## **SIEMENS**

Data sheet 3RW4027-1TB05



SIRIUS soft starter S0 32 A, 18.5 k kW/500 V, 40  $^{\circ}\text{C}$  400-600 V AC, 24 V AC/DC Screw terminals Thermistor motor protection

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>		Yes			
<ul> <li>external reset</li> </ul>		Yes			
<ul> <li>adjustable current limitation</li> </ul>		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	Power Electronics				
product designation		Soft starter			
operational current					
<ul> <li>at 40 °C rated value</li> </ul>	Α	32			
<ul> <li>at 50 °C rated value</li> </ul>	Α	29			
at 60 °C rated value	А	26			
yielded mechanical performance for 3-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 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 [%]	%	20			

adjustable motor current for motor overload protection minimum rated value	А	17
continuous operating current [% of le] at 40 °C	· %	115
power loss [W] at operational current at 40 °C during operation typical	W	13
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		
<ul> <li>at 50 Hz rated value</li> </ul>	V	24
at 60 Hz rated value	V	24
relative negative tolerance of the control supply voltage at AC at 50 Hz	%	-20
relative positive tolerance of the control supply voltage at AC at 50 Hz	%	20
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
fastening method		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 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		
# ECOLO		
Solid     Singly stranded with care and processing		2x (1 2.5 mm²), 2x (2.5 6 mm²), max. 1x 10 mm²
• finely stranded with core end processing  type of connectable conductor cross-sections at AWG		2x (1 2.5 mm²), 2x (2.5 6 mm²), max. 1x 10 mm² 2x (1 2.5 mm²), 2x (2.5 6 mm²)
finely stranded with core end processing		

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 cables		
for auxiliary contacts		2x (20 14)
<ul> <li>for auxiliary contacts finely stranded with core end processing</li> </ul>		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>		2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m)
<ul> <li>during storage acc. to IEC 60721</li> </ul>		1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get inside the devices), 1M4
<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 +60
during storage	°C	-40 +80
derating temperature	°C	40
protection class IP on the front acc. to IEC 60529		IP20
touch protection on the front acc. to IEC 60529		finger-safe, for vertical contact from the front
Certificates/ approvals		



**General Product Approval** 









**EMC** 



For use in hazard-

ous locations

**Test Certificates** Marine / Shipping other

**Special Test Certific-**<u>ate</u>

Type Test Certificates/Test Report







Confirmation

## Railway

Confirmation

UL/CSA ratings				
yielded mechanical performance [hp] for 3-phase AC motor				
• at 460/480 V				
<ul> <li>at standard circuit at 50 °C rated value</li> </ul>	hp	20		
● at 575/600 V				
<ul> <li>at standard circuit at 50 °C rated value</li> </ul>	hp	25		
contact rating of auxiliary contacts according to UL		B300 / R300		
Further information				

Simulation Tool for Soft Starters (STS)
<a href="https://support.industry.siemens.com/cs/ww/en/view/101494917">https://support.industry.siemens.com/cs/ww/en/view/101494917</a>

Information- and Downloadcenter (Catalogs, Brochures,...)

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RW4027-1TB05

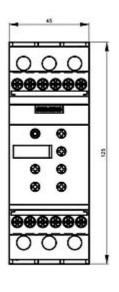
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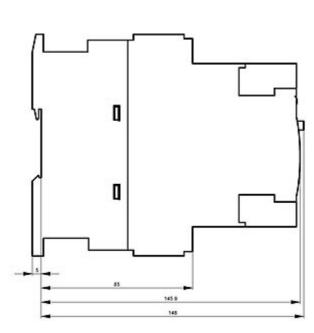
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW4027-1TB05

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

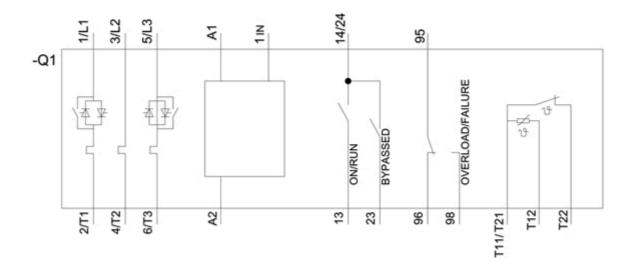
https://support.industry.siemens.com/cs/ww/en/ps/3RW4027-1TB05

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RW4027-1TB05&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RW4027-1TB05&lang=en</a>









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