SIEMENS

Data sheet

3RW40 47-1BB14



SIRIUS SOFT STARTER, S3, 106A, 55KW/400V, 40 DEGR., AC 200-480V, AC/DC 110-230V, 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 	No	
• External reset	Yes	
 Adjustable current limitation 	Yes	
• inside-delta circuit	No	
Product component Motor brake output	No	
Equipment marking acc. to DIN EN 61346-2	Q	
Equipment marking acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750	G	

Power Electronics:			
Product designation		soft starters for standard applications	
Operating current			
• at 40 °C Rated value	А	106	
• at 50 °C Rated value	А	98	
• at 60 °C Rated value	А	90	
Mechanical power output for three-phase motors			
• at 230 V			

	14/	20.000
— at standard circuit at 40 °C Rated value	W	30 000
• at 400 V		
— at standard circuit at 40 °C Rated value	W	55 000
yielded mechanical performance [hp] for three-phase	metric	30
AC motor at 200/208 V at standard circuit at 50 °C	hp	
Rated value		
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	200 480
Relative negative tolerance of the operating voltage at standard circuit	%	-15
Relative positive tolerance of the operating voltage at standard circuit	%	10
Minimum load in % of I_M	%	20
Adjustable motor current for motor overload protection minimum rated value	A	46
Continuous operating current in % of I_e at 40 °C	%	115
Active power loss at operating current at 40 °C during operation typical	W	21
Control electronics:		
Type of voltage of the control supply voltage		AC/DC
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	%	10
voltage frequency		
Control supply voltage 1 with AC at 50 Hz	V	110 230
Control supply voltage 1 with AC at 60 Hz	V	110 230
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
Control supply voltage 1 for DC	V	110 230
Relative negative tolerance of the control supply voltage for DC	%	-15
Relative positive tolerance of the control supply voltage for DC	%	10
Display version for fault signal		red
Mechanical data:		
Mechanical data: Size of engine control device		\$3

Height	mm	170
Depth	mm	190
Mounting type		screw and snap-on mounting
mounting position		With additional fan: With vertical mounting surface +/- 90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back Without additional fan: With vertical mounting surface +/-10° rotatable, with vertical mounting surface +/- 10° t
Required spacing with side-by-side mounting	-	
• upwards	mm	60
• at the side	mm	30
 downwards 	mm	40
Installation altitude at height above sea level	m	5 000
Cable length maximum	m	300
Number of poles for main current circuit		3
	_	
Connections/ Terminals: Type of electrical connection		
for main current circuit		screw-type terminals
		screw-type terminals
• for auxiliary and control current circuit Number of NC contacts for auxiliary contacts	-	0
Number of NO contacts for auxiliary contacts	-	2
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		2x (2.5 16 mm²)
 finely stranded with core end processing 		2.5 35 mm²
• stranded		4 70 mm²
Type of connectable conductor cross-section for main contacts for box terminal using the back clamping point		
• solid		2x (2.5 16 mm²)
 finely stranded with core end processing 		2.5 50 mm ²
• 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)
• stranded		2x (10 50 mm²)
Type of connectable conductor cross-section for AWG conductors for main contacts for box terminal		
 using the back clamping point 		2x (10 1/0)
 using the front clamping point 		2x (10 1/0)

 using both clamping points 			10 2/0		
Type of connectable conductor cros	ss-section for DIN				
cable lug for main contacts					
 finely stranded 			2 x (10 5		
 stranded 			2x (10 70) mm²)	
Type of connectable conductor cros auxiliary contacts	ss-section for				
• solid			2x (0.5 2	.5 mm²)	
 finely stranded with core end 	processing		2x (0.5 1	.5 mm²)	
Type of connectable conductor cros	ss-section for				
AWG conductors					
 for main contacts 			2x (7 1/0)	
 for auxiliary contacts 			2x (20 14	+)	
 for auxiliary contacts finely str 	anded with core		2x (20 16	6)	
end processing					
Ambient conditions:					
Ambient temperature					
 during operation 		°C	-25 +60		
 during storage 		°C	-40 +80		
Derating temperature		°C	40		
Protection class IP			IP00		
Certificates/ approvals:					
General Product Approval				EMC	For use in hazardous locations
		E	AC	Стіск	ATEX
Test Certificates	Shipping A	pproval			
Special Test Type Test Certificate Certificates/T Report Report		G	GL	Lloyd's Register LRS	PRS
other					
EnvironmentalDeclarationConfirmationsConformity					

UL/CSA ratings:		
yielded mechanical performance [hp] for three-phase		
AC motor		
● at 220/230 V		
— at standard circuit at 50 °C Rated value	metric hp	30
● at 460/480 V		
— at standard circuit at 50 °C Rated value	metric hp	75
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=3RW40471BB14

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RW40471BB14/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/index.aspx?attID9=3RW40471BB14&lang=en







