Data sheet

CONTACTOR RELAY, 4NO+4NC, 110V AC, 50/60HZ, SCREW TERMINAL, SIZE S00 2 NO + 2 NC BASIC UNIT /DIN EN VARISTOR PLUGGED ON



Figure similar

Product brand name	SIRIUS
Product designation	contactor relay
Product type designation	3RH2

General technical data	
Size of contactor	S00
Product extension	
Auxiliary switch	No
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 	10 000 000
Equipment marking	
● acc. to DIN EN 61346-2	К
• acc. to DIN EN 81346-2	K

Ambient conditions Ambient temperature • during operation • during storage -25 ... +60 °C -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

value of magnet coil at AC	
● at 50 Hz	0.8 1.1
● at 60 Hz	0.85 1.1
Design of the surge suppressor	with varistor
Apparent pick-up power of magnet coil at AC	37 V·A

Operating range factor control supply voltage rated

Inductive power factor with closing power of the coil

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

8.0

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Auxiliary circuit	
Number of NC contacts	
 for auxiliary contacts 	4
 instantaneous contact 	4
Number of NO contacts	
• for auxiliary contacts	4

10 ... 15 ms

- instantaneous contact

Arcing time

Identification number and letter for switching elements	44 E
Operating current at AC-12 maximum	10 A
Operating current at AC-15	
● at 230 V rated value	6 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	6 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	
 for short-circuit protection of the auxiliary circuit up to 230 V 	C characteristic: 6 A; 0.4 kA
Contact reliability of auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)
UL/CSA ratings	
Contact rating of auxiliary contacts according to UL	A600 / Q600
Short-circuit protection	
Design of the fuse link	
• for short-circuit protection of the auxiliary switch	fuse gL/gG: 10 A
required	
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
	Surface
Mounting type	screw and snap-on mounting onto 35 mm standard mounting rail
Mounting type Height	
	screw and snap-on mounting onto 35 mm standard mounting rail
Height	screw and snap-on mounting onto 35 mm standard mounting rail 57.5 mm
Height Width	screw and snap-on mounting onto 35 mm standard mounting rail 57.5 mm 45 mm
Height Width Depth	screw and snap-on mounting onto 35 mm standard mounting rail 57.5 mm 45 mm
Height Width Depth Required spacing	screw and snap-on mounting onto 35 mm standard mounting rail 57.5 mm 45 mm
Height Width Depth Required spacing • for grounded parts	screw and snap-on mounting onto 35 mm standard mounting rail 57.5 mm 45 mm 117 mm
Height Width Depth Required spacing • for grounded parts — at the side	screw and snap-on mounting onto 35 mm standard mounting rail 57.5 mm 45 mm 117 mm
Height Width Depth Required spacing • for grounded parts — at the side • for live parts	screw and snap-on mounting onto 35 mm standard mounting rail 57.5 mm 45 mm 117 mm
Height Width Depth Required spacing • for grounded parts — at the side • for live parts — at the side	screw and snap-on mounting onto 35 mm standard mounting rail 57.5 mm 45 mm 117 mm
Height Width Depth Required spacing • for grounded parts — at the side • for live parts — at the side Connections/Terminals	screw and snap-on mounting onto 35 mm standard mounting rail 57.5 mm 45 mm 117 mm

• for auxiliary contacts

— single or multi-stranded

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

- 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

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	
 with low demand rate acc. to SN 31920 	40 %
 with high demand rate acc. to SN 31920 	73 %
Failure rate [FIT]	
 with low demand rate acc. to SN 31920 	100 FIT
Product function	
positively driven operation acc. to IEC 60947-5-	Yes
T1 value for proof test interval or service life acc. to IEC 61508	20 y

Certificates/approvals

Declaration of General Product Approval Test Marine / Shipping Conformity Certificates







Special Test Certificate





other

Marine / Shipping



GL



LRS





Environmental Confirmations

other Railway

Vibration and Shock Confirmation

Further information

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

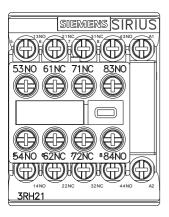
http://www.siemens.com/industrial-controls/catalogs

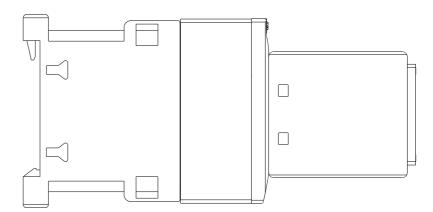
Industry Mall (Online ordering system)
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RH2344-1CF00-0KA0

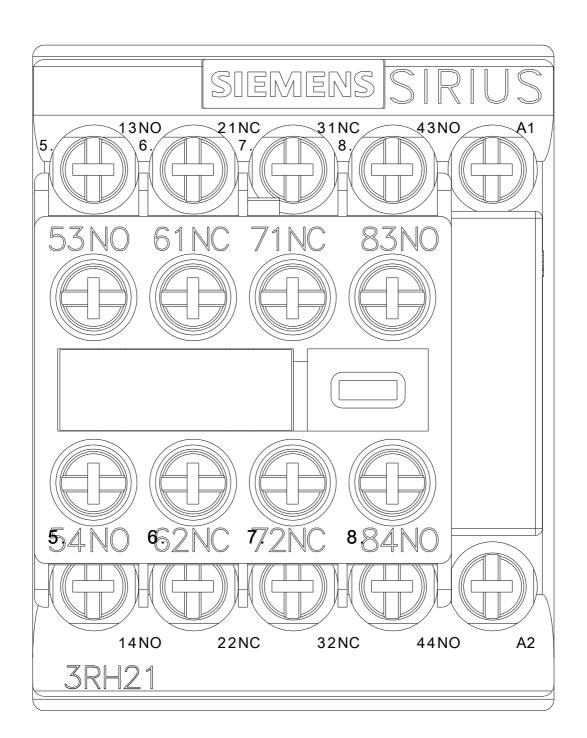
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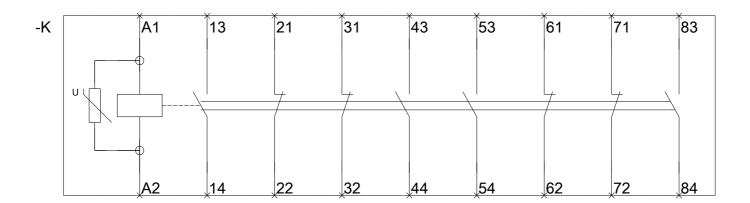
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Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RH2344-1CF00-0KA0&lang=en









last modified: 08/07/2017