SIEMENS

Data sheet

3RW4037-1TB05



SIRIUS soft starter S2 63 A, 37 kW/500 V, 40 °C 400-600 V AC, 24 V AC/DC Screw terminals Thermistor motor protection

Figure similar

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 		Yes
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	63
• at 50 °C rated value	А	58
• at 60 °C rated value	А	53
yielded mechanical performance for 3-phase motors		
• at 400 V		
— at standard circuit at 40 °C rated value	W	30 000
• at 500 V		
— at standard circuit at 40 °C rated value	W	37 000
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	400 600
relative negative tolerance of the operating voltage at standard circuit	%	-15
relative positive tolerance of the operating voltage at	%	10

minimum load [%]	%	20
minimum load [%] adjustable motor current for motor overload	- ⁷⁰ A	26
protection minimum rated value	A	20
continuous operating current [% of le] at 40 °C	%	115
power loss [W] at operational current at 40 °C during operation typical	W	12
Control circuit/ Control	_	
	_	AC/DC
type of voltage of the control supply voltage		
control supply voltage frequency 1 rated value	- Hz Hz	50 60
control supply voltage frequency 2 rated value relative negative tolerance of the control supply	- HZ %	-10
voltage frequency	_	
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	%	-20
relative positive tolerance of the control supply voltage at AC at 50 Hz	%	20
relative negative tolerance of the control supply voltage at AC at 60 Hz	%	-20
relative positive tolerance of the control supply voltage at AC at 60 Hz	%	20
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		
Mechanical data size of engine control device		S2
size of engine control device	mm	S2 55
	mm	S2 55 160
size of engine control device width height	-	55
size of engine control device width	mm	55 160
size of engine control device width height depth	mm	55 160 170
size of engine control device width height depth fastening method	mm	 55 160 170 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	mm	 55 160 170 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	mm mm	55 160 170 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
size of engine control device width height depth fastening method mounting position required spacing with side-by-side mounting • upwards • at the side	mm mm mm mm	55 160 170 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 30
size of engine control device width height depth fastening method mounting position required spacing with side-by-side mounting • upwards • at the side • downwards	mm mm mm mm	55 160 170 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 30 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	mm mm mm mm	55 160 170 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 30 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	55 160 170 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 30 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	mm mm mm mm	55 160 170 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 30 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	55 160 170 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 30 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	55 160 170 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 30 40 300 3 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	mm mm mm mm	55 160 170 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 30 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	55 160 170 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 30 40 300 3 screw-type terminals screw-type terminals 0
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	mm mm mm mm	55 160 170 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 30 40 300 3 screw-type terminals screw-type terminals 0 2 1
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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 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	mm mm mm mm	55 160 170 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 30 40 300 3 screw-type terminals screw-type terminals 0 2 1

main contacts for box clamping point						
	cterminal using the	back				
 solid 				2x (1 5 16	mm ²)	
	ith core and processi	20		2x (1.5 16 1.5 25 mm	·	
-	vith core end processi	ng		1.5 25 mm		
stranded		tions for		1.5 35 mm	-	
type of connectable c main contacts for box points						
• solid				2x (1.5 16	mm²)	
 finely stranded w 	ith core end processi	ng		2x (1.5 16		
 stranded 		5		2x (1.5 25		
type of connectable c cables for main conta				, , , , , , , , , , , , , , , , , , ,	,	
 using the back clip 	using the back clamping point			16 2		
 using the front cla 	amping point			18 2		
 using both clamp 				2x (16 2)		
type of connectable c		tions for				
auxiliary contacts						
 solid 				2x (0.5 2.5	mm²)	
 finely stranded w 	ith core end processi	ng		2x (0.5 1.5	mm²)	
type of connectable c cables	onductor cross-sec	tions at AWG				
 for auxiliary containing 	acts			2x (20 14)		
•	acts finely stranded w	rith core end		2x (20 16)		
processing						
Ambient conditions						
installation altitude at	height above sea le	evel	m	5 000		
environmental catego	ory					
 during transport a 	acc. to IEC 60721			2K2, 2C1, 2S	1, 2M2 (max. fall height	0.3 m)
• during storage acc. to IEC 60721					asional condensation),	
				1S2 (sand mu	ust not get inside the de	vices), 1M4
 during operation acc. to IEC 60721 				ation of ice, no condens and must not get into the		
ambient temperature					ind moether get me th	,
 during operation 			°C	-25 +60		
 during storage 			°C	-40 +80		
derating temperature			°C	40		
protection class IP				IP00		
Certificates/ approvals						
General Product App	oroval					EMC
	(m)	ŝ		гпг	rnr	A
Q12	(m)	(P)		EAC	FAL	<u>(</u>)
CSA	CCC	UL		LIIL	LIIL	RCM
For use in						
	Declaration of	Test Certificat	es		Marine / Shipping	
hazardous	Conformity					
hazardous						
hazardous	<u>Miscellaneous</u>	<u>Type Test</u>		Special Test	Lloude	(And and and and and and and and and and a
hazardous	<u>Miscellaneous</u>	Certificates/Te	<u>est</u>	Special Test Certificate	Lloyd's Register	
hazardous	Miscellaneous		<u>əst</u>		Hoyd's Register	PRS
hazardous	Miscellaneous	Certificates/Te	<u>est</u>		Lloyds Register us	PRS
hazardous	<u>Miscellaneous</u>	Certificates/Te	<u>est</u>		Lloyd's Register urs	PRS
hazardous locations		<u>Certificates/Te</u> <u>Report</u>	<u>est</u>		Hoyds Register us	PRS
hazardous	Miscellaneous	Certificates/Te	<u>est</u>		Hoyds Register us	PRS



UL/CSA ratings		
yielded mechanical performance [hp] for 3-phase AC motor		
• at 460/480 V		
 — at standard circuit at 50 °C rated value 	hp	40
● at 575/600 V		
 — at standard circuit at 50 °C rated value 	hp	50
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=3RW4037-1TB05

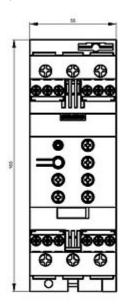
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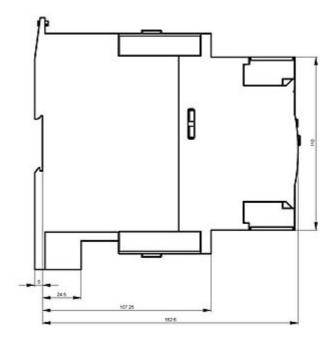
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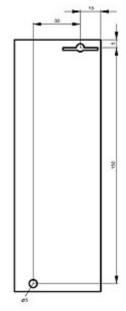
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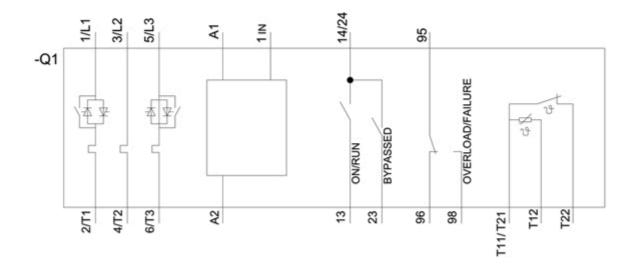
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Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW4037-1TB05&lang=en









last modified:

12/15/2020 🖸