SIEMENS

Data sheet

3RW44 46-6BC36



SIRIUS SOFT STARTER, VALUES WITH 575 V, 50 DEG., STANDARD: 315A, 300HP, INSIDE-DELTA CIRCUIT 3: 546A, 600HP, 400-690 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		G		
according to IEC 204-2 acc. to IEC 750				
Power Electronics:	Power Electronics:			

Power Electronics:		
Product designation		soft starters for high feature applications
Operating current		
• at 40 °C Rated value	А	356
• at 50 °C Rated value	А	315
• at 60 °C Rated value	А	280
Operating current for three-phase motors at 3-phase root switching		
• at 40 °C Rated value	А	617

e et 50 °C. Deted velve	А	546
• at 50 °C Rated value		
• at 60 °C Rated value	А	485
Mechanical power output for three-phase motors		
• at 400 V		000.000
— at standard circuit at 40 °C Rated value	W	200 000
— at 3-phase root switching at 40 °C Rated value	W	355 000
● at 500 V		
— at standard circuit at 40 °C Rated value	W	250 000
— at 3-phase root switching at 40 °C Rated value	W	450 000
 at 690 V at standard circuit at 40 °C Rated 	W	355 000
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	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	A	71
Continuous operating current in % of I_e at 40 °C	%	115
Active power loss at operating current at 40 °C during operation typical	W	174
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 without core end processing stranded min. 2 max. 1 Type of connectable conductor cross-section for AWG conductors for main contacts for box terminal using the back clamping point using the front clamping point using both clamping points Type of connectable conductor cross-section for DIN cable lug for main contacts finely stranded 50 	x 50 mm², max. 2x 185 mm² x 50 mm², max. 2x 185 mm² 2x 70 mm², max. 2x 240 mm² . 500 kcmil 600 kcmil
 stranded max. Type of connectable conductor cross-section for AWG conductors for main contacts for box terminal using the back clamping point using the front clamping point using both clamping points Type of connectable conductor cross-section for DIN cable lug for main contacts finely stranded stranded 	2x 70 mm², max. 2x 240 mm² . 500 kcmil 600 kcmil
Type of connectable conductor cross-section for AWG conductors for main contacts for box terminal250• using the back clamping point250• using the front clamping point3/0• using both clamping pointsmin. 2Type of connectable conductor cross-section for DIN cable lug for main contacts50• finely stranded50• stranded70	500 kcmil 600 kcmil
AWG conductors for main contacts for box terminal250• using the back clamping point250• using the front clamping point3/0• using both clamping pointsmin. 2Type of connectable conductor cross-section for DIN cable lug for main contacts50• finely stranded50• stranded70	600 kcmil
• using the back clamping point250• using the front clamping point3/0• using both clamping pointsmin. 2Type of connectable conductor cross-section for DIN cable lug for main contacts50• finely stranded50• stranded70	600 kcmil
 using the front clamping point using both clamping points Type of connectable conductor cross-section for DIN cable lug for main contacts finely stranded stranded 70 	600 kcmil
• using both clamping points min. 2 Type of connectable conductor cross-section for DIN cable lug for main contacts • finely stranded 50 • stranded 70	
Type of connectable conductor cross-section for DIN cable lug for main contacts • finely stranded • stranded	v 2/0 may 2v E00 kamil
cable lug for main contacts 50 • finely stranded 50 • stranded 70	x 2/0, max. 2x 500 kcmil
 finely stranded stranded 70 	
• stranded 70	240 mm²
Type of connectable conductor cross-section for	240 mm²
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 2x (20) 16)
end processing	
Ambient conditions:	
Ambient temperature	
• during operation °C 60	
• during storage °C -25	
Derating temperature °C 40	+80
Protection class IP IP00	+80
Certificates/ approvals:	+80

General Produ	ct Approval			EMC	Declaration of Conformity
CCC	CSA CSA		EHC	C-TICK	EG-Konf.
Test Certificate	es	Shipping Ap	proval		
<u>Type Test</u> Certificates/Test <u>Report</u>	Special Test Certificate	ABS	B U R E A U VERITAS		GL



JL/CSA ratings:		
yielded mechanical performance [hp] for three-phase		
AC motor		
● at 460/480 V		
— at standard circuit at 50 °C Rated value	metric	250
	hp	
— at 3-phase root switching at 50 °C Rated	metric	450
value	hp	
● at 575/600 V		
— at standard circuit at 50 °C Rated value	metric	300
	hp	
— at 3-phase root switching at 50 °C Rated	metric	600
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) http://www.siemens.com/industrymall

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW44466BC36

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RW44466BC36/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/index.aspx?attID9=3RW44466BC36&lang=en







