SIEMENS

Data sheet

3RW3003-2CB54



SIRIUS soft starter 22.5mm 3 A, 1.1 kW/400 V, 40 $^{\circ}\text{C}$ 200-400 V AC, 24-230 V AC/DC spring-type terminals

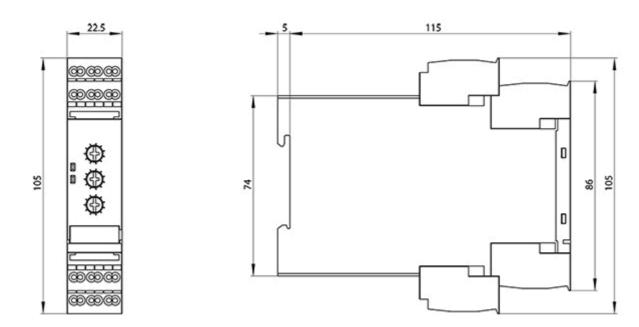
General technical data		
product brand name		SIRIUS
product feature		
 integrated bypass contact system 		No
thyristors		Yes
product function		
 intrinsic device protection 		No
 motor overload protection 		No
 evaluation of thermistor motor protection 		No
external reset		No
 adjustable current limitation 		No
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	3
• at 50 °C rated value	А	2.6
• at 60 °C rated value	А	2.2
yielded mechanical performance for 3-phase motors		
• at 230 V		
— at standard circuit at 40 °C rated value	W	550
• at 400 V		
— at standard circuit at 40 °C rated value	W	1 100
yielded mechanical performance [hp] for 3-phase AC motor at 200/208 V at standard circuit at 50 °C rated value	hp	0.5
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	200 400
relative negative tolerance of the operating voltage at standard circuit	%	-10
relative positive tolerance of the operating voltage at standard circuit	%	10
minimum load [%]	%	9

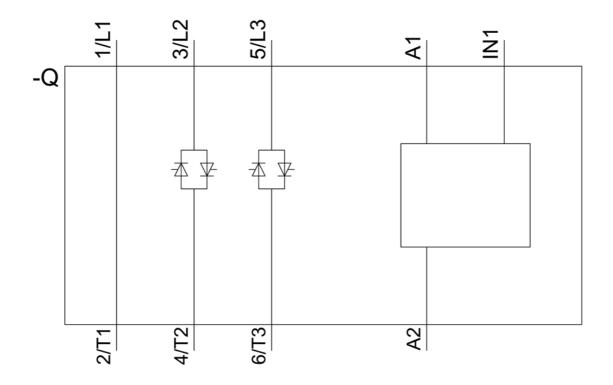
	-	
continuous operating current [% of le] at 40 °C	%	100
power loss [W] at operational current at 40 °C during operation typical	W	6.5
Control circuit/ Control		
type of voltage of the control supply voltage		AC/DC
control supply voltage frequency 1 rated value	- Hz	50
control supply voltage frequency 2 rated value	- Hz	60
control supply voltage 1 at AC at 50 Hz	V	24 230
control supply voltage 1 at AC at 60 Hz	V	24 230
relative negative tolerance of the control supply	%	-10
voltage at AC at 50 Hz	-	
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	%	-10
relative positive tolerance of the control supply voltage at AC at 60 Hz	%	10
control supply voltage 1 at DC	V	24 230
relative negative tolerance of the control supply voltage at DC	%	-10
relative positive tolerance of the control supply voltage at DC	%	10
Mechanical data		
	mrs	22.5
width	mm	22.5
height	mm	102
depth	mm	123
fastening method		screw and snap-on mounting
mounting position		With vertical mounting surface +/-10° rotatable, with vertical mounting surface +/- 10° tiltable to the front and back
wire length maximum	m	100
number of poles for main current circuit	-	3
•		
Connections/ Terminals		
Connections/ Terminals	_	
type of electrical connection		spring-loaded terminals
type of electrical connection • for main current circuit		spring-loaded terminals
 type of electrical connection for main current circuit for auxiliary and control circuit 		spring-loaded terminals
type of electrical connection for main current circuit for auxiliary and control circuit number of NC contacts for auxiliary contacts		spring-loaded terminals 0
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		spring-loaded terminals 0 0
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		spring-loaded terminals 0
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		spring-loaded terminals 0 0 0
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 • solid		spring-loaded terminals 0 0 0 2x (0.25 1.5 mm ²)
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		spring-loaded terminals 0 0 0
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 • solid		spring-loaded terminals 0 0 0 2x (0.25 1.5 mm ²)
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 • solid • finely stranded with core end processing type of connectable conductor cross-sections for		spring-loaded terminals 0 0 0 2x (0.25 1.5 mm ²)
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 • solid • finely stranded with core end processing type of connectable conductor cross-sections for auxiliary contacts		spring-loaded terminals 0 0 0 2x (0.25 1.5 mm ²) 2x (0.25 1 mm ²)
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 • solid • finely stranded with core end processing type of connectable conductor cross-sections for auxiliary contacts • solid • solid • solid • solid		spring-loaded terminals 0 0 0 2x (0.25 1.5 mm ²) 2x (0.25 1.5 mm ²) 2x (0.25 1.5 mm ²)
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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 • solid • finely stranded with core end processing type of connectable conductor cross-sections for auxiliary contacts • solid • finely stranded with core end processing type of connectable conductor cross-sections for auxiliary contacts • solid • finely stranded with core end processing type of connectable conductor cross-sections for auxiliary contacts • solid • finely stranded with core end processing type of connectable conductor cross-sections at AWG cables		spring-loaded terminals 0 0 0 2x (0.25 1.5 mm ²) 2x (0.25 1 mm ²) 2x (0.25 1.5 mm ²) 2x (0.25 1.0 mm ²)
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 • solid • finely stranded with core end processing type of connectable conductor cross-sections for auxiliary contacts • solid • finely stranded with core end processing type of connectable conductor cross-sections for auxiliary contacts • solid • finely stranded with core end processing type of connectable conductor cross-sections for auxiliary contacts • solid • finely stranded with core end processing type of connectable conductor cross-sections at AWG cables • for main contacts		spring-loaded terminals 0 0 0 2x (0.25 1.5 mm ²) 2x (0.25 1 mm ²) 2x (0.25 1.5 mm ²) 2x (0.25 1.0 mm ²) 2x (0.24 16)
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 • solid • finely stranded with core end processing type of connectable conductor cross-sections for auxiliary contacts • solid • finely stranded with core end processing type of connectable conductor cross-sections for auxiliary contacts • solid • finely stranded with core end processing type of connectable conductor cross-sections at AWG cables • for main contacts • for main contacts • for auxiliary contacts • for auxiliary contacts		spring-loaded terminals 0 0 0 2x (0.25 1.5 mm ²) 2x (0.25 1 mm ²) 2x (0.25 1.5 mm ²) 2x (0.25 1.0 mm ²) 2x (0.25 1.0 mm ²)
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 • solid • finely stranded with core end processing type of connectable conductor cross-sections for auxiliary contacts • solid • finely stranded with core end processing type of connectable conductor cross-sections for auxiliary contacts • solid • finely stranded with core end processing type of connectable conductor cross-sections at AWG cables • for main contacts • for main contacts • for auxiliary		spring-loaded terminals 0 0 0 2x (0.25 1.5 mm ²) 2x (0.25 1 mm ²) 2x (0.25 1.5 mm ²) 2x (0.25 1.0 mm ²) 2x (24 16) 2x (24 16)
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 • solid • finely stranded with core end processing type of connectable conductor cross-sections for auxiliary contacts • solid • finely stranded with core end processing type of connectable conductor cross-sections for auxiliary contacts • solid • finely stranded with core end processing type of connectable conductor cross-sections at AWG cables • for main contacts • for auxiliary contacts • for auxil		spring-loaded terminals 0 0 0 2x (0.25 1.5 mm ²) 2x (0.25 1 mm ²) 2x (0.25 1.5 mm ²) 2x (0.25 1.5 mm ²) 2x (0.25 1.0 mm ²) 2x (24 16) 2x (24 16) 5 000
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 • solid • finely stranded with core end processing type of connectable conductor cross-sections for auxiliary contacts • solid • finely stranded with core end processing type of connectable conductor cross-sections for auxiliary contacts • solid • finely stranded with core end processing type of connectable conductor cross-sections at AWG cables • for main contacts • for main contacts • for auxiliary		spring-loaded terminals 0 0 0 2x (0.25 1.5 mm ²) 2x (0.25 1 mm ²) 2x (0.25 1 mm ²) 2x (0.25 1.5 mm ²) 2x (0.25 1.0 mm ²) 2x (24 16) 2x (24 16) 2x (24 16) 2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m) 1K6 (only occasional condensation), 1C2 (no salt mist),
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 • solid • finely stranded with core end processing type of connectable conductor cross-sections for auxiliary contacts • solid • finely stranded with core end processing type of connectable conductor cross-sections for auxiliary contacts • solid • finely stranded with core end processing type of connectable conductor cross-sections at AWG cables • for main contacts • for auxiliary contacts • for auxil		spring-loaded terminals 0 0 0 2x (0.25 1.5 mm²) 2x (0.25 1 mm²) 2x (0.25 1.5 mm²) 2x (0.25 1.5 mm²) 2x (0.25 1.0 mm²) 2x (24 16) 2x (24 16) 2k2, 2C1, 2S1, 2M2 (max. fall height 0.3 m) 1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get inside the devices), 1M4 3K6 (no formation of ice, no condensation), 3C3 (no salt
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 • solid • finely stranded with core end processing type of connectable conductor cross-sections for auxiliary contacts • solid • finely stranded with core end processing type of connectable conductor cross-sections for auxiliary contacts • solid • finely stranded with core end processing type of connectable conductor cross-sections at AWG cables • for main contacts • for auxiliary contacts • during transport acc. to IEC 60721 • during storage acc. to IEC 60721 • during operation acc. to IEC 60721 </td <td>m</td> <td>spring-loaded terminals 0 0 0 2x (0.25 1.5 mm²) 2x (0.25 1 mm²) 2x (0.25 1.5 mm²) 2x (0.25 1.5 mm²) 2x (0.25 1.0 mm²) 2x (24 16) 2x (24 16) 2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m) 1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get inside the devices), 1M4</td>	m	spring-loaded terminals 0 0 0 2x (0.25 1.5 mm²) 2x (0.25 1 mm²) 2x (0.25 1.5 mm²) 2x (0.25 1.5 mm²) 2x (0.25 1.0 mm²) 2x (24 16) 2x (24 16) 2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m) 1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get inside the devices), 1M4
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 • solid • finely stranded with core end processing type of connectable conductor cross-sections for auxiliary contacts • solid • finely stranded with core end processing type of connectable conductor cross-sections for auxiliary contacts • solid • finely stranded with core end processing type of connectable conductor cross-sections at AWG cables • for main contacts • for auxiliary contacts • during transport acc. to IEC 60721 • during operation acc. to IEC 60721 <t< td=""><td></td><td>spring-loaded terminals 0 0 0 2x (0.25 1.5 mm²) 2x (0.25 1 mm²) 2x (0.25 1.5 mm²) 2x (0.25 1.5 mm²) 2x (0.25 1.0 mm²) 2x (24 16) 2x (24 16) 5 000 2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m) 1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get inside the devices), 1M4 3K6 (no formation of ice, no condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6</td></t<>		spring-loaded terminals 0 0 0 2x (0.25 1.5 mm²) 2x (0.25 1 mm²) 2x (0.25 1.5 mm²) 2x (0.25 1.5 mm²) 2x (0.25 1.0 mm²) 2x (24 16) 2x (24 16) 5 000 2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m) 1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get inside the devices), 1M4 3K6 (no formation of ice, no condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6
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 • solid • finely stranded with core end processing type of connectable conductor cross-sections for auxiliary contacts • solid • finely stranded with core end processing type of connectable conductor cross-sections for auxiliary contacts • solid • finely stranded with core end processing type of connectable conductor cross-sections at AWG cables • for main contacts • for auxiliary contacts • during transport acc. to IEC	°C	spring-loaded terminals 0 0 0 0 0 2x (0.25 1.5 mm²) 2x (0.25 1 mm²) 2x (0.25 1.5 mm²) 2x (0.25 1.5 mm²) 2x (0.25 1.0 mm²) 2x (24 16) 2x (24 16) 2x (24 16) 2x(24 16) 2x(2, 2C1, 2S1, 2M2 (max. fall height 0.3 m) 1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get inside the devices), 1M4 3K6 (no formation of ice, no condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6 -25 +60
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 • solid • finely stranded with core end processing type of connectable conductor cross-sections for auxiliary contacts • solid • finely stranded with core end processing type of connectable conductor cross-sections for auxiliary contacts • solid • finely stranded with core end processing type of connectable conductor cross-sections at AWG cables • for main contacts • for auxiliary contacts • during transport acc. to IEC 60721 • during operation acc. to IEC 60721 <t< td=""><td></td><td>spring-loaded terminals 0 0 0 0 2x (0.25 1.5 mm²) 2x (0.25 1 mm²) 2x (0.25 1.5 mm²) 2x (0.25 1.5 mm²) 2x (0.25 1.0 mm²) 2x (24 16) 2x (24 16) 2x(24 16) 2x(24 16) 2x(2, 2C1, 2S1, 2M2 (max. fall height 0.3 m) 1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get inside the devices), 1M4 3K6 (no formation of ice, no condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6</td></t<>		spring-loaded terminals 0 0 0 0 2x (0.25 1.5 mm²) 2x (0.25 1 mm²) 2x (0.25 1.5 mm²) 2x (0.25 1.5 mm²) 2x (0.25 1.0 mm²) 2x (24 16) 2x (24 16) 2x(24 16) 2x(24 16) 2x(2, 2C1, 2S1, 2M2 (max. fall height 0.3 m) 1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get inside the devices), 1M4 3K6 (no formation of ice, no condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6

protection class IP	on the front acc. to IE	C 60529		IP20		
touch protection on the front acc. to IEC 60529			finger-safe, for vertical contact from the front			
ertificates/ approva	ls					
General Product A	pproval		EMC	;	Declaration of Conformity	Test Certificates
SA CEM		EHC	ſ	RCM	CE EG-Konf.	<u>Type Test Certific</u> ates/Test Report
Test Certificates	other					
ate	Confirmation					
	Commation					
L/CSA ratings		3.nhase AC	_			
L/CSA ratings yielded mechanical	performance [hp] for	- 3-phase AC	_		_	
L/CSA ratings yielded mechanical		- 3-phase AC	_			
L/CSA ratings yielded mechanical motor • at 220/230 V — at standar	performance [hp] for	value	hp	0.5		
L/CSA ratings yielded mechanical motor • at 220/230 V — at standar	performance [hp] for	value	hp	0.5 B300 / R300		
L/CSA ratings yielded mechanical motor • at 220/230 V — at standar contact rating of au urther information	performance [hp] for rd circuit at 50 °C rated xiliary contacts accord	value	hp			
L/CSA ratings yielded mechanical motor • at 220/230 V — at standar contact rating of au urther information Simulation Tool for https://support.indust	performance [hp] for rd circuit at 50 °C rated xiliary contacts accor Soft Starters (STS) ry.siemens.com/cs/ww ownloadcenter (Catalo	value rding to UL	1 <u>7</u>			
L/CSA ratings yielded mechanical motor • at 220/230 V — at standar contact rating of au urther information Simulation Tool for https://support.indust Information- and Do https://www.siemens Industry Mall (Onlin https://mall.industry.s Cax online generato	performance [hp] for rd circuit at 50 °C rated xiliary contacts accor Soft Starters (STS) ry.siemens.com/cs/ww ownloadcenter (Catalo .com/ic10 te ordering system) siemens.com/mall/en/er	value rding to UL v/en/view/10149497 ogs, Brochures, n/Catalog/product?	17 .) ?mlfb=3RW3(B300 / R300		

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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=3RW3003-2CB54&lang=en





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