metric	125
value	hp	

## • at 575/600 V

373/000 V		
— at standard circuit at 50 °C Rated value	metric	75
	hp	
— at 3-phase root switching at 50 °C Rated	metric	150
value	hp	

# Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

http://www.siemens.com/industrial-controls/catalogs

Contact rating of the auxiliary contacts acc. to UL

### Industry Mall (Online ordering system)

http://www.siemens.com/industrymall

### Cax online generator

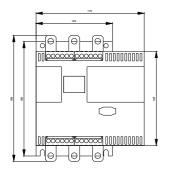
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW44346BC46

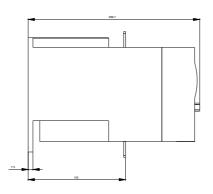
## Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

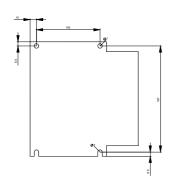
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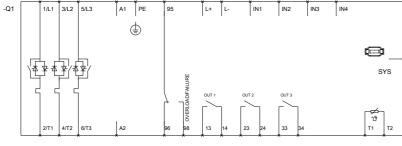
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/index.aspx?attlD9=3RW44346BC46&lang=en

B300 / R300









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