SIEMENS

Data sheet 3RW40 24-1BB05



SIRIUS SOFT STARTER, S0, 12.5A, 7.5KW/500V, 40 DEGR., AC 400-600V, AC/DC 24V, SCREW 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	12.5
• at 50 °C Rated value	Α	11
• at 60 °C Rated value	Α	10
Mechanical power output for three-phase motors		
● at 400 V		

	W	E 500
— at standard circuit at 40 °C Rated value	VV	5 500
● at 500 V		
 — at standard circuit at 40 °C Rated value 	W	7 500
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	Α	5
protection minimum rated value		
Continuous operating current in % of I_e at 40 °C	%	115
Active power loss at operating current at 40 °C during	W	2
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 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	Hz % % V V	50 60 -10 10 24 24
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Mechanical data:		
Size of engine control device		S0
Width	mm	45
Height	mm	125
Depth	mm	155

%

voltage for DC

Display version for fault signal

Relative positive tolerance of the control supply

20

red

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	15
• 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		
• for main current circuit		screw-type terminals
for auxiliary and control current circuit		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-section for main contacts for box terminal using the front clamping point		
• solid		2x (1.5 2.5 mm²), 2x (2.5 6 mm²), max. 1x 10 mm²
• finely stranded with core end processing		2x (1.5 2.5 mm²), 2x (2.5 6 mm²)
Type of connectable conductor cross-section for AWG conductors for main contacts for box terminal		
 using the front clamping point 		1x 8, 2x (16 10)
Type of connectable conductor cross-section for auxiliary contacts		
• solid		2x (0.5 2.5 mm²)
• finely stranded with core end processing		2x (0.5 1.5 mm²)
Type of connectable conductor cross-section for AWG conductors		
• for auxiliary contacts		2x (20 14)
for auxiliary contacts finely stranded with core		2x (20 16)
end processing		
Ambient conditions:		
Ambient temperature		
during operation	°C	-25 + 60
during storage	°C	-40 +80
Derating temperature	°C	40

screw and snap-on mounting

Mounting type

Protection class IP IP20

Certificates/ approvals:

General Product Approval

EMC

For use in hazardous locations













Test Certificates

Shipping Approval

Special Test Certificate Type Test
Certificates/Test
Report











other

Declaration of Environmental Conformity Confirmations

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	7.5
● at 575/600 V		
— at standard circuit at 50 °C Rated value	metric hp	10
Contact rating of the auxiliary contacts acc. to UL		B300 / R300

Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

http://www.siemens.com/industrial-controls/catalogs

Industry Mall (Online ordering system)

http://www.siemens.com/industrymall

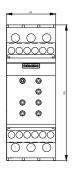
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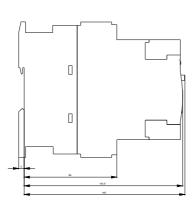
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW40241BB05

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

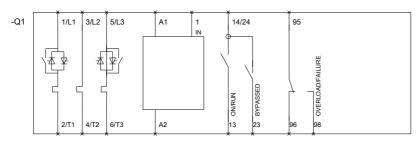
http://support.automation.siemens.com/WW/view/en/3RW40241BB05/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/index.aspx?attID9=3RW40241BB05&lang=en









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