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	А	29
• at 50 °C Rated value	А	26
• at 60 °C Rated value	А	23
Operating current for three-phase motors at 3-phase root switching		
• at 40 °C Rated value	А	50

• at 50 °C Rated value	А	45
	A	40
• at 60 °C Rated value	~	40
Mechanical power output for three-phase motors		
• at 230 V		5 500
— at standard circuit at 40 °C Rated value	W	5 500
— at 3-phase root switching at 40 °C Rated value	W	15 000
• 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 AC motor at 200/208 V at standard circuit at 50 °C Rated value	metric hp	7.5
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	5
Continuous operating current in % of I_e 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	%	-10
voltage frequency		
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 mm ²			
 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 mm ²			
 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		
• during operation	°C	60
• during storage	°C	-25 +80
Derating temperature	°C	40
Protection class IP		IP00

Certificates/ approvals

General Produc	t Approval		EMC	Declaration of Conformity	Test Certificates
(SA)		EHC	С-тіск	EG-Konf.	Special Test Certificate
Test	Shipping App	oval			
Certificates					
<u>Type Test</u> Certificates/Test <u>Report</u>	ABS	B U R E A U VERITAS		GL	Lloyd's Register LRS
Shipping	other				
Approval					
PRS	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

Further information

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

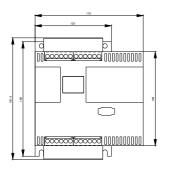
Industry Mall (Online ordering system) http://www.siemens.com/industrymall

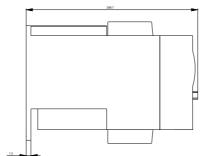
Cax online generator

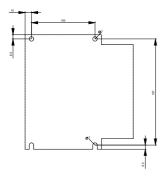
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW44221BC44

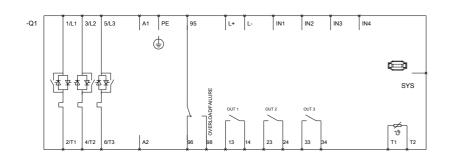
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RW44221BC44/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/index.aspx?attID9=3RW44221BC44&lang=en









last modified: