# **SIEMENS**

Data sheet 3RH2122-1AU00

CONTACTOR RELAY, 2NO+2NC, AC 240V, 50/60 HZ, SIZE S00, SCREW TERMINAL



Figure similar

product brand name	SIRIUS
Product designation	contactor relay

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

<ul> <li>of the contactor with added electronics- compatible auxiliary switch block typical</li> </ul>	5 000 000	
	40,000,000	
<ul> <li>of the contactor with added auxiliary switch block typical</li> </ul>	10 000 000	
Equipment marking		
• acc. to DIN EN 61346-2	K	
● acc. to DIN EN 81346-2	K	
Ambient conditions:		
Installation altitude at height above sea level	2 000 m	
maximum		
Ambient temperature		
<ul><li>during operation</li></ul>	-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	240 V	
• at 60 Hz Rated value	240 V	
Rated value	50 Hz	
Control supply voltage frequency 2 Rated value	60 Hz	
Operating range factor control supply voltage rated		
value of the magnet coil at AC		
● at 50 Hz	0.8 1.1	
● at 60 Hz	0.85 1.1	
Apparent pick-up power of the magnet coil at AC	37 V·A	
Inductive power factor with closing power of the coil	0.8	
Apparent holding power of the 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 s	
Auxiliary circuit:		
Number of NC contacts		
<ul> <li>for auxiliary contacts</li> </ul>	2	

— instantaneous contact	2
Number of NO contacts	
• for auxiliary contacts	2
<ul> <li>instantaneous contact</li> </ul>	2
Identification number and letter for switching	22 E
elements	
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
at 220 V Rated value	0.9 A
at 440 V Rated value	0.2 A
at 600 V Rated value	0.1 A
Operating current with 3 current paths in series at DC-13	
at 24 V Rated value	10 A
at 60 V Rated value	4.7 A
at 110 V Rated value	3 A
● at 220 V Rated value	1.2 A
● at 440 V Rated value	0.5 A
● at 600 V Rated value	0.26 A
Operating frequency at DC-13 maximum	1 000 1/h
Design of the miniature circuit breaker	
<ul> <li>for short-circuit protection of the auxiliary circuit up to 230 V</li> </ul>	C characteristic: 6 A; 0.4 kA
Contact reliability of the auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)
UL/CSA ratings:	
Contact rating of the auxiliary contacts acc. to UL	A600 / Q600
01-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	
Short-circuit protection  Design of the fuse link	
for short-circuit protection of the auxiliary switch required	fuse gL/gG: 10 A
Installation/ mounting/ dimensions:	
mounting position	+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface
Mounting type	screw and snap-on mounting onto 35 mm standard mounting rail
Height	57.5 mm
Width	45 mm
Depth	73 mm
Required spacing	
• for grounded parts	
<ul><li>for grounded parts</li><li>— at the side</li></ul>	6 mm
<ul> <li>for grounded parts</li> <li>— at the side</li> <li>for live parts</li> </ul>	
<ul><li>for grounded parts</li><li>— at the side</li></ul>	6 mm

Type of electrical connection	
<ul> <li>for auxiliary and control current circuit</li> </ul>	screw-type terminals
Type of connectable conductor cross-section	
<ul> <li>for auxiliary contacts</li> </ul>	
<ul> <li>single or multi-stranded</li> </ul>	2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²), 2x 4 mm²
— finely stranded with core end processing	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
<ul> <li>for AWG conductors for auxiliary contacts</li> </ul>	2x (20 16), 2x (18 14), 2x 12

Safety related data:	
B10 value with high demand rate acc. to SN 31920	1 000 000; With 0.3 x le
Proportion of dangerous failures	
<ul> <li>with low demand rate acc. to SN 31920</li> </ul>	40 %
<ul> <li>with high demand rate acc. to SN 31920</li> </ul>	73 %
Product function  ● positively driven operation acc. to IEC 60947-5- 1	Yes
T1 value for proof test interval or service life acc. to IEC 61508	20 y

# Certificates/ approvals:

General Product Approval	Declaration of	Test
	Conformity	Certificates











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