# **SIEMENS**

Data sheet 3RW40 27-2TB05



SIRIUS SOFT STARTER, S0, 32A, 18.5KW/500V, 40 DEGR., AC 400-600V, AC/DC 24V, SPRING-LOADED TERMINALS, THERMISTOR MOTOR PROTECTION

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>		Yes
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	32
• at 50 °C Rated value	Α	29
• at 60 °C Rated value	Α	26
Mechanical power output for three-phase motors		
● at 400 V		

<ul> <li>— at standard circuit at 40 °C Rated value</li> </ul>	W	15 000
● at 500 V		
— at standard circuit at 40 °C Rated value	W	18 500
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	17
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	13
4		
operation typical		
	-	
	-	AC/DC
Control electronics:	Hz	AC/DC 50
Control electronics:  Type of voltage of the control supply voltage	Hz Hz	
Control electronics:  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
Control electronics:  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
Control electronics:  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
Control electronics:  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
Control electronics:  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
Control electronics:  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
Control electronics:  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
Control electronics:  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
Control electronics:  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
Control electronics:  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 V	50 60 -10 10 24 24 24 -20

Mechanical data:		
Size of engine control device		S0
Width	mm	45
Height	mm	150
Depth	mm	155

%

voltage for DC

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	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		spring-loaded 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 clamping point  • solid		2x (1.5 2.5 mm²), 2x (2.5 6 mm²), max. 1x 10 mm²
<ul> <li>finely stranded with core end processing</li> </ul>		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		
<ul><li>using the front clamping point</li></ul>		1x 8, 2x (16 10)
Type of connectable conductor cross-section for main contacts		
• solid		1 10 mm²
• finely stranded with core end processing		1 6 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)

AWG conductors	
• for main contacts	16 10, 1x 8
• for auxiliary contacts	2x (24 14)
A 12 ( 190	
Ambient conditions:	
Ambient temperature	

Type of connectable conductor cross-section for

during operation	°C	-25 <b>+</b> 60
during storage	°C	-40 <b>+</b> 80
Derating temperature	°C	40
Protection class IP		IP20

#### Certificates/ approvals:

General Product Approval

EMC
For use in hazardous locations













#### **Test Certificates**

## **Shipping Approval**

Type Test
Certificates/Test
Report

Special Test
Certificate









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#### 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	20
● at 575/600 V		
— at standard circuit at 50 °C Rated value	metric hp	25
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

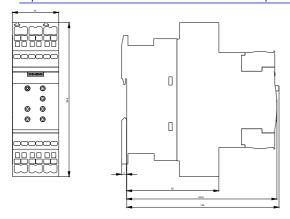
Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW40272TB05

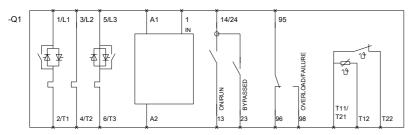
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

http://support.automation.siemens.com/WW/view/en/3RW40272TB05/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=3RW40272TB05&lang=en">http://www.automation.siemens.com/bilddb/index.aspx?attID9=3RW40272TB05&lang=en</a>







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