SIEMENS

Product data sheet

3RW4456-6BC44



SIRIUS SOFT STARTER, VALUES AT 400V, 40DEG., STANDARD: 780A, 450KW, INSIDE-DELTA CIRCUIT 3: 1351A, 800KW, 200-460V AC, 230V AC, SCREW TERMINALS

General details:

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	
Reference code		
• acc. to DIN EN 61346-2	Q	
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	А	780
• at 50 °C / Rated value	А	693
• at 60 °C / Rated value	А	615
 for three-phase motors / at 3-phase root switching 		
• at 40 °C / Rated value	А	1,351
• at 50 °C / Rated value	А	1,200
• at 60 °C / Rated value	А	1,065
Mechanical power output / for three-phase motors	_	
• at 230 V / at standard circuit / at 40 °C		
Rated value	W	250,000
• at 400 V / at standard circuit / at 40 °C		
Rated value	W	450,000
• at 230 V / at 3-phase root switching / at 40 °C		
Rated value	W	450,000
• at 400 V / at 3-phase root switching / at 40 °C		
Rated value	W	800,000
yielded mechanical performance [hp] / for three-phase AC motor / at 200/208 V / at standard circuit / at 50 °C / Rated value	hp	200
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	A	156
Continuous operating current in % of I_e / at 40 °C	%	115
Active power loss / at operating current / at 40 °C / during operation / typical	W	214
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	V	230
• with AC / at 60 Hz	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 design:		
Width	mm	510
Height	mm	640
Depth	mm	290
Mounting type		screw fixing
mounting position		bei senkrechter Montageebene +/-90° drehbar, bei senkrechter Montageebene +/- 22,5° nach vorne und hinten kippbar
Spacing required 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

Electrical connections:

busbar connection
screw-type terminals
0
3
1
50 240 mm²
70 240 mm²
2/0 500 kcmil

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)
 for AWG conductors / for auxiliary contacts 		2x (20 14)
 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
0	_	
Certificates/approvals:		
General Product Approval		EMC Declaration of Conformity
		C-TICK EG-Konf.
Test Certificates Shipping Approval		other
Special Test		Environmental
Special Test Certificate	Lloyd's Register	Environmental Confirmations
Special Test	Lloyd's Kegister _{LRS}	
Special Test Certificate	Lloyd's Register LRS	
Special Test Certificate Image: Certificate ABS Image: Certificate UL/CSA ratings Image: Certificate yielded mechanical performance [hp] / for three-phase AC	Llovd's Register LRS	
Special Test Certificate Image: Certificate UL/CSA ratings yielded mechanical performance [hp] / for three-phase AC motor	Llovd's Kegister LRS	
Special Test Certificate Image: Certificate ABS Image: Certificate UL/CSA ratings Image: Certificate yielded mechanical performance [hp] / for three-phase AC		
Special Test Certificate Image: Certificate ABS Image: Certificate UL/CSA ratings Image: Certificate vielded mechanical performance [hp] / for three-phase AC motor Image: Certificate • at 220/230 V / at standard circuit Image: Certificate	LRS	Confirmations
Special Test Certificate ABS UL/CSA ratings yielded mechanical performance [hp] / for three-phase AC motor • at 220/230 V / at standard circuit • at 50 °C / Rated value	hp	Confirmations
Special Test Certificate ABS UL/CSA ratings vielded mechanical performance [hp] / for three-phase AC motor • at 220/230 V / at standard circuit • at 220/230 V / at standard circuit • at 460/480 V / at standard circuit		Confirmations 250
Special Test Certificate Image: Certificate ABS Image: Certificate UL/CSA ratings Image: Certificate vielded mechanical performance [hp] / for three-phase AC motor Image: Certificate • at 220/230 V / at standard circuit • at 50 °C / Rated value • at 460/480 V / at standard circuit • at 460/480 V / at standard circuit • at 460/480 V / at standard circuit • at 50 °C / Rated value • at 200/208 V / at 3-phase root switching / at 50 °C / Rated value	hp	<u>Confirmations</u> 250 600
Special Test Certificate Image: Certificate ABS Image: Certificate UL/CSA ratings Image: Certificate yielded mechanical performance [hp] / for three-phase AC motor Image: Certificate • at 220/230 V / at standard circuit • at 50 °C / Rated value • at 460/480 V / at standard circuit • at 50 °C / Rated value	hp hp hp	<u>Confirmations</u> 250 600 450

Further information:

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

Industry Mall (Online ordering system)

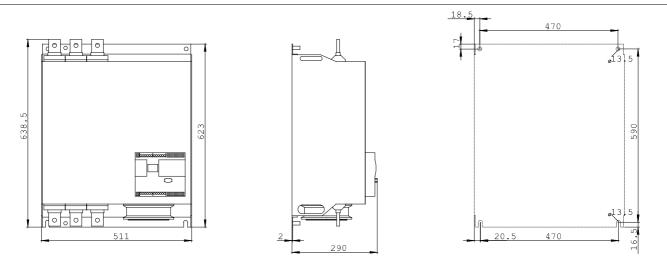
http://www.siemens.com/industrial-controls/mall

CAx-Online-Generator

http://www.siemens.com/cax

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RW4456-6BC44/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RW4456-6BC44



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last change:

Sep 29, 2014