## **SIEMENS**

**Data sheet** 3RW4038-1BB04



SIRIUS soft starter S2 72 A, 37 kW/400 V, 40 °C 200-480 V AC, 24 V AC/DC Screw terminals

Figure similar

General technical data		
product brand name		SIRIUS
product feature		
<ul> <li>integrated bypass contact system</li> </ul>		Yes
• thyristors		Yes
product function		
<ul> <li>intrinsic device protection</li> </ul>		Yes
<ul> <li>motor overload protection</li> </ul>		Yes
<ul> <li>evaluation of thermistor motor protection</li> </ul>		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	А	62
<ul> <li>at 60 °C rated value</li> </ul>	А	60
yielded mechanical performance for 3-phase motors		
• at 230 V		
<ul> <li>— at standard circuit at 40 °C rated value</li> </ul>	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	A	35

protection minimum rated value		
protection minimum rated value continuous operating current [% of le] at 40 °C	%	115
power loss [W] at operational current at 40 °C during	% W	15
operation typical	VV	15
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	%	-10
voltage frequency		
relative positive tolerance of the control supply	%	10
voltage frequency 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	%	-15
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	%	-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	%	-20
voltage at DC relative positive tolerance of the control supply	%	20
voltage at DC		and
display version for fault signal		red
Mechanical data		00
size of engine control device		S2
width height	mm mm	55 160
depth	mm	170
fastening method	111111	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
<ul> <li>for auxiliary and control circuit</li> </ul>		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		Ov. (4.5. 4.6. more?)
solid     finally attended with core and processing.		2x (1.5 16 mm²)
<ul><li>finely stranded with core end processing</li><li>stranded</li></ul>		0.75 25 mm <sup>2</sup> 0.75 35 mm <sup>2</sup>
type of connectable conductor cross-sections for main contacts for box terminal using the back clamping point		0 (4.5 40 %)
• solid		2x (1.5 16 mm²)
<ul><li>finely stranded with core end processing</li><li>stranded</li></ul>		1.5 25 mm <sup>2</sup> 1.5 35 mm <sup>2</sup>
type of connectable conductor cross-sections for		
main contacts for box terminal using both clamping		

points		
• solid		2x (1.5 16 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>		2x (1.5 16 mm²)
<ul><li>stranded</li></ul>		2x (1.5 25 mm²)
type of connectable conductor cross-sections at AWG cables for main contacts for box terminal		
<ul> <li>using the back clamping point</li> </ul>		16 2
<ul> <li>using the front clamping point</li> </ul>		18 2
<ul> <li>using both clamping points</li> </ul>		2x (16 2)
type of connectable conductor cross-sections for auxiliary contacts		
• solid		2x (0.5 2.5 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>		2x (0.5 1.5 mm²)
type of connectable conductor cross-sections at AWG cables		
<ul> <li>for auxiliary contacts</li> </ul>		2x (20 14)
<ul> <li>for auxiliary contacts finely stranded with core end processing</li> </ul>		2x (20 16)
Ambient conditions		
installation altitude at height above sea level	m	5 000
environmental category		
<ul> <li>during transport according to IEC 60721</li> </ul>		2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m)
<ul> <li>during storage according to IEC 60721</li> </ul>		1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get inside the devices), 1M4
<ul> <li>during operation according to IEC 60721</li> </ul>		3K6 (no formation of ice, no condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6
ambient temperature		
during operation	°C	-25 +60
during storage	°C	-40 +80
derating temperature	°C	40
protection class IP on the front according to IEC 60529		IP20
touch protection on the front according to IEC 60529		finger-safe, for vertical contact from the front

Certificates/ approvals

**General Product Approval** 

**EMC** 



Confirmation









**Declaration of Test Certificates** Marine / Shipping Conformity



Type Test Certificates/Test Report

**Special Test Certific-**<u>ate</u>



**SIEMENS KALA** 





other Railway

Vibration and Shock Confirmation Confirmation

UL/CSA ratings		
yielded mechanical performance [hp] for 3-phase AC motor		
• at 220/230 V		
<ul> <li>at standard circuit at 50 °C rated value</li> </ul>	hp	20

• at 460/480 V

Further information

— at standard circuit at 50 °C rated value

40 hp B300 / R300

contact rating of auxiliary contacts according to UL

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=3RW4038-1BB04

Cax online generator

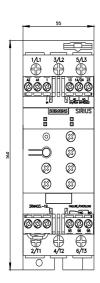
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW4038-1BB04

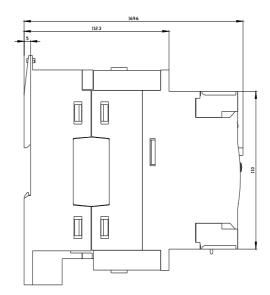
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

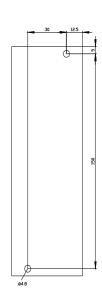
https://support.industry.siemens.com/cs/ww/en/ps/3RW4038-1BB04

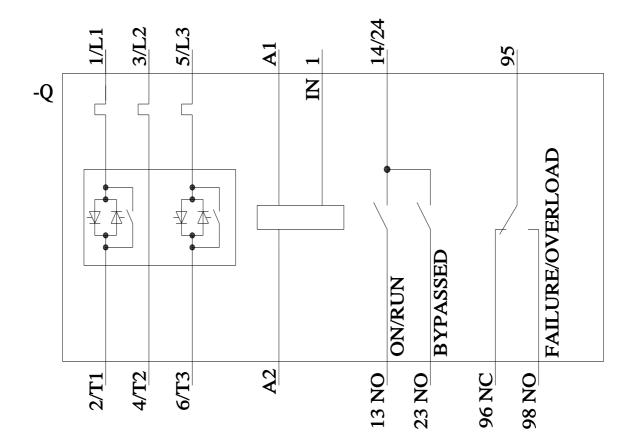
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RW4038-1BB04&lang=en









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