# **SIEMENS**

Data sheet 3RW44 47-6BC36



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, SCREW TERMINALS

General technical data:	
product brand name	SIRIUS
Product feature	
<ul> <li>integrated bypass contact system</li> </ul>	Yes
<ul><li>Thyristors</li></ul>	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
Adjustable current limitation	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	432
● at 50 °C Rated value	Α	385
• at 60 °C Rated value	Α	335
Operating current for three-phase motors at 3-phase root switching		
• at 40 °C Rated value	Α	748

● at 50 °C Rated value	Α	667
• at 60 °C Rated value	Α	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	W	400 000
value		
● at 500 V		
— at standard circuit at 40 °C Rated value	W	315 000
— at 3-phase root switching at 40 °C Rated	W	500 000
value		
• at 690 V at standard circuit at 40 °C Rated	W	400 000
value		
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	%	-15
at standard circuit	0/	40
Relative positive tolerance of the operating voltage at standard circuit	%	10
Operating voltage at 3-phase root switching Rated	V	400 600
value		
Relative negative tolerance of the operating voltage	%	-15
at 3-phase root switching		
Relative positive tolerance of the operating voltage at	%	10
3-phase root switching		
Minimum load in % of I_M	%	8
Adjustable motor current for motor overload	Α	86
protection minimum rated value	0/	445
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	%	-10
voltage frequency		
Relative positive tolerance of the control supply	%	10
voltage frequency		
Control supply voltage 1 with AC		445
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
<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>	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	

finely stranded with core end processing	min. 2x 50 mm², max. 2x 185 mm²
finely stranded without core end processing	min. 2x 50 mm², max. 2x 185 mm²
• stranded	max. 2x 70 mm², max. 2x 240 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>	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	10.11.2.10.11.11
auxiliary contacts	
• solid	2x (0.5 2.5 mm²)
• finely stranded with core end processing	2x (0.5 1.5 mm²)
Type of connectable conductor cross-section for	
AWG conductors	
• for main contacts	2/0 500 kcmil
• for auxiliary contacts	2x (20 14)
<ul> <li>for auxiliary contacts finely stranded with core end processing</li> </ul>	2x (20 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 Product Approval**

**EMC** 

Declaration of Conformity













## **Test Certificates**

# **Shipping Approval**

Type Test
Certificates/Test
Report

Special Test Certificate









GL

#### **Shipping Approval**

## other



**UL/CSA** ratings:



Environmental Confirmations

yielded mechanical performance [hp] for three-phase  AC motor		
● at 460/480 V		
— at standard circuit at 50 °C Rated value	metric hp	300
<ul> <li>— at 3-phase root switching at 50 °C Rated value</li> </ul>	metric hp	600
● at 575/600 V		
— at standard circuit at 50 °C Rated value	metric hp	400

metric

750

B300 / R300

value hp

Contact rating of the auxiliary contacts acc. to UL

# Further information

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

— at 3-phase root switching at 50 °C Rated

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

Industry Mall (Online ordering system)

http://www.siemens.com/industrymall

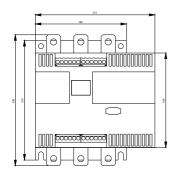
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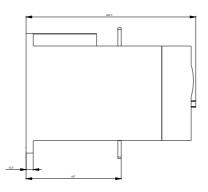
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW44476BC36

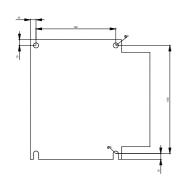
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

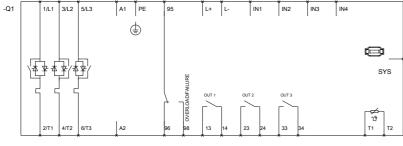
http://support.automation.siemens.com/WW/view/en/3RW44476BC36/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/index.aspx?attlD9=3RW44476BC36&lang=en









**last modified:** 15.01.2015