# **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			
<ul> <li>integrated bypass contact system</li> </ul>	Yes		
<ul><li>Thyristors</li></ul>	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>	No		
External reset	Yes		
Adjustable current limitation	Yes		
• inside-delta circuit	No		
Product component Motor brake output	No		
Reference identifier acc. to DIN EN 61346-2	Q		
Reference indentifier acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750	G		

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	0/	40		
Relative positive tolerance of the operating frequency  Operating voltage at standard circuit rated value	%	10		
	V 	200 480 -15		
Relative negative tolerance of the operating voltage at standard circuit	%	-10		
Relative positive tolerance of the operating voltage at	%	10		
standard circuit				
Minimum load [%]	%	20		
Adjustable motor current for motor overload protection minimum rated value	Α	17		
Continuous operating current [% of le] at 40 °C	%	115		
Power loss [W] at operating current at 40 °C during	W	13		
operation typical	•			
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	%	-10		
voltage frequency				
Relative positive tolerance of the control supply	%	10		
voltage frequency	V	110 220		
Control supply voltage 1 at AC at 50 Hz	V	110 230 110 230		
Control supply voltage 1 at AC at 60 Hz  Relative negative tolerance of the control supply		-15		
voltage at AC at 60 Hz				
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	%	10
voltage at DC		
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

Compactions/Torrainale	
Connections/Terminals	
Type of electrical connection	
for main current circuit	screw-type terminals
<ul> <li>for auxiliary and control current circuit</li> </ul>	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
<ul> <li>finely stranded with core end processing</li> </ul>	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	
<ul> <li>using the front clamping point</li> </ul>	1x 8, 2x (16 10)
Type of connectable conductor cross-sections for	
auxiliary contacts	
• solid	2x (0.5 2.5 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	2x (0.5 1.5 mm²)
Type of connectable conductor cross-sections at	
AWG conductors	
<ul> <li>for auxiliary contacts</li> </ul>	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				
<ul> <li>during transport acc. to IEC 60721</li> </ul>		3K6 (no formation of ice, no condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6		
• during storage acc. to IEC 60721		3K6 (no formation of ice, no condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6		
<ul> <li>during operation acc. to IEC 60721</li> </ul>		3K6 (no formation of ice, no condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6		
Ambient temperature				
<ul><li>during operation</li></ul>	°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













## **Declaration of Conformity**

### **Test Certificates**

**Shipping Approval** 



Miscellaneous

Special Test Certificate

Type Test Certificates/Test Report





other

Confirmation

### 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	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,...)

http://www.siemens.com/industrial-controls/catalogs

#### Industry Mall (Online ordering system)

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

#### Cax online generator

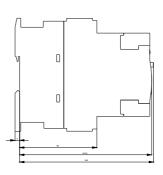
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW4027-1BB14

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

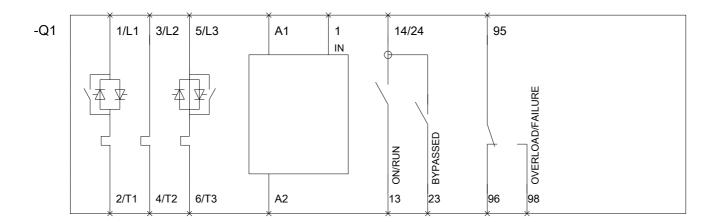
https://support.industry.siemens.com/cs/ww/en/ps/3RW4027-1BB14

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









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