SIEMENS

Data sheet 3RH2122-1AF00

CONTACTOR RELAY, 2NO+2NC, AC 110V, 50/60 HZ, SIZE S00, SCREW TERMINAL



product brandname	SIRIUS
Product designation	contactor relay
Product type designation	3RH2

General technical data	
Size of contactor	S00
Product extension	
 Auxiliary switch 	Yes
Insulation voltage	
 with degree of pollution 3 rated value 	690 V
Degree of pollution	3
Surge voltage resistance rated value	6 kV
Protection class IP	
• on the front	IP20
Shock resistance at rectangular impulse	
• at AC	7,3g / 5 ms, 4,7g / 10 ms
Shock resistance with sine pulse	
• at AC	11,4g / 5 ms, 7,3g / 10 ms
Mechanical service life (switching cycles)	
 of contactor typical 	30 000 000

 of the contactor with added electronics- compatible auxiliary switch block typical 	5 000 000
 of the contactor with added auxiliary switch block typical 	10 000 000
Equipment marking	
• acc. to DIN EN 61346-2	K
• acc. to DIN EN 81346-2	К
Ambient conditions	
Ambient temperature	
during operation	-25 +60 °C
during storage	-55 +80 °C
Main circuit	
No-load switching frequency	
• at AC	10 000 1/h
• at DC	10 000 1/h
Control circuit/ Control	
Type of voltage of the control supply voltage	AC
Control supply voltage at AC	
• at 50 Hz rated value	110 V
• at 60 Hz rated value	110 V
Operating range factor control supply voltage rated value of magnet coil at AC	
● at 50 Hz	0.8 1.1
● at 60 Hz	0.85 1.1
Apparent pick-up power of magnet coil at AC	37 V·A
Inductive power factor with closing power of the coil	0.8
Apparent holding power of magnet coil at AC	5.7 V·A
Inductive power factor with the holding power of the coil	0.25
Closing delay	
• at AC	8 33 ms
Opening delay	
• at AC	4 15 ms
Arcing time	10 15 ms
Auxiliary circuit	

Number of NO contacts
 for auxiliary contact

Number of NC contacts

• for auxiliary contacts

2 acts 2

- instantaneous contact

- instantaneous contact

2

2

Identification number and letter for switching elements	22 E
Operating current at AC-12 maximum	10 A
Operating current at AC-15	
● at 230 V rated value	10 A
• at 400 V rated value	3 A
● at 500 V rated value	2 A
• at 690 V rated value	1 A
Operating current at 1 current path at DC-12	
at 24 V rated value	10 A
● at 110 V rated value	3 A
at 220 V rated value	1 A
● at 440 V rated value	0.3 A
at 600 V rated value	0.15 A
Operating current with 2 current paths in series at DC-12	
• at 24 V rated value	10 A
• at 60 V rated value	10 A
• at 110 V rated value	4 A
at 220 V rated value	2 A
• at 440 V rated value	1.3 A
at 600 V rated value	0.65 A
Operating current with 3 current paths in series at DC-12	
• at 24 V rated value	10 A
• at 60 V rated value	10 A
• at 110 V rated value	10 A
• at 220 V rated value	3.6 A
• at 440 V rated value	2.5 A
• at 600 V rated value	1.8 A
Operating frequency at DC-12 maximum	1 000 1/h
Operating current at 1 current path at DC-13	
• at 24 V rated value	10 A
● at 110 V rated value	1 A
• at 220 V rated value	0.3 A
• at 440 V rated value	0.14 A
• at 600 V rated value	0.1 A
Operating current with 2 current paths in series at DC-13	
• at 24 V rated value	10 A
• at 60 V rated value	3.5 A
• at 110 V rated value	1.3 A

Height 57.5 mm Width 45 mm Depth 73 mm Required spacing • for grounded parts — at the side 6 mm • for live parts — at the side 6 mm		
at 800 V rated value Operating current with 3 current paths in series at DC-13 at 24 V rated value at 600 V rated value at 220 V rated value at 400 V rated value at 600 V rated value being for the miniature circuit breaker for short-circuit protection of the auxiliary circuit up to 230 V Contact reliability of auxiliary contacts Contact rating of auxiliary contacts according to UL Contact rating of auxiliary contacts according to UL Contact rating of auxiliary contacts according to UL Contact rating of the function of the auxiliary switch required Installation/ mounting/ dimensions Mounting position A600 / G600 First Pick Edit Short - Great of the auxiliary switch required Installation of the fuse link for short-circuit protection of the auxiliary switch required Installation of the fuse link for short-circuit protection of the auxiliary switch required First Bo* rotation possible on vertical mounting surface; can be titled forward and backward by +/- 22.5* on vertical mounting surface Mounting type screw and snap-on mounting onto 35 mm standard mounting surface screw and snap-on mounting onto 35 mm standard mounting surface First Short - Great Short	● at 220 V rated value	0.9 A
Operating current with 3 current paths in series at DC-13 • at 24 V rated value • at 60 V rated value • at 60 V rated value • at 440 V rated value • at 440 V rated value • at 440 V rated value • at 600 V rated value • Coperating frequency at DC-13 maximum Design of the miniature circuit protection of the auxiliary circuit up to 230 V Contact reliability of auxiliary contacts Contact reliability of auxiliary contacts Contact rating of auxiliary contacts according to UL A600 / G600 Short-circuit protection Design of the fuse link • for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions Mounting position H-180* rotation possible on vertical mounting surface; can be titled forward and backward by +/- 22.5* on vertical mounting surface Mounting type screw and snap-on mounting onto 35 mm standard mounting surface Mounting type screw and snap-on mounting onto 35 mm standard mounting surface For grounded parts - at the side for grounded parts - at the side for live parts - at the side for live parts - at the side for miniature 10.0 A 4.7 A 3.A 4.7 A	● at 440 V rated value	0.2 A
DC-13 • at 24 V rated value • at 60 V rated value • at 60 V rated value • at 110 V rated value • at 220 V rated value • at 220 V rated value • at 220 V rated value • at 440 V rated value • at 600 V rated value • for short-circuit protection of the auxiliary circuit up to 230 V Contact reliability of auxiliary contacts C characteristic: 6 A; 0.4 kA **C characteristic: 6 A; 0.4 kA **DUL/CSA ratings** Contact rating of auxiliary contacts **Design of the fuse link • for short-circuit protection Design of the fuse link • for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions Mounting position **H-180* rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface Mounting type #Height #Height ##Height ###################################	• at 600 V rated value	0.1 A
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Height 57.5 mm Width 45 mm Depth 73 mm Required spacing • for grounded parts — at the side 6 mm • for live parts — at the side 6 mm	Mounting position	tilted forward and backward by +/- 22.5° on vertical mounting
Width 45 mm Depth 73 mm Required spacing • for grounded parts — at the side 6 mm • for live parts — at the side 6 mm	Mounting type	screw and snap-on mounting onto 35 mm standard mounting rail
Depth 73 mm Required spacing • for grounded parts — at the side 6 mm • for live parts 6 mm	Height	57.5 mm
Required spacing • for grounded parts — at the side • for live parts — at the side 6 mm	Width	
 for grounded parts at the side for live parts at the side 6 mm 6 mm 		73 mm
 — at the side ● for live parts — at the side 6 mm 6 mm 	Required spacing	
● for live parts — at the side 6 mm	for grounded parts	
— at the side 6 mm	— at the side	6 mm
	• for live parts	
	— at the side	6 mm
Connections/Terminals	Connections/Terminals	
Type of electrical connection		

• for auxiliary and control current circuit

Type of connectable conductor cross-sections

- single or multi-stranded

• for auxiliary contacts

2x (0,5 ... 1,5 mm²), 2x (0,75 ... 2,5 mm²), 2x 4 mm²

screw-type terminals

- finely stranded with core end processing

• at AWG conductors for auxiliary contacts

2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²) 2x (20 ... 16), 2x (18 ... 14), 2x 12

1 000 000; With 0.3 x le
1 000 000; With 0.3 x le
40 %
73 %
100 FIT
Yes .
20 y
7: 1 (

Certificates/approvals

General Product Approval	Functional	Declaration of
	Safety/Safety	Conformity
	of Machinery	









Type Examination



Test Certificates

Special Test Certificate Certificates/Test





Shipping Approval



other



GL



LRS

Shipping Approval







Environmental Confirmations

Confirmation



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

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

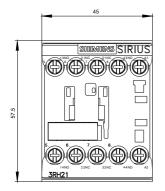
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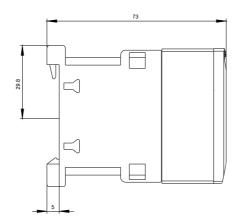
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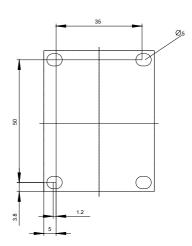
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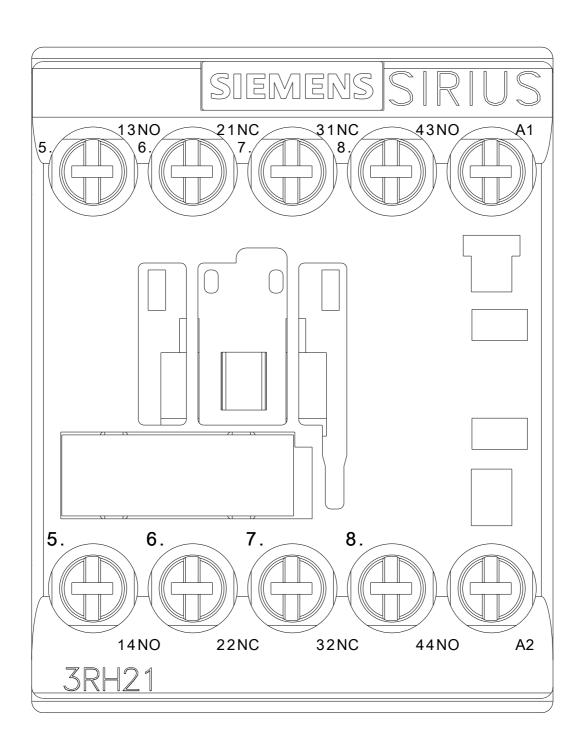
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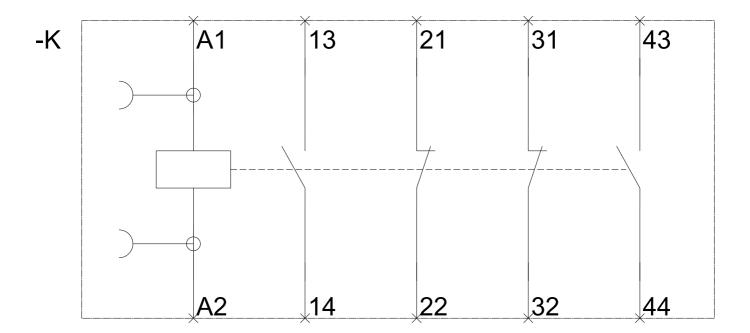
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