SIEMENS

Data sheet

3RW4027-1BB14



SIRIUS soft starter S0 32 A, 15 kW/400 V, 40 $^\circ\text{C}$ 200-480 V AC, 110-230 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 acc. to DIN EN 61346-2		Q
reference code acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750		G
Power Electronics		
product designation		Soft starter
operational current		
• at 40 °C rated value	А	32
• at 50 °C rated value	А	29
• at 60 °C rated value	А	26
yielded mechanical performance for 3-phase motors		
• at 230 V		
 — at standard circuit at 40 °C rated value 	W	7 500
• at 400 V		
 — at standard circuit at 40 °C rated value 	W	15 000
yielded mechanical performance [hp] for 3-phase AC motor at 200/208 V at standard circuit at 50 °C rated value	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	200 480
relative negative tolerance of the operating voltage at standard circuit	%	-15
relative positive tolerance of the operating voltage at	%	10

	_	
standard circuit		
minimum load [%]	%	20
adjustable motor current for motor overload protection minimum rated value	A	17
continuous operating current [% of le] at 40 °C	%	115
power loss [W] at operational current at 40 °C during		13
operation typical		
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	V	110 230
control supply voltage 1 at AC at 60 Hz	V	110 230
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
control supply voltage 1 at DC	V	110 230
relative negative tolerance of the control supply voltage at DC	%	-15
relative positive tolerance of the control supply voltage at DC	%	10
display version for fault signal		red
Mechanical data		
size of engine control device	_	S0
	mm	45
size of engine control device width height	mm	45 125
size of engine control device width height depth	-	45 125 155
size of engine control device width height depth fastening method	mm	45 125 155 screw and snap-on mounting
size of engine control device width height depth	mm	45 125 155
size of engine control device width height depth fastening method	mm	 45 125 155 screw and snap-on mounting 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
size of engine control device width height depth fastening method mounting position required spacing with side-by-side mounting • upwards	mm	 45 125 155 screw and snap-on mounting 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
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size of engine control device width height depth fastening method mounting position required spacing with side-by-side mounting • upwards • at the side • downwards wire length maximum	mm mm mm mm	 45 125 155 screw and snap-on mounting 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 60 15 40 300
size of engine control device width height depth fastening method mounting position required spacing with side-by-side mounting • upwards • at the side • downwards wire length maximum number of poles for main current circuit	mm mm mm mm	 45 125 155 screw and snap-on mounting 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 60 15 40
size of engine control device width height depth fastening method mounting position required spacing with side-by-side mounting • upwards • at the side • downwards wire length maximum number of poles for main current circuit Connections/ Terminals	mm mm mm mm	 45 125 155 screw and snap-on mounting 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 60 15 40 300
size of engine control device width height depth fastening method mounting position required spacing with side-by-side mounting • upwards • at the side • downwards wire length maximum number of poles for main current circuit Connections/ Terminals type of electrical connection	mm mm mm mm	 45 125 155 screw and snap-on mounting 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 60 15 40 300 3
size of engine control device width height depth fastening method mounting position required spacing with side-by-side mounting • upwards • at the side • downwards wire length maximum number of poles for main current circuit Connections/ Terminals type of electrical connection • for main current circuit	mm mm mm mm	 45 125 155 screw and snap-on mounting 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 60 15 40 300 3
size of engine control device width height depth fastening method mounting position required spacing with side-by-side mounting • upwards • at the side • downwards wire length maximum number of poles for main current circuit Connections/ Terminals type of electrical connection • for main current circuit • for auxiliary and control circuit	mm mm mm mm	 45 125 155 screw and snap-on mounting 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 60 15 40 300 3 screw-type terminals screw-type terminals
size of engine control device width height depth fastening method mounting position required spacing with side-by-side mounting • upwards • at the side • downwards wire length maximum number of poles for main current circuit Connections/ Terminals type of electrical connection • for main current circuit • for auxiliary and control circuit number of NC contacts for auxiliary contacts	mm mm mm mm	 45 125 155 screw and snap-on mounting 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 60 15 40 300 3
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size of engine control device width height depth fastening method mounting position required spacing with side-by-side mounting • upwards • at the side • downwards wire length maximum number of poles for main current circuit Connections/ Terminals type of electrical connection • for main current circuit • for auxiliary and control circuit number of NC contacts for auxiliary contacts	mm mm mm mm	 45 125 155 screw and snap-on mounting 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 60 15 40 300 3 screw-type terminals screw-type terminals 0 2
size of engine control device width height depth fastening method mounting position required spacing with side-by-side mounting • upwards • at the side • downwards wire length maximum number of poles for main current circuit Connections/ Terminals type of electrical connection • for main current circuit • for auxiliary and control circuit number of NC contacts for auxiliary contacts number of CO contacts for auxiliary contacts type of connectable conductor cross-sections for main contacts for box terminal using the front	mm mm mm mm	 45 125 155 screw and snap-on mounting 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 60 15 40 300 3 screw-type terminals screw-type terminals 0 2 1 2x (1 2.5 mm ²), 2x (2.5 6 mm ²), max. 1x 10 mm ²
size of engine control device width height depth fastening method mounting position required spacing with side-by-side mounting • upwards • at the side • downwards wire length maximum number of poles for main current circuit Connections/ Terminals type of electrical connection • for main current circuit • for auxiliary and control circuit number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts number of CO contacts for auxiliary contacts type of connectable conductor cross-sections for main contacts for box terminal using the front clamping point • solid • finely stranded with core end processing	mm mm mm mm	 45 125 155 screw and snap-on mounting With additional fan: 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 60 15 40 300 3 screw-type terminals c c c c d <lid< li=""> d d d d d <l< th=""></l<></lid<>
size of engine control device width height depth fastening method mounting position required spacing with side-by-side mounting • upwards • at the side • downwards wire length maximum number of poles for main current circuit Connections/ Terminals type of electrical connection • for main current circuit • for auxiliary and control circuit number of NC contacts for auxiliary contacts number of CO contacts for auxiliary contacts number of CO contacts for auxiliary contacts type of connectable conductor cross-sections for main contacts for box terminal using the front clamping point • solid	mm mm mm mm	 45 125 155 screw and snap-on mounting 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 60 15 40 300 3 screw-type terminals screw-type terminals 0 2 1 2x (1 2.5 mm ²), 2x (2.5 6 mm ²), max. 1x 10 mm ²

 using the front 	clamping point			1x 8, 2x (16	10)		
type of connectable auxiliary contacts	e conductor cross-secti	ons for					
• solid				2x (0.5 2.5 r	mm²)		
 finely stranded 	 finely stranded with core end processing 			2x (0.5 1.5 r	2x (0.5 1.5 mm ²)		
type of connectable cables	e conductor cross-secti	ons at AWG					
 for auxiliary co 	ontacts			2x (20 14)			
 for auxiliary co processing 	ontacts finely stranded wit	h core end		2x (20 16)			
Ambient conditions							
installation altitude	e at height above sea lev	vel	m	5 000			
environmental cate	gory						
 during transpo 	during transport acc. to IEC 60721			2K2, 2C1, 2S1	, 2M2 (max. fall he	eight 0.3 m)	
 during storage 	during storage acc. to IEC 60721				1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get inside the devices), 1M4		
 during operation 	on acc. to IEC 60721			3K6 (no forma mist), 3S2 (sai	tion of ice, no cond nd must not get inte	lensation), 3C3 (no salt o the devices), 3M6	
ambient temperatu	re						
 during operation 	on		°C	-25 +60			
 during storage 			°C	-40 +80			
derating temperatu	re		°C	40			
	protection class IP on the front acc. to IEC 60529			IP20			
touch protection or	n the front acc. to IEC 6	0529		finger-safe, for	vertical contact fro	om the front	
Certificates/ approva	als						
General Product A	pproval				EMC	For use in hazard- ous locations	
SP CM	CCC CCC			EHC	RCM	κ ATEX	
Declaration of Conformity	Test Certificates		N	larine / Shipping			
CE EG-Konf.	<u>Special Test Certific-</u> <u>ate</u>	<u>Type Test Certi</u> ates/Test Rep		Lloyd's Register urs	PRS	DNV-GL	
other	Railway						
Confirmation	Confirmation						

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	7.5		
• at 460/480 V				
— at standard circuit at 50 °C rated value	hp	20		
contact rating of auxiliary contacts according to UL		B300 / R300		
Further information				

Simulation Tool for Soft Starters (STS)

https://support.industry.siemens.com/cs/ww/en/view/101494917

Information- and Downloadcenter (Catalogs, Brochures,...)

https://www.siemens.com/ic10 Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RW4027-1BB14

Cax online generator

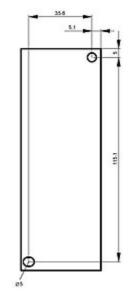
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW4027-1BB14

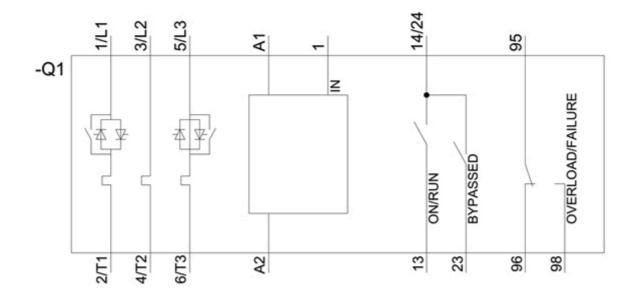
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

https://support.industry.siemens.com/cs/ww/en/ps/3RW4027-1BB14

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW4027-1BB14&lang=en







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