SIEMENS

Data sheet 3RW44 45-6BC34



SIRIUS SOFT STARTER, VALUES WITH 460 V, 50 DEG., STANDARD: 280A, 200HP, INSIDE-DELTA CIRCUIT 3: 485A, 400HP, 200-460 V AC, 115 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	313
● at 50 °C Rated value	Α	280
• at 60 °C Rated value	Α	250
Operating current for three-phase motors at 3-phase root switching		
• at 40 °C Rated value	Α	542

• at 50 °C Rated value	Α	485
• at 60 °C Rated value	Α	433
Mechanical power output for three-phase motors		
● at 230 V		
— at standard circuit at 40 °C Rated value	W	90 000
 at 3-phase root switching at 40 °C Rated value 	W	160 000
● at 400 V		
— at standard circuit at 40 °C Rated value	W	160 000
 — at 3-phase root switching at 40 °C Rated value 	W	315 000
yielded mechanical performance [hp] for three-phase AC motor at 200/208 V at standard circuit at 50 °C Rated value	metric hp	75
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	Α	62
Continuous operating current in % of I_e at 40 °C	%	115
Active power loss at operating current at 40 °C during operation typical	W	145
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	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
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	busbar connection
 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	
 finely stranded with core end processing 	70 240 mm²
• finely stranded without core end processing	70 240 mm²
• stranded	95 300 mm²
Type of connectable conductor cross-section for main contacts for box terminal using the back clamping point	
 finely stranded with core end processing 	120 185 mm²
• finely stranded without core end processing	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	
 using the back clamping point 	250 500 kcmil
 using the front clamping point 	3/0 600 kcmil
 using both clamping points 	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	
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)
 for auxiliary contacts finely stranded with core end processing 	2x (20 16)

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 Conformity













Test Certificates

Shipping Approval

Type Test Certificates/Test Report

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	150
value	hp	
● at 220/230 V		
 — at standard circuit at 50 °C Rated value 	metric	100
	hp	
 — at 3-phase root switching at 50 °C Rated 	metric	200
value	hp	
● at 460/480 V		
 — at standard circuit at 50 °C Rated value 	metric	200
	hp	
 — at 3-phase root switching at 50 °C Rated 	metric	400
value	hp	
Contact rating of the auxiliary contacts acc. to UL		B300 / R300

Further information

Information- and Downloadcenter (Catalogs, Brochures,...) http://www.siemens.com/industrial-controls/catalogs

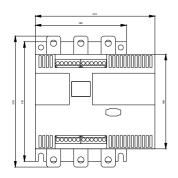
Industry Mall (Online ordering system)

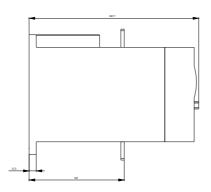
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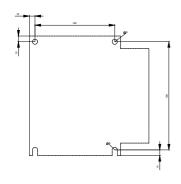
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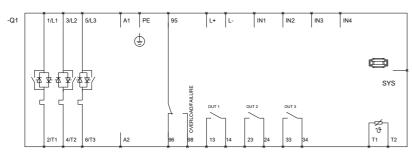
http://support.automation.siemens.com/WW/view/en/3RW44456BC34/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/index.aspx?attID9=3RW44456BC34&lang=en









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