SIEMENS

Data sheet 3RW40 56-6BB44

SIRIUS SOFT STARTER, S6, 162 A, 90 KW/400 V, 40 DEG., 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		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	A	162
• at 50 °C Rated value	A	145
• at 60 °C Rated value	A	125
Mechanical power output for three-phase motors		
• at 230 V		

— at standard circuit at 40 °C Rated value	W	45 000
• at 400 V		
— at standard circuit 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	metric hp	40
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
Minimum load in % of I_M	%	20
Adjustable motor current for motor overload protection minimum rated value	A	87
Continuous operating current in % of I_e at 40 °C	%	115
Active power loss at operating current at 40 °C during operation typical	W	75

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		red

Mechanical data:		
Size of engine control device		S6
Width	mm	120
Height	mm	198
Depth	mm	250
Mounting type		screw fixing

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	100
• at the side	mm	5
• downwards	mm	75
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		busbar connection
• for auxiliary and control current circuit		screw-type terminals
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		
• finely stranded with core end processing		16 ... 70 mm²
• finely stranded without core end processing		16 ... 70 mm²
• stranded		16 ... 70 mm²
Type of connectable conductor cross-section for main contacts for box terminal using the back clamping point		
• finely stranded with core end processing		16 ... 70 mm²
• finely stranded without core end processing		16 ... 70 mm²
• stranded		16 ... 70 mm²
Type of connectable conductor cross-section for main contacts for box terminal using both clamping points		
• finely stranded with core end processing		max. 1x 50 mm², 1x 70 mm²
• finely stranded without core end processing		max. 1x 50 mm², 1x 70 mm²
• stranded		max. 2x 70 mm²
Type of connectable conductor cross-section for AWG conductors for main contacts for box terminal		
• using the back clamping point		6 ... 2/0
• using the front clamping point		6 ... 2/0
• using both clamping points		max. 2x 1/0
Type of connectable conductor cross-section for DIN cable lug for main contacts		

• finely stranded		16 ... 95 mm²
• stranded		25 ... 120 mm²
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 main contacts		4 ... 250 kcmil
• for auxiliary contacts		2x (20 ... 14)
• for auxiliary contacts finely stranded with core end processing		2x (20 ... 16)

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	Test Certificates
CSA	UL	EAC	C-TICK	ATEX	Special Test Certificate

Shipping Approval			other	
DNV	GL	LRS	Declaration of Conformity	Environmental Confirmations

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	50
• **at 460/480 V**		
— at standard circuit at 50 °C Rated value	metric hp	100

Contact rating of the auxiliary contacts acc. to UL		B300 / R300

Further information

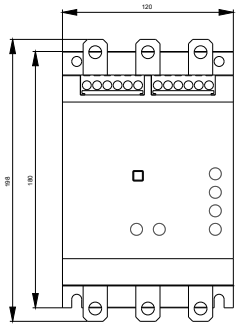
Information- and Downloadcenter (Catalogs, Brochures,…)
http://www.siemens.com/industrial-controls/catalogs

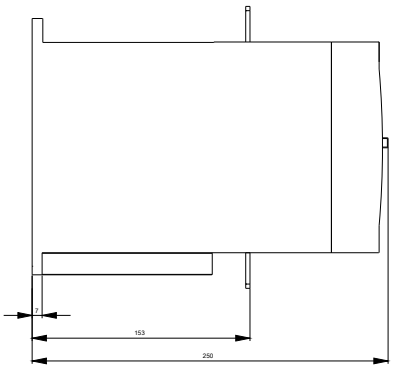
Industry Mall (Online ordering system)
http://www.siemens.com/industrymall

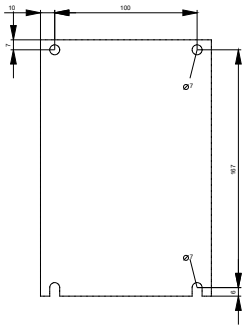
Cax online generator
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW40566BB44

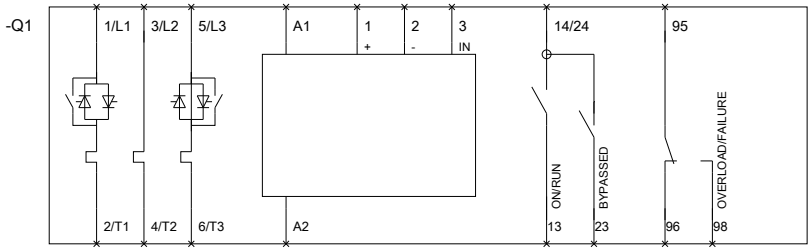
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
http://support.automation.siemens.com/WW/view/en/3RW40566BB44/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
http://www.automation.siemens.com/bilddb/index.aspx?attID9=3RW40566BB44&lang=en









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