# SIEMENS

# **Product data sheet**

## 3RH2122-2HB40



COUPLING CONTACTOR RELAY, 2NO+2NC, DC 24V, 0.7...1.25\*US, SZ S00, SPRING-LOADED TERMINAL

General	technical	data

General technical data:		
Product brand name		SIRIUS
Size of the contactor		S00
Identification number and letter for switching elements		22 E
Product extension / auxiliary switch		No
Protection class IP / on the front		IP20
Protection against electrical shock		finger-safe
Degree of pollution		3
Insulation voltage / with degree of pollution 3 / rated value	V	690
Installation altitude / at a height over sea level / maximum	m	2,000
Ambient temperature / during storage	°C	-55 80
Ambient temperature / during operating	°C	-25 60
Shock resistance		
• at rectangular impulse		
• at DC		10g / 5 ms, 5g / 10 ms
• at sine pulse		
• at DC		15g / 5 ms, 8g / 10 ms
Impulse voltage resistance / rated value	kV	6
Mechanical operating cycles as operating time		
of the contactor / typical		30,000,000

Control circuit:		
Type of voltage / of the controlled supply voltage		DC
Control supply voltage / 1		
• for DC / rated value	V	24
Operating range factor control supply voltage rated value / of the solenoid		
• for DC		0.7 1.25
Holding power / of the solenoid / for DC	W	2.8
Pull-in power / of the solenoid / for DC	W	2.8
Closing delay		
• at DC	ms	30 100
Opening delay		
• at DC	ms	25 90
Arcing time	S	10 15
Auxiliary circuit:		
	_	1 foulty outphing per 100 million (17.) ( 1 mA)
Contact reliability / of the auxiliary contacts		1 faulty switching per 100 million (17 V, 1 mA)
Number of NC contacts / for auxiliary contacts / instantaneous switching		2
Number of NO contacts / for auxiliary contacts / instantaneous switching		2
Operating current / of the auxiliary contacts / at AC-12 / maximum	А	10
Operating current / of the auxiliary contacts / at AC-15		
• at 230 V	А	6
• at 400 V	А	3
• at 500 V	А	2
• at 690 V	А	1
Operating current		
• of the auxiliary contacts / with 1 current path / at DC-12		
• at 24 V	А	6
• at 110 V	А	3
• at 220 V	А	1
• with 2 current paths in series / at DC-12		
• at 24 V / rated value	А	10
• at 60 V / rated value	А	10
• at 110 V / rated value	А	4
• at 220 V / rated value	А	2
• at 440 V / rated value	А	1.3
• at 600 V / rated value	А	0.65
• with 3 current paths in series / at DC-12		

• at 24 V / rated value	А	10
• at 60 V / rated value	А	10
• at 110 V / rated value	А	10
• at 220 V / rated value	А	3.6
• at 440 V / rated value	А	2.5
• at 600 V / rated value	А	1.8
Operating current	_	
• of the auxiliary contacts / with 1 current path / at DC-13		
• at 24 V	А	6
• at 110 V	А	1
• at 220 V	А	0.3
• with 2 current paths in series / at DC-13		
• at 24 V / rated value	А	10
• at 60 V / rated value	А	3.5
• at 110 V / rated value	А	1.3
• at 220 V / rated value	А	0.9
• at 440 V / rated value	А	0.2
• at 600 V / rated value	А	0.1
• with 3 current paths in series / at DC-13		
• at 24 V / rated value	А	10
• at 60 V / rated value	А	4.7
• at 110 V / rated value	А	3
• at 220 V / rated value	А	1.2
• at 440 V / rated value	А	0.5
• at 600 V / rated value	А	0.26
Off-load operating frequency		
• at AC	1/h	10,000
• at DC	1/h	10,000
Frequency of operation		
• at AC-12 / maximum	1/h	1,000
• at AC-14 / maximum	1/h	1,000
• at AC-15 / maximum	1/h	1,000
• at DC-12 / maximum	1/h	1,000
• at DC-13 / maximum	1/h	1,000

# Short-circuit:

Design of the fuse link / for short-circuit protection of the auxiliary switch

required

Fuse gL/gG: 10 A, miniature circuit breaker C 6 A (short-circuit current Ik < 400 A)

Installation/mounti	ng/dimensions	:			
Built in orientation				vertical	
Type of mounting				screw and snap-on mo mounting rail	ounting onto 35 mm standard
Width			mm	45	
Height			mm	70	
Depth			mm	73	
Distance, to be maint	ained, to the ran	ks assembly / sidewards	mm	0	
Connections:					
Design of the electric	al connection				
• for auxiliary and co	ontrol current circu	iit		spring-loaded terminal	ls
Type of the connecta	ble conductor cr	oss-section			
<ul> <li>for auxiliary contact</li> </ul>	cts				
• solid				2x (0.5 4 mm²)	
<ul> <li>finely stranded</li> </ul>					
<ul> <li>with conduct</li> </ul>	with conductor end processing			2x (0.5 2.5 mm²)	
<ul> <li>without cond</li> </ul>	• without conductor final cutting			2x (0.5 2.5 mm²)	
<ul> <li>for AWG conducto</li> </ul>	conductors / for auxiliary contacts			2x (20 12)	
Certificates/approv	/als:				
General Product Ap	proval			Test Certific	ates
coc		<u>ROSTEST</u>		Manufacture	[
Shipping Approval					
ABS		GL	Lloyd's Register	PRS	RINA
Shipping Approval	other				
RMRS					
UL/CSA ratings:					
Contact rating desigr UL	Contact rating designation / for auxiliary contacts / according to UL			A600 / Q600	
Safety:related Para	ameter:				
B10 value / with high	demand rate				
<ul> <li>according to SN 3<sup>-</sup></li> </ul>	1920			1,000,000	
T1 value / for proof test interval or service life					

according to IEC 61508	а	10
Proportion of dangerous failures		
with low demand rate / according to SN 31920	%	40
with high demand rate / according to SN 31920	%	73
Failure rate (FIT value) / with low demand rate		
according to SN 31920	FIT	100
Product function / positively driven operation to IEC 60947-5-1		Yes

## Further information:

Information- and Downloadcenter (Catalogs, Brochures,...) http://www.siemens.com/industrial-controls/catalogs

### Industry Mall (Online ordering system)

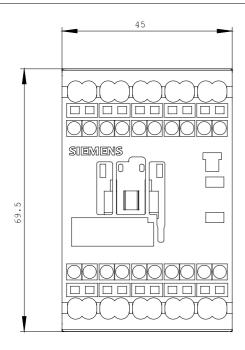
http://www.siemens.com/industrial-controls/mall

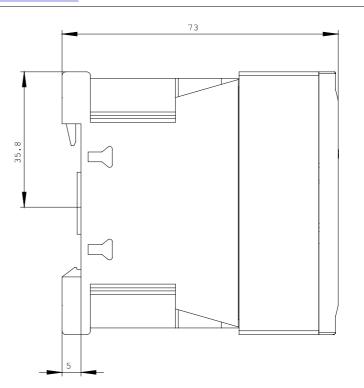
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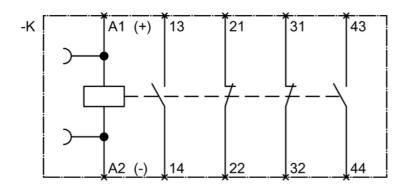
http://www.siemens.com/cax

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RH2122-2HB40/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3RH2122-2HB40







last change:

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