SIEMENS

Product data sheet

3RH2122-1KB40



COUPLING CONTACTOR RELAY, 2NO+2NC, DC 24V, 0.7...1.25*US, W/ INTEGRATED SUPPRESSOR DIODE, SIZE S00, SCREW TERMINAL

General technical data:

Size of the contactorSoloSize of the contactorSoloIdentification number and letter for switching elements22 EProduct extension / auxiliary switchNoProtection class IP / on the frontIP20Protection against electrical shockfinger-safeDegree of pollution3Insulation voltage / with degree of pollution 3 / rated valueVBiscal at a height over sea level / maximummAmbient temperature / during storage°CAmbient temperature / during operating°C• at rectangular impulse • at DC10g / 5 ms, 5g / 10 ms• at DCis to DC• at DCis to DC <tr< th=""><th>General technical data:</th><th></th><th></th></tr<>	General technical data:		
Identification number and letter for switching elements22 EProduct extension / auxiliary switchNoProtection class IP / on the frontIP20Protection against electrical shockfinger-safeDegree of pollution3Insulation voltage / with degree of pollution 3 / rated valueVBitsallation altitude / at a height over sea level / maximumMAmbient temperature / during storage°CAmbient temperature / during operating°CShock resistance-25 60• at pC10g / 5 ms, 5g / 10 ms• at DC10g / 5 ms, 8g / 10 ms• at DC15g / 5 ms, 8g / 10 ms• at DC15g / 5 ms, 8g / 10 ms	Product brand name		SIRIUS
Product extension / auxiliary switchNoProtection class IP / on the frontIP20Protection against electrical shockfinger-safeDegree of pollution3Insulation voltage / with degree of pollution 3 / rated valueVInsulation altitude / at a height over sea level / maximumMAmbient temperature / during storage°CAmbient temperature / during operating°CShock resistance-at IPC• at rectangular impulse10g / 5 ms, 5g / 10 ms• at DC15g / 5 ms, 8g / 10 ms• at DC15g / 5 ms, 8g / 10 ms	Size of the contactor		S00
Protection class IP / on the frontIP20Protection against electrical shockfinger-safeDegree of pollution3Insulation voltage / with degree of pollution 3 / rated valueVBissel at insulation altitude / at a height over sea level / maximumM2,000Ambient temperature / during storage°CAmbient temperature / during operating°CShock resistance·at rectangular impulse·at DC·at sine pulse·at DCis sine pulse·at DC<	Identification number and letter for switching elements		22 E
Protection against electrical shockfinger-safeDegree of pollution3Insulation voltage / with degree of pollution 3 / rated valueVInstallation altitude / at a height over sea level / maximumM2,000Ambient temperature / during storage°CAmbient temperature / during operating°CShock resistance-25 60• at rectangular impulse10g / 5 ms, 5g / 10 ms• at sine pulseiat DC• at DC15g / 5 ms, 8g / 10 ms• at DCKV6	Product extension / auxiliary switch		No
Degree of pollution3Insulation voltage / with degree of pollution 3 / rated valueV690Installation altitude / at a height over sea level / maximumm2,000Ambient temperature / during storage°C-55 80Ambient temperature / during operating°C-25 60Shock resistance• at rectangular impulse10g / 5 ms, 5g / 10 ms• at polse• at DC15g / 5 ms, 8g / 10 ms• at DCInstallation altitude / rated valueKVImpulse voltage resistance / rated valueKV6	Protection class IP / on the front	-	IP20
Insulation voltage / with degree of pollution 3 / rated valueV690Installation altitude / at a height over sea level / maximumm2,000Ambient temperature / during storage°C-55 80Ambient temperature / during operating°C-25 60Shock resistance • at rectangular impulse • at DC • at sine pulse • at DC10g / 5 ms, 5g / 10 msImpulse voltage resistance / rated valueKV6	Protection against electrical shock	-	finger-safe
Installation altitude / at a height over sea level / maximumm2,000Ambient temperature / during storage°C-55 80Ambient temperature / during operating°C-25 60Shock resistance • at rectangular impulse • at DC • at sine pulse • at DC10g / 5 ms, 5g / 10 msImpulse voltage resistance / rated valuekV6	Degree of pollution		3
Ambient temperature / during storage°C-55 80Ambient temperature / during operating°C-25 60Shock resistance • at rectangular impulse • at DC • at sine pulse • at DCIng / 5 ms, 5g / 10 msImpulse voltage resistance / rated valuekV6	Insulation voltage / with degree of pollution 3 / rated value	V	690
Ambient temperature / during operating °C -25 60 Shock resistance • at rectangular impulse • at DC • at sine pulse • at DC 10g / 5 ms, 5g / 10 ms • at DC 15g / 5 ms, 8g / 10 ms	Installation altitude / at a height over sea level / maximum	m	2,000
Shock resistance Impulse • at rectangular impulse • at DC • at sine pulse • at DC • at DC 10g / 5 ms, 5g / 10 ms • at DC 15g / 5 ms, 8g / 10 ms	Ambient temperature / during storage	°C	-55 80
 at rectangular impulse at DC at sine pulse at DC at DC bat documents bat documents	Ambient temperature / during operating	°C	-25 60
 • at DC • at sine pulse • at DC • at DC Inpulse voltage resistance / rated value kV 6 	Shock resistance		
 • at sine pulse • at DC Impulse voltage resistance / rated value kV 6 	• at rectangular impulse		
• at DC 15g / 5 ms, 8g / 10 ms kV 6	• at DC		10g / 5 ms, 5g / 10 ms
Impulse voltage resistance / rated value kV 6	• at sine pulse		
	• at DC		15g / 5 ms, 8g / 10 ms
Mechanical operating cycles as operating time	Impulse voltage resistance / rated value	kV	6
	Mechanical operating cycles as operating time		
• of the contactor / typical 30,000,000	of the contactor / typical		30,000,000

Control circuit:	_	
Design of the surge suppressor		with suppressor diode
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:		
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

• at 220 V / rated value

• at 440 V / rated value

• at 600 V / rated value

А

А

А

А

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• 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

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/mounting/dimensions:			
Built in orientation		vertical	
Type of mounting		screw and snap-on mounting mounting rail	onto 35 mm standard
Width	mm	45	
Height	mm	57.5	
Depth	mm	73	
Distance, to be maintained, to the ranks assembly / sidewards	mm	0	
Connections:			
Design of the electrical connection			
for auxiliary and control current circuit		screw-type terminals	
Type of the connectable conductor cross-section			
for auxiliary contacts			
• solid		2x (0.5 1.5 mm²), 2x (0.75	2.5 mm²), 2x 4 mm²
finely stranded			
with conductor end processing		2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)	
 for AWG conductors / for auxiliary contacts 		2x (20 16), 2x (18 14), 2	x 12
Certificates/approvals:			
General Product Approval		Test Certificates	
CQC CSA ROSTEST		Manufacturer	other
Shipping Approval			
ABS DNV GL	Lloyd's Register LRS	PRS	RINA
Shipping Approval other Image: RMRS Image: Comparison of the provided in the provided i			
UL/CSA ratings:			
Contact rating designation / for auxiliary contacts / according to UL	D	A600 / Q600	
Safety:related Parameter:			
B10 value / with high demand rate			

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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

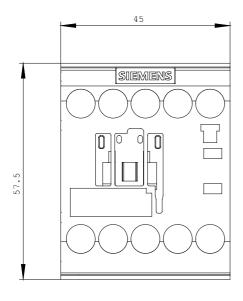
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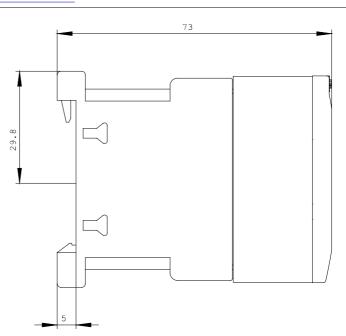
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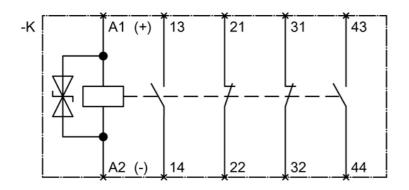
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

http://support.automation.siemens.com/WW/view/en/3RH2122-1KB40/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RH2122-1KB40







last change:

Oct 24, 2011