## **SIEMENS**

Data sheet 3RW44 23-1BC34



SIRIUS SOFT STARTER, VALUES WITH 460 V, 50 DEG., STANDARD: 32A, 20HP, INSIDE-DELTA CIRCUIT 3: 55A, 40HP, 200-460 V AC, 115 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	36
● at 50 °C Rated value	Α	32
• at 60 °C Rated value	Α	29
Operating current for three-phase motors at 3-phase root switching		
• at 40 °C Rated value	Α	62

● at 50 °C Rated value	Α	55
● at 60 °C Rated value	Α	50
Mechanical power output for three-phase motors		
● at 230 V		
— at standard circuit at 40 °C Rated value	W	7 500
— at 3-phase root switching at 40 °C Rated	W	18 500
value		
● at 400 V		
— at standard circuit at 40 °C Rated value	W	18 500
— at 3-phase root switching at 40 °C Rated value	W	30 000
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	7
Continuous operating current in % of I_e at 40 °C	%	115
Active power loss at operating current at 40 °C during operation typical	W	10
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	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>	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	
• solid	2.5 16 mm²
<ul> <li>finely stranded with core end processing</li> </ul>	2.5 35 mm <sup>2</sup>
<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 (0.5 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 auxiliary contacts	2x (20 14)
• for auxiliary contacts finely stranded with core	2x (20 16)
end processing	
Ambient conditions:	
Ambient temperature	

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 Certificates











Type Test
Certificates/Test
Report

Test
Certificates

**Shipping Approval** 

Special Test Certificate











LRS

Shipping Approval other



Environmental Confirmations

#### UL/CSA ratings: yielded mechanical performance [hp] for three-phase AC motor • at 200/208 V — at 3-phase root switching at 50 °C Rated metric 15 value hp • at 220/230 V - at standard circuit at 50 °C Rated value metric 10 hp metric 20 — at 3-phase root switching at 50 °C Rated value hp • at 460/480 V - at standard circuit at 50 °C Rated value metric 20 hp 40 — at 3-phase root switching at 50 °C Rated metric hp value

#### 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

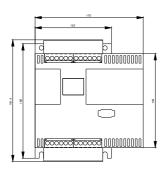
B300 / R300

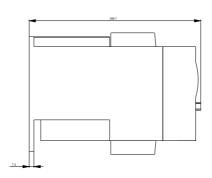
#### Cax online generator

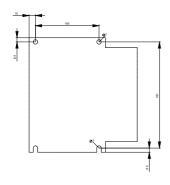
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW44231BC34

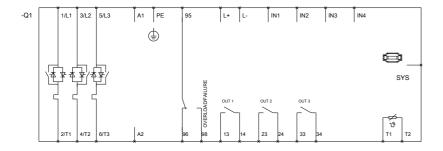
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RW44231BC34/all

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=3RW44231BC34&lang=en">http://www.automation.siemens.com/bilddb/index.aspx?attID9=3RW44231BC34&lang=en</a>









**last modified:** 15.01.2015