SIEMENS

Data sheet 3RW44 27-1BC44



SIRIUS SOFT STARTER, VALUES WITH 400 V, 40 DEG., STANDARD: 93A, 45KW, INSIDE-DELTA CIRCUIT 3: 161A, 90KW, 200-460 V AC, 230 V AC, SCREW TERMINALS

General technical data:			
product brand name		SIRIUS	
Product feature			
 integrated bypass contact system 		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	
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	93	
● at 50 °C Rated value	Α	82	
● at 60 °C Rated value	Α	72	
Operating current for three-phase motors at 3-phase root switching			
• at 40 °C Rated value	Α	161	

● at 50 °C Rated value	Α	142
• at 60 °C Rated value	Α	125
Mechanical power output for three-phase motors		
● at 230 V		
 at standard circuit at 40 °C Rated value 	W	22 000
— at 3-phase root switching at 40 °C Rated	W	45 000
value		
● at 400 V		
 at standard circuit at 40 °C Rated value 	W	45 000
 — at 3-phase root switching at 40 °C Rated value 	W	90 000
yielded mechanical performance [hp] for three-phase	metric	25
AC motor at 200/208 V at standard circuit at 50 °C	hp	
Rated value	11-	50 60
Operating frequency Rated value Relative negative tolerance of the operating	Hz %	-10
frequency		
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	18
Continuous operating current in % of I_e at 40 °C	%	115
Active power loss at operating current at 40 °C during operation typical	W	55
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	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	
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		box terminals	
 for auxiliary and control current circuit 		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	
 finely stranded with core end processing 		2.5 35 mm²	
 finely stranded without core end processing 		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	
 finely stranded with core end processing 		2.5 50 mm²	
 finely stranded without core end processing 		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)
 finely stranded with core end processing 	2x (2.5 35 mm²)
 finely stranded without core end processing 	2x (4 35 mm²)
• stranded	2x (4 50 mm²)
Type of connectable conductor cross-section for	
AWG conductors for main contacts for box terminal	
 using the back clamping point 	10 2/0
using the front clamping point	10 2/0
 using both clamping points 	2x (10 1/0)
Type of connectable conductor cross-section for 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 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		
during operation	°C	60
during storage	°C	-25 + 80
Derating temperature	°C	40
Protection class IP		IP00

Certificates/ approvals:

General Product Approval **EMC Declaration of** Test Conformity Certificates











Type Test Certificates/Test Report

Test	
Certificates	

Shipping Approval

Special Test Certificate











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	40	
value	hp		
● at 220/230 V			
 at standard circuit at 50 °C Rated value 	metric	25	
	hp		
 at 3-phase root switching at 50 °C Rated 	metric	50	
value	hp		
● at 460/480 V			
 at standard circuit at 50 °C Rated value 	metric	60	
	hp		
 — at 3-phase root switching at 50 °C Rated 	metric	100	
value	hp		
Contact rating of the auxiliary contacts acc. to UL		B300 / R300	

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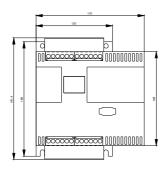
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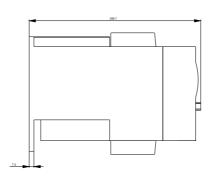
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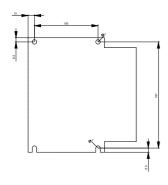
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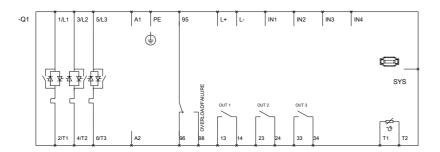
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RW44271BC44/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/index.aspx?attID9=3RW44271BC44&lang=en









last modified: 15.01.2015