SIEMENS

Data sheet

3RW40 38-1TB04



SIRIUS SOFT STARTER, S2, 72A, 37KW/400V, 40 DEGR., AC 200-480V, AC/DC 24V, SCREW TERMINALS, THERMISTOR MOTOR PROTECTION

General technical data:	
product brand name	SIRIUS
 Product equipment Integrated bypass contact 	Yes
system	
 Product feature 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	G
according to IEC 204-2 acc. to IEC 750	

Power Electronics:

Product designation

soft starters for standard applications

Operating current		
● at 40 °C rated value	А	72
● at 50 °C rated value	А	62
• at 60 °C rated value	А	60
Mechanical power output for three-phase motors		
• at 230 V		
— at standard circuit at 40 °C rated value	W	22 000
● at 400 V		
— at standard circuit at 40 °C rated value	W	37 000
Yielded mechanical performance [hp] for three-phase AC motor at 200/208 V at standard circuit at 50 °C rated value	hp	20
Operating frequency rated value	Hz	50 60
Relative negative tolerance of the operating frequency	%	-10
Relative positive tolerance of the operating frequency	%	10
Operating voltage at standard circuit rated value	V	200 480
Relative negative tolerance of the operating voltage at standard circuit	%	-15
Relative positive tolerance of the operating voltage at standard circuit	%	10
Minimum load [% of IM]	%	20
Adjustable motor current for motor overload protection minimum rated value	A	35
Continuous operating current [% of le] at 40 °C	%	115
Power loss [W] at operating current at 40 °C during operation typical	W	15
Control electronics:		
Type of voltage of the control supply voltage		AC/DC
Control supply voltage frequency 1 rated value	Hz	50
Control supply voltage frequency 2 rated value	Hz	60
Relative negative tolerance of the control supply voltage frequency	%	-10
Relative positive tolerance of the control supply voltage frequency	%	10
Control supply voltage 1 at AC		
• at 50 Hz rated value	V	24
• at 60 Hz rated value	V	24
Relative negative tolerance of the control supply voltage at AC at 60 Hz	%	-20
Relative positive tolerance of the control supply voltage at AC at 60 Hz	%	20
Control supply voltage 1 at DC rated value	V	24

Relative negative tolerance of the control supply voltage at DC	%	-20
Relative positive tolerance of the control supply voltage at DC	%	20
Display version for fault signal		red

Mechanical data:		
Size of engine control device		S2
Width	mm	55
Height	mm	160
Depth	mm	170
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
Wire 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-sections 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-sections 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-sections 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-sections at		
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-sections 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-sections at 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
Protection class IP		IP00
Certificates/ approvals:		

General Produc	t Approval			EMC	For use in hazardous locations
CCC	CSA		EHC		ATEX
Declaration of Conformity	Test Certificates		Shipping Ap	proval	
CE	Typprüfbescheinigu ng/Werkszeugnis	spezielle Prüfbescheinigunge n	ĴÅ DNV	GL	Lloyd's Register

Shipping Approval	other	
	Umweltbestätigung	Bestätigungen

UL/CSA ratings:		
Yielded mechanical performance [hp] for three-phase		
AC motor		
• at 220/230 V		
— at standard circuit at 50 °C rated value	hp	20
● at 460/480 V		
— at standard circuit at 50 °C rated value	hp	40
Contact rating of auxiliary contacts according to UL		B300 / R300

Further information
Simulation Tool for Soft Starters (STS)
https://support.industry.siemens.com/cs/ww/en/view/101494917

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

PRS

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW4038-1TB04

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RW4038-1TB04

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW4038-1TB04&lang=en







