SIEMENS

Data sheet 3RW40 47-1TB05



SIRIUS SOFT STARTER, S3, 106A, 75KW/500V, 40 DEGR., AC 400-600V, AC/DC 24V, SCREW TERMINALS, THERMISTOR MOTOR PROTECTION

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 		Yes	
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	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			

 at standard circuit at 40 °C Rated value 	W	55 000
● at 500 V		
 at standard circuit at 40 °C Rated value 	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	Α	46
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	21
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 Relative negative tolerance of the control supply voltage with AC at 60 Hz	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
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 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	Hz % % V V %	50 60 -10 10 24 24 -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
• 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 (2.5 16 mm²)
• finely stranded with core end processing		2.5 35 mm²
• stranded		4 70 mm²
Type of connectable conductor cross-section for main contacts for box terminal using the back clamping point		
• solid		2x (2.5 16 mm²)
 finely stranded with core end processing 		2.5 50 mm²

stranded

10 ... 70 mm²

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 (0.5 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 main contacts	2x (7 1/0)
• for auxiliary contacts	2x (20 14)
• for auxiliary contacts finely stranded with core	2x (20 16)
end processing	

Analysis at a smallting as			
Ambient conditions: Ambient temperature			
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

Declaration of
ConformityEnvironmental
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	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

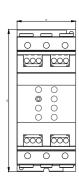
Industry Mall (Online ordering system) http://www.siemens.com/industrymall

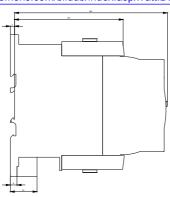
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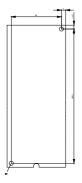
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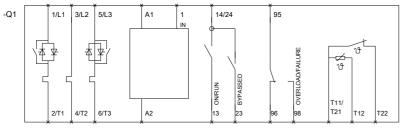
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RW40471TB05/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/index.aspx?attID9=3RW40471TB05&lang=en









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