SIEMENS

Data sheet

3RW44 36-6BC44

SIRIUS SOFT STARTER, VALUES WITH 400 V, 40 DEG., STANDARD: 162A, 90KW, INSIDE-DELTA CIRCUIT 3: 281A, 160KW, 200-460 V AC, 230 V AC, SCREW TERMINALS



General technical data	
product brandname	SIRIUS
 Product equipment Integrated bypass contact 	Yes
system	
 Product feature 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	
Product designation	Soft starter

Operating current		
● at 40 °C rated value	А	162
● at 50 °C rated value	А	145
• at 60 °C rated value	А	125
Operating current for three-phase motors at inside-		
delta circuit		
• at 40 °C rated value	А	281
• at 50 °C rated value	А	251
• at 60 °C rated value	А	217
Mechanical power output for three-phase motors		
• at 230 V		
— at standard circuit at 40 °C rated value	W	45 000
— at inside-delta circuit at 40 °C rated value	W	90 000
• at 400 V		
— at standard circuit at 40 °C rated value	W	90 000
— at inside-delta circuit at 40 °C rated value	W	160 000
Yielded mechanical performance [hp] for three-phase AC motor at 200/208 V at standard circuit at 50 °C	hp	40
rated 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	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 inside-delta circuit rated value	V	200 460
Relative negative tolerance of the operating voltage at inside-delta circuit	%	-15
Relative positive tolerance of the operating voltage at inside-delta circuit	%	10
Minimum load [% of IM]	%	8
Adjustable motor current for motor overload protection minimum rated value	A	32
Continuous operating current [% of le] at 40 °C	%	115
Power loss [W] at operating current at 40 °C during operation typical	W	95
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 at AC		
• at 50 Hz rated value	V	230
• at 60 Hz rated value	V	230
Relative negative tolerance of the control supply voltage at AC at 60 Hz	%	-15
Relative positive tolerance of the control supply voltage at AC at 60 Hz	%	10
Display version for fault signal		Display

Mechanical data		
Width	mm	170
Height	mm	200
Depth	mm	270
Mounting type	_	screw fixing
Mounting position		with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back
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
Wire 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-sections for main contacts for box terminal using the front clamping point	
 finely stranded with core end processing 	16 70 mm²
 finely stranded without core end processing 	16 70 mm²
• stranded	16 70 mm²
Type of connectable conductor cross-sections for main contacts for box terminal using the back clamping point	

 finely stranded with core end processing 		16 70 mm²
 finely stranded without core end processing 		16 70 mm²
stranded stranded		16 70 mm²
Type of connectable conductor cross-sections for		
main contacts for box terminal using both clamping points		
 finely stranded with core end processing 		max. 1x 50 mm², 1x 70 mm²
 finely stranded without core end processing 		max. 1x 50 mm², 1x 70 mm²
• stranded		max. 2x 70 mm ²
Type of connectable conductor cross-sections at		
AWG conductors for main contacts for box terminal		
 using the back clamping point 		6 2/0
 using the front clamping point 		6 2/0
 using both clamping points 		max. 2x 1/0
Type of connectable conductor cross-sections for DIN cable lug for main contacts		
 finely stranded 		16 95 mm²
• stranded		25 120 mm²
Type of connectable conductor cross-sections 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-sections at AWG conductors		
 for main contacts 		4 250 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	t Approval			EMC	Declaration of Conformity
	CSA		EHC	C-Tick	EG-Konf.
Test Certificates		Shipping Ap	oroval		
spezielle Prüfbescheinigunge <u>n</u>	Typprüfbescheinigu ng/Werkszeugnis	ABS	B U R E A U VE R I T A S	GL	Lloyd's Register Lrs

Shipping	other	
Approval		
PRS	Umweltbestätigung	Bestätigungen

UL/CSA ratings		
Yielded mechanical performance [hp] for three-phase		
AC motor		
● at 200/208 V		
— at inside-delta circuit at 50 °C rated value	hp	75
● at 220/230 V		
— at standard circuit at 50 °C rated value	hp	50
— at inside-delta circuit at 50 °C rated value	hp	100
● at 460/480 V		
— at standard circuit at 50 °C rated value	hp	100
— at inside-delta circuit at 50 °C rated value	hp	200
Contact rating of auxiliary contacts according to UL		B300 / R300

Further information

Simulation Tool for Soft Starters (STS) https://support.industry.siemens.com/cs/ww/en/view/101494917

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

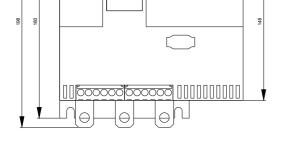
Industry Mall (Online ordering system) https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RW4436-6BC44

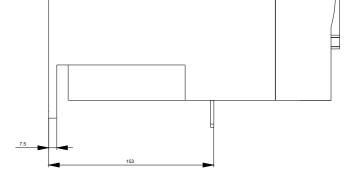
Cax online generator

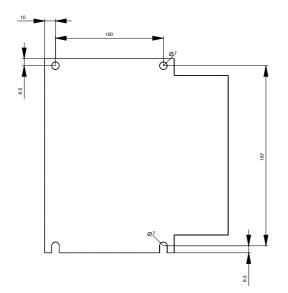
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW4436-6BC44

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RW4436-6BC44

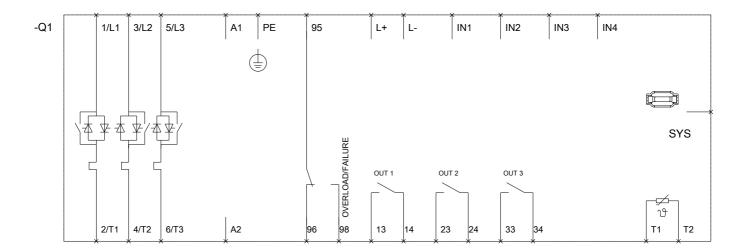
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW4436-6BC44&lang=en







02/27/2017



last modified:

02/10/2017