## **SIEMENS**

Data sheet 3RW4037-1BB05



SIRIUS soft starter S2 63 A, 37 kW/500 V, 40  $^{\circ}\text{C}$  400-600 V AC, 24 V AC/DC Screw terminals

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 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				
<ul> <li>at 40 °C rated value</li> </ul>	Α	63		
<ul> <li>at 50 °C rated value</li> </ul>	Α	58		
at 60 °C rated value	Α	53		
yielded mechanical performance for 3-phase motors				
• at 400 V				
<ul> <li>at standard circuit at 40 °C rated value</li> </ul>	kW	30		
● at 500 V				
<ul> <li>at standard circuit at 40 °C rated value</li> </ul>	kW	37		
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 standard circuit	%	10		
minimum load [%]	%	20		
adjustable motor current for motor overload protection minimum rated value	А	26		

continuous operating ourrent [0/ of la1 at 40 °C	0/	115
continuous operating current [% of le] at 40 °C power loss [W] at operational current at 40 °C during	- % W	115 12
operation typical	VV	12
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		
<ul> <li>at 50 Hz rated value</li> </ul>	V	24
<ul> <li>at 60 Hz rated value</li> </ul>	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		
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
<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		
• solid		2x (1.5 16 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>		0.75 25 mm²
• stranded		0.75 35 mm²
type of connectable conductor cross-sections for main contacts for box terminal using the back clamping point		
• solid		2x (1.5 16 mm²)
finely stranded with core end processing		1.5 25 mm <sup>2</sup>
stranded     stranded		1.5 35 mm <sup>2</sup>
- onanaoa		oo min

	-	
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)
• stranded		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 acc. to IEC 60721</li> </ul>		2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m)
• during storage acc. to IEC 60721		1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get inside the devices), 1M4
<ul> <li>during operation acc. 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		
<ul> <li>during operation</li> </ul>	°C	-25 +60
during storage	°C	-40 +80
derating temperature	°C	40
protection class IP on the front acc. to IEC 60529		IP20
touch protection on the front acc. to IEC 60529		finger-safe, for vertical contact from the front
and the second s		

Certificates/ approvals

**General Product Approval** 

**EMC** 

For use in hazardous locations













Declaration of Conformity

**Test Certificates** 

Marine / Shipping



Type Test Certificates/Test Report

Special Test Certificate







other Railway

<u>Confirmation</u> <u>Vibration and Shock</u>

**UL/CSA** ratings

yielded mechanical performance [hp] for 3-phase AC

motor		
• at 460/480 V		
<ul> <li>at standard circuit at 50 °C rated value</li> </ul>	hp	40
● at 575/600 V		
<ul> <li>at standard circuit at 50 °C rated value</li> </ul>	hp	50
contact rating of auxiliary contacts according to UL		B300 / R300
5 - 4 - 1 - 5		

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=3RW4037-1BB05

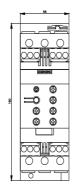
Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW4037-1BB05

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

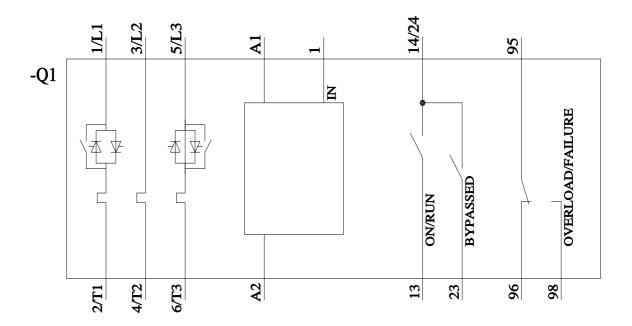
https://support.industry.siemens.com/cs/ww/en/ps/3RW4037-1BB05

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RW4037-1BB05&lang=en









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