SIEMENS

Data sheet 3RW40 38-2BB05



SIRIUS SOFT STARTER, S2, 72A, 45KW/500V, 40 DEGR., AC 400-600V, AC/DC 24V, SPRING-LOADED 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
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	72
● at 50 °C Rated value	Α	62
● at 60 °C Rated value	Α	60
Mechanical power output for three-phase motors		
● at 400 V		

 at standard circuit at 40 °C Rated value 	W	37 000
● at 500 V		
 at standard circuit at 40 °C Rated value 	W	45 000
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	%	-15
at standard circuit	0/	40
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	Α	35
Continuous operating current in % of I_e at 40 °C	%	115
Active power loss at operating current at 40 °C during	W	15
operation typical		
Control electronics:		
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		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	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	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	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 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	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	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

Mechanical data:		
Size of engine control device		S2
Width	mm	55
Height	mm	160
Depth	mm	170

%

voltage for DC

Display version for fault signal

Relative positive tolerance of the control supply

20

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
downwards	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		

Connections/ Terminals:	
Type of electrical connection	
for main current circuit	screw-type terminals
 for auxiliary and control current circuit 	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 clamping point	
• solid	2x (1.5 16 mm²)
 finely stranded with core end processing 	0.75 25 mm²
• stranded	0.75 35 mm²
Type of connectable conductor cross-section 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 mm²
• stranded	1.5 35 mm²
Type of connectable conductor cross-section for main contacts for box terminal using both clamping points	
• solid	2x (1.5 16 mm²)
 finely stranded with core end processing 	2x (1.5 16 mm²)
• stranded	2x (1.5 25 mm²)
Type of connectable conductor cross-section for AWG conductors for main contacts for box terminal	
 using the back clamping point 	16 2
 using the front clamping point 	18 2
 using both clamping points 	2x (16 2)

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 auxiliary contacts	2x (24 14)

Ambient conditions:		
Ambient temperature		
during operation	°C	-25 +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

Shipping Approval

Type Test
Certificates/Test
Report

Special Test Certificate





GL





other

Environmental Confirmations

Declaration of 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	40
	hp	
● at 575/600 V		

— at standard circuit at 50 °C Rated value	metric hp	60
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)

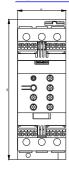
http://www.siemens.com/industrymall

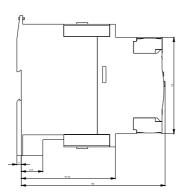
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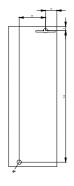
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW40382BB05

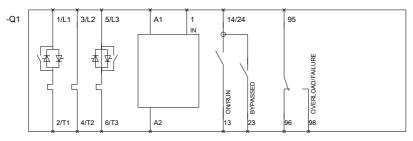
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RW40382BB05/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/index.aspx?attID9=3RW40382BB05&lang=en









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