SIEMENS

Data sheet 3RW4056-6BB44



SIRIUS soft starter S6 162 A, 90 kW/400 V, 40 °C 200-460 V AC, 230 V AC Screw terminals !!! Phased-out product !!! Successor is SIRIUS 3RW5, Preferred successor type is >>3RW5056-6AB14<<

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
insulation voltage rated value	V	600
degree of pollution		3, acc. to IEC 60947-4-2
reference code according to EN 61346-2		Q
reference code according to DIN 40719 extended according to IEC 204-2 according to IEC 750		G
Power Electronics		
product designation		Soft starter
operational current		
 at 40 °C rated value 	Α	162
 at 50 °C rated value 	Α	145
at 60 °C rated value	А	125
yielded mechanical performance for 3-phase motors		
● at 230 V		
 at standard circuit at 40 °C rated value 	kW	45
• at 400 V		
— at standard circuit at 40 °C rated value	kW	90
yielded mechanical performance [hp] for 3-phase AC motor at 200/208 V at standard circuit at 50 °C rated value	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 [%]	%	20
adjustable motor current for motor overload protection minimum rated value	А	87

continuous operating surrent FO/ of Is1 at 40 90	0/	115
continuous operating current [% of le] at 40 °C		115 75
power loss [W] at operational current at 40 °C during operation typical	VV	13
Control circuit/ Control		
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 at AC		
• at 50 Hz rated value	V	230
at 60 Hz rated value	V	230
relative negative tolerance of the control supply voltage at AC at 50 Hz	%	-15
relative positive tolerance of the control supply voltage at AC at 50 Hz	%	10
relative negative tolerance of the control supply voltage at AC at 60 Hz	%	-15
relative positive tolerance of the control supply voltage at 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
fastening method		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
wire 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 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-sections 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 stranded		16 70 mm ²
type of connectable conductor cross-sections 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		40 70 3
		16 70 mm²
type of connectable conductor cross-sections for main contacts for box terminal using both clamping points		16 70 mm²
••		max. 1x 50 mm², 1x 70 mm²
contacts for box terminal using both clamping points		
contacts for box terminal using both clamping points • finely stranded with core end processing		max. 1x 50 mm², 1x 70 mm²
 contacts for box terminal using both clamping points finely stranded with core end processing finely stranded without core end processing 		max. 1x 50 mm², 1x 70 mm² max. 1x 50 mm², 1x 70 mm²
contacts for box terminal using both clamping points • finely stranded with core end processing • finely stranded without core end processing • stranded type of connectable conductor cross-sections for AWG		max. 1x 50 mm², 1x 70 mm² max. 1x 50 mm², 1x 70 mm²

using both clamping points		max. 2x 1/0
type of connectable conductor cross-sections for DIN cable lug for main contacts		
 finely stranded 		2x (16 95 mm²)
• stranded		2x (25 120 mm²)
type of connectable conductor cross-sections 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-sections for AWG cables		
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		
installation altitude at height above sea level	m	5 000
environmental category		
 during transport according to IEC 60721 		2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m)
 during storage according to IEC 60721 		1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get inside the devices), 1M4
during operation according to IEC 60721		3K6 (no formation of ice, no condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6
ambient temperature		
during operation	°C	-25 +60
during storage	°C	-40 +80
derating temperature	°C	40
protection class IP on the front according to IEC 60529		IP00; IP20 with cover
touch protection on the front according to IEC 60529		finger-safe, for vertical contact from the front with cover
Certificates/ approvals		
General Product Approval		EMC











Declaration of Conformity Test Certificates	Marine / Shipping	other
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yielded mechanical performance [hp] for 3-phase AC motor		
• at 220/230 V		
 at standard circuit at 50 °C rated value 	hp	50
• at 460/480 V		
 at standard circuit at 50 °C rated value 	hp	100
contact rating of auxiliary contacts according to UL		B300 / R300







