SIEMENS

Data sheet 3RW4038-2BB14



SIRIUS soft starter S2 72 A, 37 kW/400 V, 40 °C 200-480 V AC, 110-230 V AC/DC spring-type 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	Α	72
• at 50 °C rated value	Α	62
at 60 °C rated value	Α	60
yielded mechanical performance for 3-phase motors		
• at 230 V		
 at standard circuit at 40 °C rated value 	kW	22
• at 400 V		
— at standard circuit at 40 °C rated value	kW	37
yielded mechanical performance [hp] for 3-phase AC motor at 200/208 V at standard circuit at 50 °C rated value	hp	20
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	35

continuous operating current [% of le] at 40 °C	%	115
power loss [W] at operational current at 40 °C during	- 76 W	15
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		S2
width	mm	55
height	mm	160
depth	mm	170
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
		screw-type terminals
for auxiliary and control circuit number of NC contacts for auxiliary contacts.		spring-loaded terminals
number of NC contacts for auxiliary contacts		
number of NO contacts for auxiliary contacts		1
number of CO contacts for auxiliary contacts type of connectable conductor cross-sections for main contacts for box terminal using the front clamping point		ı
solid		2x (1.5 16 mm²)
finely stranded with core end processing		0.75 25 mm ²
stranded stranded		0.75 25 mm²
type of connectable conductor cross-sections for main		0.7 0 00 Hilli
contacts for box terminal using the back clamping point • solid		2x (1.5 16 mm²)
		1.5 25 mm ²
 finely stranded with core end processing stranded 		1.5 25 mm²
type of connectable conductor cross-sections for main contacts for box terminal using both clamping points		1.J JJ IIIII
		2v (1.5 16 mm²)
solid finally stranded with core and processing		2x (1.5 16 mm²)
finely stranded with core end processing stranded		2x (1.5 16 mm²)
• stranded		2x (1.5 25 mm²)

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 ambient temperature • during operation • during storage • during storage • during storage • during operation • during operation • during storage • c			
using the front clamping point using both clamping points type of connectable conductor cross-sections for auxiliary contacts solid finely stranded with core end processing for auxiliary contacts of or auxiliary contacts for auxiliary contacts arbient 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 during storage derating temperature during storage derating temperature eduring storage derating temperature conditions ambient temperature during storage derating temperature during storage derating temperature eduring storage derating temperature conditions protection class IP on the front according to IEC 60529 yielded mechanical performance [hp] for 3-phase AC motor e at 220/230 V e at standard circuit at 50 °C rated value e at 460/480 V e at standard circuit at 50 °C rated value e at 460/480 V e at standard circuit at 50 °C rated value e to the device of a condition of auxiliary contacts according to UL e at 800 / R300 18 2 2x (16 2) xx (0.25 2.5 mm²) 2x (0.25 1.5 mm²) 2x (24 14) 2x (24 14) 2x (24 14) 2x (24 14) 2x (25 1.5 mm²) 2x (24 14) 2x (24 14) 2x (24 14) 2x (25 1.5 mm²) 2x (24 14) 2x (24 14) 2x (27 1.5 mm²) 2x (24 14) 2x (27 1.5 mm²) 2x (24 14) 2x (27 1.5 mm²) 2x (27 1.5 mm²) 2x (27 1.5 mm²) 2x (2			
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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 auxiliary contacts • for auxiliary contacts • for auxiliary contacts 2x (24 14) Ambient 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 • condensation • condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6 ### during operation • condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6 ### during operation • during storage • during storage • during storage • during storage • during operation • duri	 using the front clamping point 		18 2
e solid e finely stranded with core end processing type of connectable conductor cross-sections for AWG cables e for auxiliary contacts Ambient conditions installation altitude at height above sea level environmental category e during transport according to IEC 60721 during storage according to IEC 60721 eduring operation according to IEC 60721 ambient temperature e during operation e during storage derating temperature e at unique storage derating temperature e touring operation e during storage derating temperature e touring operation e touring storage derating temperature e touring operation e touring storage derating temperature e touring storage derating temperature 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 on the front according to IEC 60529 touch protection on the front according to IEC 60529 tyleIded mechanical performance [hp] for 3-phase AC motor e at 220/230 V — at standard circuit at 50 °C rated value e at 460/480 V — at standard circuit at 50 °C rated value hp 40 contact rating of auxiliary contacts according to UL B300 / R300	 using both clamping points 		2x (16 2)
type of connectable conductor cross-sections for AWG cables • for auxiliary contacts **Exercise Support Conductor Con			
type of connectable conductor cross-sections for AWG cables • for auxiliary contacts Ambient 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 derating temperature or during storage derating temperature reprotection 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 yielded mechanical performance [hp] for 3-phase AC motor • at 220/230 V — at standard circuit at 50 °C rated value • at 460/480 V — at standard circuit at 50 °C rated value hp 40 contact rating of auxiliary contacts according to UL 2x (24 14) Ambient conditions 2x (24 14) Auxiliary contacts according to IEC 60721 m 5 000 2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m) 5 (RS (miny occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get into the devices), 1M4 4 (Sand must not get into the devices), 3M6 and institute a devices, 1M4 3K6 (not occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get into the devices), 1M4 4 (Sand must not get into the devices), 1M4 4 (Sand must not get into the devices), 1M4 4 (Sand must not get into the devices), 1M4 4 (Sand must not get into the devices), 1M4 4 (Sand must not get into the devices), 1M2 4 (Sand must not get into the devices), 1M2 4 (Sand must not get into the devices), 1M2 4 (Sand must not get into the devices), 1M2 4 (Sand must not get into the devices), 1M2 4 (Sand must not get into the devices), 1M2 4 (Sand must not get into the devices), 1M2 4 (Sand must not get into the devices), 1M2 4 (Sand must not get into the devices), 1M2 4 (Sand must not get into the devices), 1M2 4 (Sand must not get into the devices), 1M2 4 (Sand must not	• solid		2x (0.25 2.5 mm²)
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protection class IP on the front according to IEC 60529 touch protection on the front according to IEC 60529 UL/CSA ratings yielded mechanical performance [hp] for 3-phase AC motor • at 220/230 V — at standard circuit at 50 °C rated value • at 460/480 V — at standard circuit at 50 °C rated value hp 40 contact rating of auxiliary contacts according to UL IP20	during storage	°C	-40 +80
touch protection on the front according to IEC 60529 UL/CSA ratings yielded mechanical performance [hp] for 3-phase AC motor • at 220/230 V — at standard circuit at 50 °C rated value • at 460/480 V — at standard circuit at 50 °C rated value hp 40 contact rating of auxiliary contacts according to UL finger-safe, for vertical contact from the front ### ### ### ### ### ### ### ### ### #	derating temperature	°C	40
yielded mechanical performance [hp] for 3-phase AC motor • at 220/230 V — at standard circuit at 50 °C rated value hp 20 • at 460/480 V — at standard circuit at 50 °C rated value hp 40 contact rating of auxiliary contacts according to UL B300 / R300	protection class IP on the front according to IEC 60529		IP20
yielded mechanical performance [hp] for 3-phase AC motor • at 220/230 V — at standard circuit at 50 °C rated value hp 20 • at 460/480 V — at standard circuit at 50 °C rated value hp 40 contact rating of auxiliary contacts according to UL B300 / R300	touch protection on the front according to IEC 60529		finger-safe, for vertical contact from the front
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 — at standard circuit at 50 °C rated value b at 460/480 V — at standard circuit at 50 °C rated value hp 40 contact rating of auxiliary contacts according to UL B300 / R300 	yielded mechanical performance [hp] for 3-phase AC motor		
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— at standard circuit at 50 °C rated value hp 40 contact rating of auxiliary contacts according to UL B300 / R300	 at standard circuit at 50 °C rated value 	hp	20
contact rating of auxiliary contacts according to UL B300 / R300	• at 460/480 V		
· · · · · · · · · · · · · · · · · · ·	 — at standard circuit at 50 °C rated value 	hp	40
Approvals Certificates	contact rating of auxiliary contacts according to UL		B300 / R300
	Approvals Certificates		

General Product Approval





Confirmation







General Product Approval

EMV

For use in hazardous locations

Test Certificates

EAC



<u>KC</u>



Special Test Certificate

Type Test Certificates/Test Report

Marine / Shipping





PRS

Confirmation

other

Special Test Certificate

Railway

Confirmation

Environment

Environmental Confirmations

Further information

Simulation Tool for Soft Starters (STS)

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

Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

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=3RW4038-2BB14

Cax online generator

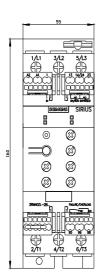
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW4038-2BB14

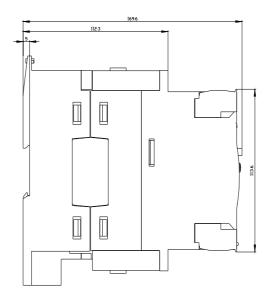
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

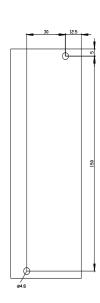
https://support.industry.siemens.com/cs/ww/en/ps/3RW4038-2BB14

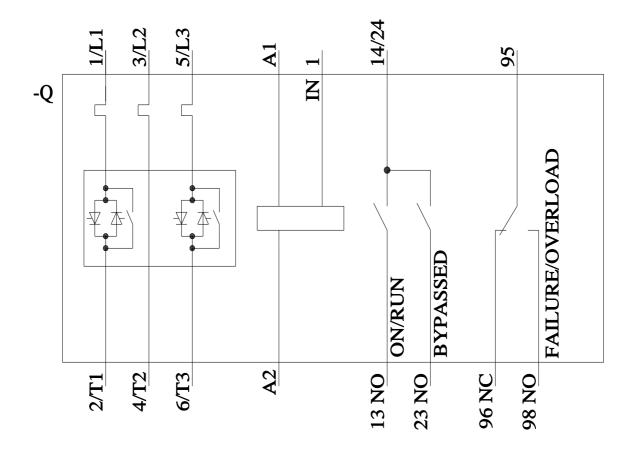
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW4038-2BB14&lang=en









last modified: 3/11/2024 🖸