SIEMENS

Product data sheet

3RW4427-3BC44



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, CAGE CLAMP TERMINALS

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	details:
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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:	

ons	soft starters for high feature applications	Product designation
		Operating current
		Operating current

• at 40 °C / Rated value • at 50 °C / Rated value	А	93
• at 50 °C / Rated value		
	А	82
• at 60 °C / Rated value	А	72
 for three-phase motors / at 3-phase root switching 		
• at 40 °C / Rated value	А	161
• at 50 °C / Rated value	А	142
• at 60 °C / Rated value	А	125
Mechanical power output / for three-phase motors		
• at 230 V / at standard circuit / at 40 °C		
Rated value	W	22,000
• at 400 V / at standard circuit / at 40 °C		
Rated value	W	45,000
 at 230 V / at 3-phase root switching / at 40 °C 		
Rated value	W	45,000
 at 400 V / at 3-phase root switching / at 40 °C 		
Rated value	W	90,000
yielded mechanical performance [hp] / for three-phase AC motor / at 200/208 V / at standard circuit / at 50 °C / Rated value	hp	25
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	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 / 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	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
Spacing required		
with side-by-side mounting	mm	100
with side-by-side mounting	mm	5
with side-by-side mounting	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

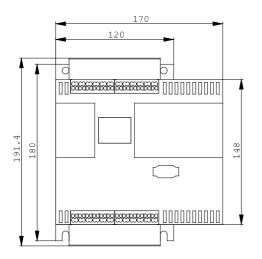
Electrical connections:

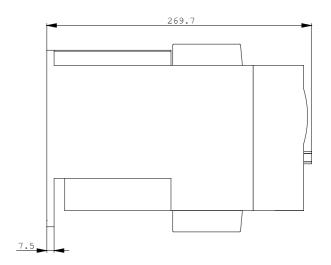
Design of the electrical connection	
for main current circuit	box terminals
 for auxiliary and control current circuit 	spring-loaded terminals
Number of NC contacts / for auxiliary contacts	0
Number of NO contacts / for auxiliary contacts	3
Number of CO contacts / for auxiliary contacts	1
Type of connectable 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 mm ²
 finely stranded / without core end processing 	4 50 mm²
• stranded	4 70 mm²

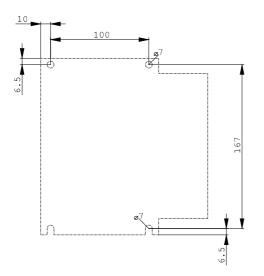
Type of connectable conductor cross-section / for main contacts / for box terminal / using the back clamping point		
• solid		2,5 16 mm²
 finely stranded / with core end processing 		2.5 50 mm²
 finely stranded / without core end processing 		10 50 mm²
• stranded		10 70 mm²
Type of connectable conductor 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 (0.25 1.5 mm²)
 finely stranded / with core end processing 		2x (0.25 1.5 mm²)
 for AWG conductors / for auxiliary contacts 		2x (24 16)
Ambient conditions:		
Ambient temperature		
during operation	/ °C	60
during storage	°C	-25 +80
Derating temperature	°C	40
Protection class IP		IP00

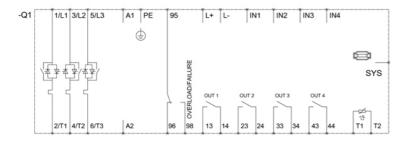
Certificates/approvals:

General Product App	oroval			EMC	Declaration of Conformity
	(SA) CSA	EAC		C-TICK	EG-Konf.
Test Certificates					
Special Test Certificate	<u>Type Test</u> <u>Certificates/Test</u> <u>Report</u>				
Shipping Approval					
ABS	BUREAU VERITAS	DNV DNV	GL	Llovd's Register	PRS
other					
Environmental Confirmations					
UL/CSA ratings					
vielded mechanical pe notor	erformance [hp] / f	or three-phase AC			
• at 220/230 V / at sta	andard circuit				
• at 50 °C / Rated	value		hp	25	
• at 460/480 V / at sta	andard circuit				
• at 50 °C / Rated	value		hp	60	
• at 200/208 V / at 3-	phase root switchin	g / at 50 °C / Rated value	hp	40	
• at 220/230 V / at 3-	phase root switchin	g / at 50 °C / Rated value	hp	50	
• at 460/480 V / at 3-	phase root switchin	g / at 50 °C / Rated value	hp	100	
Contact rating / of the	auxiliary contacts	s / acc. to UL		B300 / R300	
Further information					
nformation- and Down	•	•			
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/3RW4427-3BC44/all					
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams,) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RW4427-3BC44					









last change:

Sep 29, 2014