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

General details:			
Product brand name		SIRIUS	
Product equipment			
 integrated bridging contact system 		Yes	
thyristors		Yes	
Product function			
intrinsic device protection		Yes	
motor overload protection		Yes	
 evaluation of thermal resistor motor protection 		Yes	
reset external		Yes	
adjustable current limitation		Yes	
inside-delta circuit		Yes	
Product component / outlet for enine brake		Yes	
Item designation			
according to DIN EN 61346-2		Q	
 according to DIN 40719 extendable after IEC 204-2 / according to IEC 750 		G	
Power Electronics:			
product designation		soft starters for high feature applications	
Operating current			

• at 40 °C / rated value	А	93
• at 50 °C / rated value	А	82
• at 60 °C / rated value	А	72
 for three-phase servomotors / 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
Emitted mechanical power / for three-phase servomotors	_	
• at 230 V / at standard switching / at 40 °C		
• rated value	W	22,000
• at 400 V / at standard switching / at 40 °C		
• rated value	W	45,000
• at 230 V / at 3-phase root switching / at 40 °C		
• rated value	W	45,000
\bullet at 400 V / at 3-phase root switching / at 40 $^{\circ}\text{C}$		
rated value	W	90,000
yielded mechanical performance (hp) / for three-phase squirrel cage motors / at 200/208 V / at standard circuit / at 50 °C / rated V	hp	25
alue		
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 / with standard circuit / rated value	V	200 460
Relative negative tolerance / of the operating voltage / with standard circuit	%	-15
Relative positive tolerance / of the operating voltage / with standard circuit	%	10
Operating voltage / at 3-phase root switching / rated value	V	200 460
Relative negative tolerance / of the operating voltage / with inside-delta circuit	%	-15
Relative positive tolerance / of the operating voltage / with inside-delta circuit	%	10
Minimum load in % of I_M	%	8
Adjustable rated current / of the motor / for motor overload protection / minimum	А	18
Continuous operating current in % of I_e / at 40°C	%	115
Active power loss / at operating current / at 40°C / during operating phase / typical	W	55
Control electronics:		
Type of voltage / of the controlled 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 50 Hz / for AC	V	230
• at 60 Hz / for AC	V	230
Relative negative tolerance / of the control supply voltage / at 60 Hz / for AC	%	-15
Relative positive tolerance / of the control supply voltage / at 60 Hz / for AC	%	10
Type of display / for fault signal		Display

Mechanical design:		
Width	mm	170
Height	mm	192
Depth	mm	270
Type of mounting		screw fixing
Built in orientation		bei senkrechter Montageebene +/-90° drehbar, bei senkrechter Montageebene +/- 22,5° nach vorne und hinten kippbar
Distance, to be maintained, to the ranks assembly		
• upwards	mm	100
• sidewards	mm	5
downwards	mm	75
Altitude of installation site / at a height over 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 change-over switches / for auxiliary contacts	1
Type of the connectable conductor cross section / for main contacts / for box terminal / when using the front clamping point	
• solid	2.5 16 mm2
 finel y stranded / with conductor end processing 	2.5 35 mm2

• finel		4 50 mm2
y stranded / without conductor end processing		+ 50 mmz
• stran ded		4 70 mm2
Type of the connectable conductor cross-section / for main contacts / for box terminal / when using the back clamping point	-	
• solid		2,5 16 mm2
 finely stranded / with conductor end processing 		2.5 50 mm2
 withou t conductor final cutting / without conductor end processing 		10 50 mm2
• strand ed		10 70 mm2
Type of the connectable conductor cross-section / for main contacts / for box terminal / when using both clamping points		
• solid		2x (2.5 16 mm2)
 finely strande d / with conductor end processing 		2x (2.5 35 mm2)
 without conduc tor final cutting / without conductor end processing 		2x (4 35 mm2)
• stranded		2x (4 50 mm2)
Type of the connectable conductor cross-section / for AWG conductors / for main contacts / for box terminal		
when using the back cl amping point		10 2/0
• when using the front c lamping point		10 2/0
 when using both clampi ng points 		2x (10 1/0)
Type of the connectable conductor cross-section		
for auxiliary contacts		
• solid		2x (0.25 1.5 mm2)
 finely stranded / with conductor end processing 		2x (0.25 1.5 mm2)
 for AWG conductors / for auxiliary contacts 		2x (24 16)
Ambient conditions:		
Ambient temperature		
during operating	/ °C	60
during storage	°C	-25 80
Derating temperature	°C	40
Protection class IP		IP00
Certificates/approvals:		

General Product Approval				Test Certificates
	DSTEST			Manufacturer
Shipping Approval				other
BUREAU VERITAS	GL GL	PRS		Manufacturer
UL/CSA ratings				
yielded mechanical performance (hp) / for three cage motors	-phase squirrel			
• at 220/230 V / at standard circuit				
• at 50 °C / rated v alue		hp	25	
• at 460/480 V / at standard circuit				
• at 50 °C / rated v alue		hp	60	
\bullet at 200/208 V / at inside-delta circuit / at 50 °C / ed value	rat	hp	40	
\bullet at 220/230 V / at inside-delta circuit / at 50 °C / ed value	rat	hp	50	
\bullet at 460/480 V / at inside-delta circuit / at 50 °C / ed value	rat	hp	100	
Further information:				
Information- and Downloadcenter (Catalogs, Brownloadcenter (Catalogs, Brown	ochures,)			

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

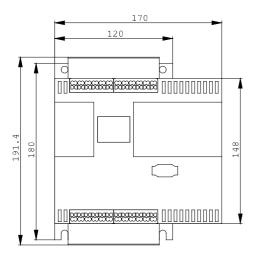
Industry Mall (Online ordering system) http://www.siemens.com/industrial-controls/mall

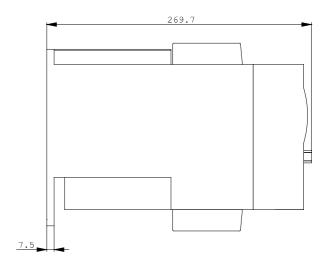
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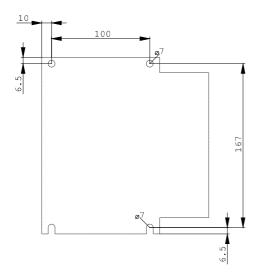
CAx-Online-Generator http://www.siemens.com/cax

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:

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