SIEMENS

Data sheet 3RW40 27-1BB14

SIRIUS soft starter S0 32 A, 15 kW/400 V, 40 $^{\circ}$ C 200-480 V AC, 110-230 V AC/DC 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
Insulation voltage rated value	V	600
Degree of pollution		3, acc. to IEC 60947-4-2
Reference code acc. to DIN EN 61346-2		Q
Reference code acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750		G

Power Electronics		
Product designation		Soft starter
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 230 V		
 at standard circuit at 40 °C rated value 	W	7 500
● at 400 V		
— at standard circuit at 40 °C rated value	W	15 000
Yielded mechanical performance [hp] for three-phase	hp	7.5
AC motor at 200/208 V at standard circuit at 50 °C		
rated value		
Operating frequency rated value	Hz	50 60
Relative negative tolerance of the operating	%	-10
frequency	%	10
Relative positive tolerance of the operating frequency Operating voltage at standard circuit rated value	76 V	200 480
Relative negative tolerance of the operating voltage	%	-15
at standard circuit	70	-13
Relative positive tolerance of the operating voltage at standard circuit	%	10
Minimum load [%]	%	20
Adjustable motor current for motor overload	Α	17
protection minimum rated value		
Continuous operating current [% of le] at 40 °C	%	115
Power loss [W] at operating current at 40 °C during	W	13
operation typical		
Control circuit/ Control		
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	%	-10
voltage frequency		
Relative positive tolerance of the control supply voltage frequency	%	10
Control supply voltage 1 at AC at 50 Hz	V	110 230
Control supply voltage 1 at AC at 60 Hz	V	110 230
Relative negative tolerance of the control supply voltage at AC at 50 Hz	%	-15
Relative positive tolerance of the control supply voltage at AC at 50 Hz	%	10

Relative negative tolerance of the control supply voltage at AC at 60 Hz	%	-15
Relative positive tolerance of the control supply voltage at AC at 60 Hz	%	10
Control supply voltage 1 at DC	V	110 230
Relative negative tolerance of the control supply voltage at DC	%	-15
Relative positive tolerance of the control supply voltage at DC	%	10
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
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 2.5 mm²), 2x (2.5 6 mm²), max. 1x 10 mm²
 finely stranded with core end processing 	2x (1 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		
Installation altitude at height above sea level	m	5 000
Environmental category		
 during transport acc. to IEC 60721 		2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m)
• during storage acc. to IEC 60721		1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get inside the devices), 1M4
 during operation acc. to IEC 60721 		3K6 (no formation of ice, no condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6
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

Marine / Shipping



Miscellaneous

Special Test Certificate

Type Test Certificates/Test Report





Marine / Shipping other

ping

Confirmation



Yielded mechanical performance [hp] for three-phase AC motor		
● at 220/230 V		
— at standard circuit at 50 °C rated value	hp	7.5
● at 460/480 V		
— at standard circuit at 50 °C rated value	hp	20
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,...)

www.siemens.com/sirius/catalogs

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RW4027-1BB14

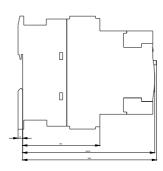
Cax online generator

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

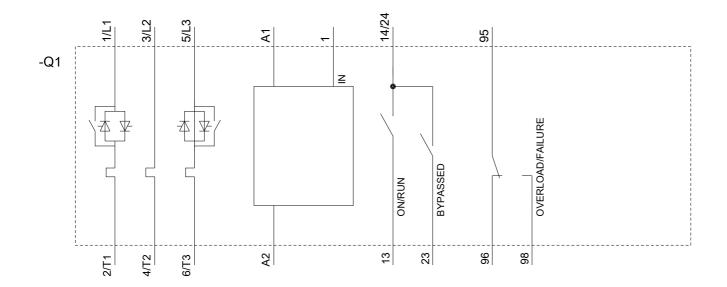
https://support.industry.siemens.com/cs/ww/en/ps/3RW4027-1BB14

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW4027-1BB14&lang=en









last modified: 03/10/2020