SIEMENS

Data sheet 3RW40 28-1BB05



SIRIUS SOFT STARTER, S0, 38A, 22KW/500V, 40 DEGR., AC 400-600V, AC/DC 24V, SCREW TERMINALS

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

Product designation

soft starters for standard applications

Operating current		
• at 40 °C rated value	Α	38
● at 50 °C rated value	Α	34
• at 60 °C rated value	Α	31
Mechanical power output for three-phase motors		
● at 400 V		
— at standard circuit at 40 °C rated value	W	18 500
● at 500 V		
— at standard circuit at 40 °C rated value	W	22 000
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	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 [% of IM]	%	20
Adjustable motor current for motor overload	Α	23
protection minimum rated value		
Continuous operating current [% of le] at 40 °C	%	115
Power loss [W] at operating current at 40 °C during operation typical	W	19
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		S0
Width	mm	45
Height	mm	125
Depth	mm	155
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
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 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-sections at AWG conductors for main contacts for box terminal		
using the front clamping point		1x 8, 2x (16 10)
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 end processing 		2x (20 16)

Ambient conditions:			
Ambient temperature			
during operation	°C	-25 + 60	
during storage	°C	-40 +80	
Derating temperature	°C	40	
Protection class IP		IP20	

Certificates/ approvals:

General Product Approval	EMC	For use in
		hazardous
		locations













Declaration of Conformity	Test Certificates		Shipping Ap	pproval	
((spezielle Prüfbescheinigunge n	Typprüfbescheinigu ng/Werkszeugnis	<u> </u>	[GL [®]]	Lloyd's Register
EG-Konf.			DNV	GL	LRS

Shipping	other
Approval	



Umweltbestätigung

UL/CSA ratings:			
Yielded mechanical performance [hp] for three-phase			
AC motor			
● at 460/480 V			
 at standard circuit at 50 °C rated value 	hp	25	
● at 575/600 V			
— at standard circuit at 50 °C rated value	hp	30	
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)

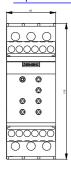
http://www.siemens.com/industrymall

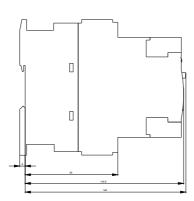
Cax online generator

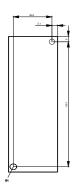
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW40281BB05

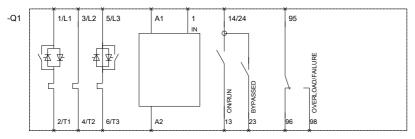
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RW40281BB05

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW40281BB05&lang=en









last modified: 29.02.2016