## **SIEMENS**

Data sheet 3RW40 47-2BB05



SIRIUS SOFT STARTER, S3, 106A, 75KW/500V, 40 DEGR., AC 400-600V, AC/DC 24V, SPRING-LOADED 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
<ul> <li>Adjustable current limitation</li> </ul>		Yes
• inside-delta circuit		No
Product component Motor brake output		No
Equipment marking acc. to DIN EN 61346-2		Q
Equipment marking acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750		G

Power Electronics:			
Product designation		soft starters for standard applications	
Operating current			
• at 40 °C Rated value	Α	106	
● at 50 °C Rated value	Α	98	
• at 60 °C Rated value	Α	90	
Mechanical power output for three-phase motors			
● at 400 V			

<ul> <li>— at standard circuit at 40 °C Rated value</li> </ul>	W	55 000
● at 500 V		
<ul> <li>at standard circuit at 40 °C Rated value</li> </ul>	W	75 000
Operating frequency Rated value	Hz	50 60
Relative negative tolerance of the operating	%	-10
frequency		
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 in % of I_M	%	20
Adjustable motor current for motor overload protection minimum rated value	A	46
Continuous operating current in % of I_e at 40 °C	%	115
Active power loss at operating current at 40 °C during	W	21
operation typical		
Control electronics:		
Type of voltage of the control supply voltage		AC/DC
	Hz	AC/DC 50
Type of voltage of the control supply voltage	Hz Hz	
Type of voltage of the control supply voltage  Control supply voltage frequency 1 Rated value  Control supply voltage frequency 2 Rated value  Relative negative tolerance of the control supply		50
Type of voltage of the control supply voltage  Control supply voltage frequency 1 Rated value  Control supply voltage frequency 2 Rated value  Relative negative tolerance of the control supply  voltage frequency	Hz %	50 60 -10
Type of voltage of the control supply voltage  Control supply voltage frequency 1 Rated value  Control supply voltage frequency 2 Rated value  Relative negative tolerance of the control supply	Hz	50 60
Type of voltage of the control supply voltage  Control supply voltage frequency 1 Rated value  Control supply voltage frequency 2 Rated value  Relative negative tolerance of the control supply voltage frequency  Relative positive tolerance of the control supply	Hz %	50 60 -10
Type of voltage of the control supply voltage  Control supply voltage frequency 1 Rated value  Control supply voltage frequency 2 Rated value  Relative negative tolerance of the control supply voltage frequency  Relative positive tolerance of the control supply voltage frequency	Hz %	50 60 -10
Type of voltage of the control supply voltage  Control supply voltage frequency 1 Rated value  Control supply voltage frequency 2 Rated value  Relative negative tolerance of the control supply voltage frequency  Relative positive tolerance of the control supply voltage frequency  Control supply voltage 1 with AC	Hz % %	50 60 -10
Type of voltage of the control supply voltage  Control supply voltage frequency 1 Rated value  Control supply voltage frequency 2 Rated value  Relative negative tolerance of the control supply voltage frequency  Relative positive tolerance of the control supply voltage frequency  Control supply voltage 1 with AC  • at 50 Hz Rated value	Hz % %	50 60 -10 10
Type of voltage of the control supply voltage  Control supply voltage frequency 1 Rated value  Control supply voltage frequency 2 Rated value  Relative negative tolerance of the control supply voltage frequency  Relative positive tolerance of the control supply voltage frequency  Control supply voltage 1 with AC  • at 50 Hz Rated value  • at 60 Hz Rated value  Relative negative tolerance of the control supply voltage with AC at 60 Hz	Hz % % V V V %	50 60 -10 10 24 24 -20
Type of voltage of the control supply voltage  Control supply voltage frequency 1 Rated value  Control supply voltage frequency 2 Rated value  Relative negative tolerance of the control supply voltage frequency  Relative positive tolerance of the control supply voltage frequency  Control supply voltage 1 with AC  • at 50 Hz Rated value  • at 60 Hz Rated value  Relative negative tolerance of the control supply voltage with AC at 60 Hz  Relative positive tolerance of the control supply	Hz % % V V	50 60 -10 10 24 24
Type of voltage of the control supply voltage  Control supply voltage frequency 1 Rated value  Control supply voltage frequency 2 Rated value  Relative negative tolerance of the control supply voltage frequency  Relative positive tolerance of the control supply voltage frequency  Control supply voltage 1 with AC  • at 50 Hz Rated value  • at 60 Hz Rated value  Relative negative tolerance of the control supply voltage with AC at 60 Hz  Relative positive tolerance of the control supply voltage with AC at 60 Hz	Hz %  %  V V %	50 60 -10 10 24 24 -20
Type of voltage of the control supply voltage  Control supply voltage frequency 1 Rated value  Control supply voltage frequency 2 Rated value  Relative negative tolerance of the control supply voltage frequency  Relative positive tolerance of the control supply voltage frequency  Control supply voltage 1 with AC  • at 50 Hz Rated value  • at 60 Hz Rated value  Relative negative tolerance of the control supply voltage with AC at 60 Hz  Relative positive tolerance of the control supply voltage with AC at 60 Hz  Control supply voltage 1 for DC Rated value	Hz % % V V V %	50 60 -10 10 24 24 -20 20
Type of voltage of the control supply voltage  Control supply voltage frequency 1 Rated value  Control supply voltage frequency 2 Rated value  Relative negative tolerance of the control supply voltage frequency  Relative positive tolerance of the control supply voltage frequency  Control supply voltage 1 with AC  • at 50 Hz Rated value  • at 60 Hz Rated value  Relative negative tolerance of the control supply voltage with AC at 60 Hz  Relative positive tolerance of the control supply voltage with AC at 60 Hz	Hz %  %  V V %	50 60 -10 10 24 24 -20
Type of voltage of the control supply voltage  Control supply voltage frequency 1 Rated value  Control supply voltage frequency 2 Rated value  Relative negative tolerance of the control supply voltage frequency  Relative positive tolerance of the control supply voltage frequency  Control supply voltage 1 with AC  • at 50 Hz Rated value  • at 60 Hz Rated value  Relative negative tolerance of the control supply voltage with AC at 60 Hz  Relative positive tolerance of the control supply voltage with AC at 60 Hz  Control supply voltage 1 for DC Rated value  Relative negative tolerance of the control supply	Hz % % V V V %	50 60 -10 10 24 24 -20 20

Mechanical data:		
Size of engine control device		S3
Width	mm	70
Height	mm	170
Depth	mm	190

Display version for fault signal

red

Mounting type		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
<ul><li>downwards</li></ul>	mm	40
Installation altitude at height above sea level	m	5 000
Cable length maximum	m	300
Number of poles for main current circuit		3
Connections/ Terminals:		
Type of electrical connection		
<ul> <li>for main current circuit</li> </ul>		screw-type terminals
<ul> <li>for auxiliary and control current circuit</li> </ul>		spring-loaded 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-section for main contacts for box terminal using the front		

screw-type terminals
spring-loaded terminals
0
2
1
2x (2.5 16 mm²)
2.5 35 mm²
4 70 mm²
2x (2.5 16 mm²)
2.5 50 mm²
10 70 mm²
2x (2.5 16 mm²)
2x (2.5 35 mm²)
2x (10 50 mm²)
2x (10 1/0)
2x (10 1/0)
10 2/0

Type of connectable conductor cross-section for DIN	
cable lug for main contacts	
• finely stranded	2 x (10 50 mm²)
• stranded	2x (10 70 mm²)
Type of connectable conductor cross-section for auxiliary contacts	
• solid	2x (0.25 2.5 mm²)
• finely stranded with core end processing	2x (0.25 1.5 mm²)
Type of connectable conductor cross-section for AWG conductors	
• for main contacts	2x (7 1/0)
• for auxiliary contacts	2x (24 14)

Ambient conditions:		
Ambient temperature		
<ul> <li>during operation</li> </ul>	°C	-25 <b>+</b> 60
during storage	°C	-40 +80
Derating temperature	°C	40
Protection class IP		IP00

### Certificates/ approvals:

General Product Approval	EMC	For use in
		hazardous
		locations













#### **Test Certificates**

Type Test
Certificates/Test
Report

Special Test Certificate



Shipping Approval







#### other

Environmental Declaration of Confirmations Conformity

# UL/CSA ratings: yielded mechanical performance [hp] for three-phase AC motor

● at 460/480 V		
— at standard circuit at 50 °C Rated value	metric hp	75
● at 575/600 V		
— at standard circuit at 50 °C Rated value	metric hp	75
Contact rating of the auxiliary contacts acc. to UL		B300 / R300

Information- and Downloadcenter (Catalogs, Brochures,...) http://www.siemens.com/industrial-controls/catalogs

Industry Mall (Online ordering system)

http://www.siemens.com/industrymall

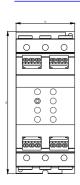
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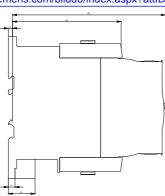
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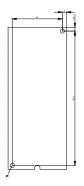
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

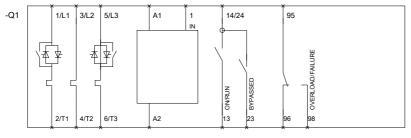
http://support.automation.siemens.com/WW/view/en/3RW40472BB05/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <a href="http://www.automation.siemens.com/bilddb/index.aspx?attID9=3RW40472BB05&lang=en">http://www.automation.siemens.com/bilddb/index.aspx?attID9=3RW40472BB05&lang=en</a>









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