SIEMENS

Data sheet 3RW44 22-1BC44



SIRIUS SOFT STARTER, VALUES WITH 400 V, 40 DEG., STANDARD: 29A, 15KW, INSIDE-DELTA CIRCUIT 3: 50A, 22KW, 200-460 V AC, 230 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:			
Product designation		soft starters for high feature applications	
Operating current			
● at 40 °C Rated value	Α	29	
• at 50 °C Rated value	Α	26	
• at 60 °C Rated value	Α	23	
Operating current for three-phase motors at 3-phase root switching			
• at 40 °C Rated value	Α	50	

● at 50 °C Rated value	Α	45
• at 60 °C Rated value	Α	40
Mechanical power output for three-phase motors		
● at 230 V		
 at standard circuit at 40 °C Rated value 	W	5 500
— at 3-phase root switching at 40 °C Rated	W	15 000
value		
● at 400 V		
 — at standard circuit at 40 °C Rated value 	W	15 000
 — at 3-phase root switching at 40 °C Rated value 	W	22 000
yielded mechanical performance [hp] for three-phase	metric	7.5
AC motor at 200/208 V at standard circuit at 50 °C Rated value	hp	
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	Α	5
Continuous operating current [% of le] at 40 °C	%	115
Active power loss at operating current at 40 °C during operation typical	W	8
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	230

● at 60 Hz Rated value	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 data:		
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
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		box terminals	
 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			
• solid		2.5 16 mm²	
 finely stranded with core end processing 		2.5 35 mm²	
 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 (0.5 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 auxiliary contacts	2x (20 14)
• for auxiliary contacts finely stranded with core	2x (20 16)
end processing	
Ambient conditions:	
Ambient temperature	

Ambient conditions:			
Ambient temperature			
during operation	°C	60	
during storage	°C	-25 +80	
Derating temperature	°C	40	
Protection class IP		IP00	

Certificates/ approvals:

EMC Declaration of General Product Approval Test Conformity Certificates











Special Test Certificate

lest	
Certificates	

Shipping Approval

Type Test Certificates/Test Report











Shipping **Approval** other



Environmental Confirmations

UL/CSA ratings:		
yielded mechanical performance [hp] for three-phase		
AC motor		
● at 200/208 V		
 — at 3-phase root switching at 50 °C Rated 	metric	10
value	hp	
● at 220/230 V		
 — at standard circuit at 50 °C Rated value 	metric	7.5
	hp	
 — at 3-phase root switching at 50 °C Rated 	metric	15
value	hp	
● at 460/480 V		
 — at standard circuit at 50 °C Rated value 	metric	15
	hp	
 — at 3-phase root switching at 50 °C Rated 	metric	30
value	hp	
Contact rating of the auxiliary contacts acc. to UL		B300 / R300

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

Industry Mall (Online ordering system)

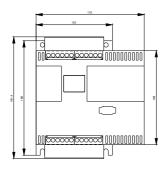
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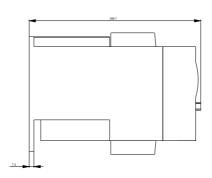
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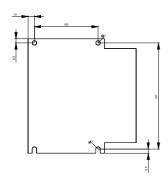
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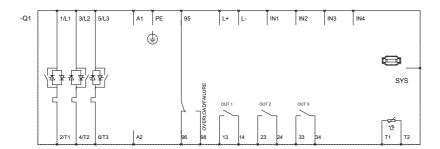
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RW44221BC44

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW44221BC44&lang=en









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