## SIEMENS

## Data sheet

## 3RW4024-2TB05



SIRIUS soft starter S0 12.5 A, 7.5 kW/500 V, 40 °C 400-600 V AC, 24 V AC/DC spring-type terminals Thermistor motor protection

General technical data		
product brand name		SIRIUS
product feature		
<ul> <li>integrated bypass contact system</li> </ul>		Yes
thyristors		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
external reset		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		
product designation		Soft starter
operational current		
<ul> <li>at 40 °C rated value</li> </ul>	А	12.5
<ul> <li>at 50 °C rated value</li> </ul>	А	11
• at 60 °C rated value	А	10
yielded mechanical performance for 3-phase motors		
• at 400 V		
<ul> <li>— at standard circuit at 40 °C rated value</li> </ul>	W	5 500
• at 500 V		
— at standard circuit at 40 °C rated value	W	7 500
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	A	5
continuous operating current [% of le] at 40 °C	%	115
power loss [W] at operational current at 40 °C during operation typical	W	2
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 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 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		SO
width	mm	45
height	mm	150
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		
<ul> <li>for main current circuit</li> </ul>		spring-loaded terminals
<ul> <li>for auxiliary and control circuit</li> </ul>		spring-loaded 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 mm <sup>2</sup> ), 2x (2.5 6 mm <sup>2</sup> ), max. 1x 10 mm <sup>2</sup>
<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 cables for main contacts for box terminal		
<ul> <li>using the front clamping point</li> </ul>		1x 8, 2x (16 10)

type of connectable main contacts	conductor cross-sec	tions for					
<ul> <li>solid</li> </ul>				1 10 mm²			
<ul> <li>finely stranded</li> </ul>	with core end processi	ng		1 6 mm²			
	conductor cross-sec	-					
• solid				2x (0.25 2.	5 mm²)		
<ul> <li>finely stranded with core end processing</li> </ul>					2x (0.25 1.5 mm <sup>2</sup> )		
-	conductor cross-sec	-			- ,		
<ul> <li>for main contac</li> </ul>	ts			16 10, 1x 8	3		
<ul> <li>for auxiliary con</li> </ul>	for auxiliary contacts			2x (24 14)			
Ambient conditions				· · · · · · · · · · · · · · · · · · ·			
	at height above sea le	vol	m	5 000			
	-		111	5 000			
environmental categ	-			21/2 201 25	1 2M2 (may fall baight	t 0.2 m)	
	t acc. to IEC 60721				2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m)		
	<ul> <li>during storage acc. to IEC 60721</li> </ul>			1S2 (sand m	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	9						
<ul> <li>during operation</li> </ul>	n		°C	-25 +60	-25 +60		
<ul> <li>during storage</li> </ul>			°C	-40 +80	-40 +80		
derating temperature	е		°C	40			
protection class IP				IP20			
Certificates/ approval	s						
General Product Ap	proval					EMC	
		~				•	
(S) S	CCC	(hr)		EHC	EHC	RCM	
For use in hazardous locations	Declaration of Conformity	Test Certifica	ites		Marine / Shipping		
K ATEX	<u>Miscellaneous</u>	<u>Special Te</u> <u>Certificate</u>		<u>Type Test</u> Certificates/Test <u>Report</u>	Lloyd's Register urs	PRS	
Marine / Shipping	other						
and the company	Ullu						
DNV-GL DNV-GL	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	7.5			
• at 575/600 V					
- at standard circuit at 50 °C rated value	hp	10			
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,...)

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RW4024-2TB05

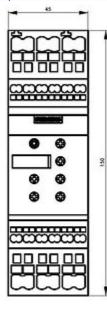
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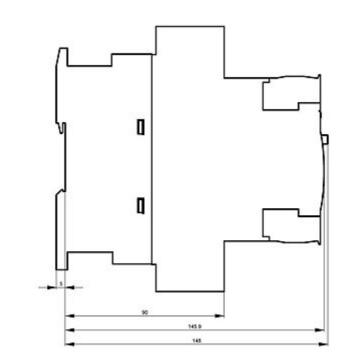
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW4024-2TB05

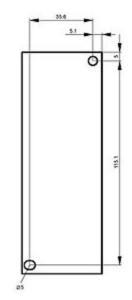
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

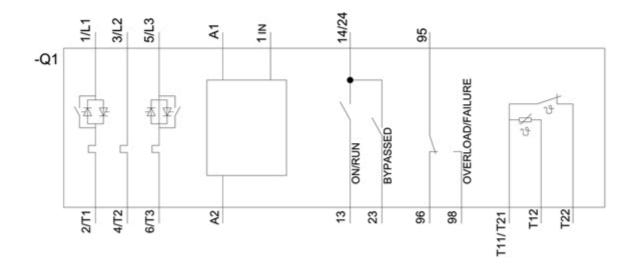
https://support.industry.siemens.com/cs/ww/en/ps/3RW4024-2TB05

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RW4024-2TB05&lang=en









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