SIEMENS

Data sheet 3RW4047-1BB04



SIRIUS soft starter S3 106 A, 55 kW/400 V, 40 $^{\circ}\text{C}$ 200-480 V AC, 24 V AC/DC 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
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 	А	106
 at 50 °C rated value 	А	98
at 60 °C rated value	А	90
yielded mechanical performance for 3-phase motors		
• at 230 V		
 — at standard circuit at 40 °C rated value 	kW	30
• at 400 V		
— at standard circuit at 40 °C rated value	kW	55
yielded mechanical performance [hp] for 3-phase AC motor at 200/208 V at standard circuit at 50 °C rated value	hp	30
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 [%]	%	20
adjustable motor current for motor overload protection minimum rated value	А	46

continuous providing		445
continuous operating current [% of le] at 40 °C	%	115
power loss [W] at operational current at 40 °C during operation typical	W	21
Control circuit/ Control		
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 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	24
• at 60 Hz rated value	V	24
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
control supply voltage 1 at DC rated value	V	24
relative negative tolerance of the control supply voltage at DC	%	-20
relative positive tolerance of the control supply voltage at DC	%	20
display version for fault signal		red
Mechanical data		
size of engine control device		S3
width	mm	70
height	mm	170
depth	mm	190
fastening method		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
wire 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
for auxiliary and control circuit number of NC contacts for auxiliary contacts.		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		0.405 40 3
• solid		2x (2.5 16 mm²)
finely stranded with core end processing		2.5 35 mm ²
stranded type of connectable conductor cross-sections for main		4 70 mm²
contacts for how torminal regime the heads also also as a first		0(0.5
contacts for box terminal using the back clamping point		2x (2.5 16 mm²)
• solid		D F FO?
solidfinely stranded with core end processing		2.5 50 mm²
 solid finely stranded with core end processing stranded type of connectable conductor cross-sections for main 		10 70 mm ²
solid finely stranded with core end processing stranded type of connectable conductor cross-sections for main contacts for box terminal using both clamping points		10 70 mm²
solid finely stranded with core end processing stranded type of connectable conductor cross-sections for main		

installation altitude at height above sea level environmental category • during transport according to IEC 60721 • during storage according to IEC 60721 • during operation according to IEC 60721 • during operation according to IEC 60721 ambient temperature • during operation • during storage • during storage • during temperature • during operation • cc • c	• stranded		2x (10 50 mm²)
 using the front clamping point using both clamping points type of connectable conductor cross-sections for DIN cable lug for main contacts finely stranded stranded stranded 2x (10 50 mm²) 2x (10 70 mm²) type of connectable conductor cross-sections for auxiliary contacts solid finely stranded with core end processing type of connectable conductor cross-sections for AWG cables for main contacts for main contacts for auxiliary contacts (2x (20 1/0) for auxiliary contacts (2x (20 1/4) for auxiliary contacts finely stranded with core end processing mobilent conditions installation altitude at height above sea level environmental category during transport according to IEC 60721 during storage according to IEC 60721 during operation according to IEC 60721 during operation according to IEC 60721 during operation according to IEC 60721 during storage during temperature during storage during storage<td></td><td></td><td></td>			
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ingly stranded solid finely stranded with core end processing stranded with core end p	 using both clamping points 		10 2/0
type of connectable conductor cross-sections for auxiliary contacts • solid • finely stranded with core end processing type of connectable conductor cross-sections for AWG cables • for main contacts • for main contacts • for auxiliary contacts • for auxiliary contacts finely stranded with core end processing mbient conditions installation altitude at height above sea level • during storage according to IEC 60721 • during operation • °C -25 +60 • during storage °C -40 +80 detaiting temperature • during temperature • during torage • C 40 protection class IP on the front according to IEC 60529 touch protection on the front according to IEC 60529 touch protection on the front according to IEC 60529 touch protection on the front according to IEC 60529 touch protection of conductor from the front			
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e solid finely stranded with core end processing type of connectable conductor cross-sections for AWG cables of for main contacts for auxiliary contacts for auxiliary contacts finely stranded with core end processing mblent conditions installation altitude at height above sea level of during storage according to IEC 60721 of during operation according to IEC 60721 ambient temperature of during operation of during storage of during storage of during stor	• stranded		2x (10 70 mm²)
type of connectable conductor cross-sections for AWG cables • for main contacts • for auxiliary contacts • for auxiliary contacts finely stranded with core end processing mblent conditions installation altitude at height above sea level environmental category • during transport according to IEC 60721 • during storage according to IEC 60721 • during operation according to IEC 60721 • during operation according to IEC 60721 • during operation according to IEC 60721 • during storage according to IEC 60721 • during operation according to IEC 60721 • during operation according to IEC 60721 • during storage according to IEC 60721 • during operation • °C -25 +60 • during storage derating temperature o C 40 protection class IP on the front according to IEC 60529 touch protection on the front according to IEC 60529 finger-safe, for vertical contact from the front			
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• for auxiliary contacts • for auxiliary contacts finely stranded with core end processing mbient conditions Installation altitude at height above sea level environmental category • during transport according to IEC 60721 • during storage according to IEC 60721 • during operation according to IEC 60721 • during operation according to IEC 60721 ambient temperature • during operation • during storage • during storage • C • 25 +60 • during temperature	71		
 for auxiliary contacts finely stranded with core end processing mblent conditions installation altitude at height above sea level m 5 000 environmental category during transport according to IEC 60721 during storage according to IEC 60721 during operation according to IEC 60721 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 during storage C -25 +60 during storage C -40 +80 derating temperature C 40 protection class IP on the front according to IEC 60529 finger-safe, for vertical contact from the front 	 for main contacts 		2x (7 1/0)
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installation altitude at height above sea level environmental category • during transport according to IEC 60721 • during storage according to IEC 60721 • during operation according to IEC 60721 • during operation according to IEC 60721 ambient temperature • during operation • during storage • during storage • during temperature • during operation • cc • c			2x (20 16)
environmental category • during transport according to IEC 60721 • during storage according to IEC 60721 • during operation according to IEC 60721 ambient temperature • during operation • during storage • during storage • during operation c	Ambient conditions		
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(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 • during storage ° C -25 +60 • during storage ° C -40 +80 derating temperature ° C protection class IP on the front according to IEC 60529 touch protection on the front according to IEC 60529 finger-safe, for vertical contact from the front	 during transport according to IEC 60721 		2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m)
ambient temperature • during operation • during storage • during temperature • c -25 +60 • during temperature ° C -40 +80 derating temperature ° C 40 protection class IP on the front according to IEC 60529 touch protection on the front according to IEC 60529 finger-safe, for vertical contact from the front	during storage according to IEC 60721		
 during operation during storage C -25 +60 +40 +80 derating temperature C 40 protection class IP on the front according to IEC 60529 touch protection on the front according to IEC 60529 IP20 finger-safe, for vertical contact from the front 	during operation according to IEC 60721		
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derating temperature °C 40 protection class IP on the front according to IEC 60529 touch protection on the front according to IEC 60529 finger-safe, for vertical contact from the front	during operation	°C	-25 +60
protection class IP on the front according to IEC 60529 touch protection on the front according to IEC 60529 finger-safe, for vertical contact from the front	during storage	°C	-40 +80
touch protection on the front according to IEC 60529 finger-safe, for vertical contact from the front	derating temperature	°C	40
	protection class IP on the front according to IEC 60529		IP20
ertificates/ approvals	touch protection on the front according to IEC 60529		finger-safe, for vertical contact from the front
	Certificates/ approvals		











Declaration of Conformity

Test Certificates

Marine / Shipping









Marine / Shipping

other

Railway



UL/CSA ratings		
yielded mechanical performance [hp] for 3-phase AC motor		
• at 220/230 V		
 at standard circuit at 50 °C rated value 	hp	30
• at 460/480 V		
 at standard circuit at 50 °C rated value 	hp	75







