SIEMENS

Data sheet 3RH2244-1AP60

Contactor relay, 4 NO + 4 NC, 220 V AC 50 Hz / 240 V 60 Hz, Size S00, screw terminal, Captive auxiliary switch, for SUVA applications



Product brand name	SIRIUS
Product designation	Auxiliary contactor
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

Reference code acc. to DIN EN 81346-2	K
Reference code acc. to DIN EN 61346-2	K
Reference code acc. to Din En 01340-2	N.
Ambient conditions	
Installation altitude at height above sea level	
• maximum	2 000 m
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	220 V
• at 60 Hz rated value	240 V
Control supply voltage frequency	
• 1 rated value	50 Hz
• 2 rated value	60 Hz
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 NC contacts for auxiliary contacts	4
• instantaneous contact	4
Number of NO contacts for auxiliary contacts	4
• instantaneous contact	4
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 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	ir		
	45 mm		
Depth	45 mm 117 mm		
Depth Required spacing			
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Required spacing			
Required spacing • with side-by-side mounting	117 mm		
Required spacing • with side-by-side mounting — forwards	117 mm 10 mm		
Required spacing • with side-by-side mounting — forwards — upwards	117 mm 10 mm 10 mm		
Required spacing • with side-by-side mounting — forwards — upwards — downwards	117 mm 10 mm 10 mm 10 mm		
Required spacing • with side-by-side mounting — forwards — upwards — downwards — at the side	117 mm 10 mm 10 mm 10 mm		
Required spacing • with side-by-side mounting — forwards — upwards — downwards — at the side • for grounded parts	117 mm 10 mm 10 mm 0 mm		
Required spacing • with side-by-side mounting — forwards — upwards — downwards — at the side • for grounded parts — forwards	117 mm 10 mm 10 mm 10 mm 0 mm		
Required spacing • with side-by-side mounting — forwards — upwards — downwards — at the side • for grounded parts — forwards — upwards	117 mm 10 mm 10 mm 10 mm 10 mm 10 mm		
Required spacing • with side-by-side mounting — forwards — upwards — downwards — at the side • for grounded parts — forwards — upwards — upwards — at the side	117 mm 10 mm 10 mm 0 mm 10 mm 10 mm 6 mm		
Required spacing • with side-by-side mounting — forwards — upwards — downwards — at the side • for grounded parts — forwards — upwards — upwards — at the side — downwards	117 mm 10 mm 10 mm 0 mm 10 mm 10 mm 6 mm		

— downwards	10 mm
— at the side	6 mm

Connections/ Terminals		
Type of electrical connection		
 for auxiliary and control current circuit 	screw-type terminals	
Type of connectable conductor cross-sections		
 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 	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)	
 at AWG conductors for auxiliary contacts 	2x (20 16), 2x (18 14), 2x 12	

1 000 000; With 0.3 x le
40 %
73 %
100 FIT
Yes
20 y

Certificates/ approvals

General Product Approval







KC





EMC

Functional Safety/Safety of Machinery	Declaration of Conformity	Test Certificates	Marine / Ship- ping
Type Examination Certificate	Miscellaneous EG-Konf.	Type Test Certificates/Test Report Special Test Certificate	ABS

Marine / Shipping





LRS









other

Confirmation



Further information

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

www.siemens.com/sirius/catalogs

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RH2244-1AP60

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RH2244-1AP60

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

https://support.industry.siemens.com/cs/ww/en/ps/3RH2244-1AP60

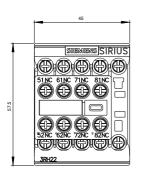
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RH2244-1AP60&lang=en

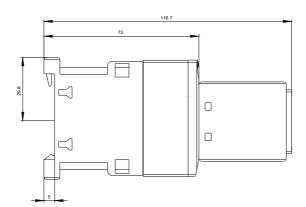
Characteristic: Tripping characteristics, I2t, Let-through current

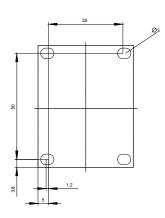
https://support.industry.siemens.com/cs/ww/en/ps/3RH2244-1AP60/char

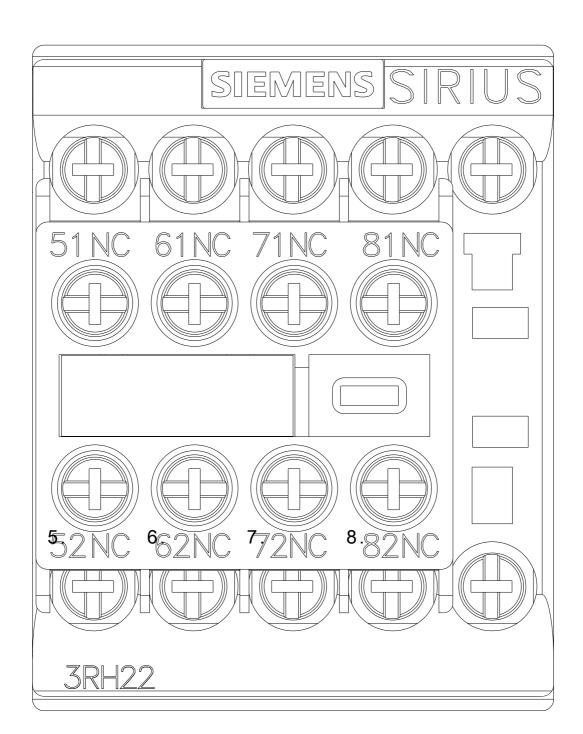
Further characteristics (e.g. electrical endurance, switching frequency)

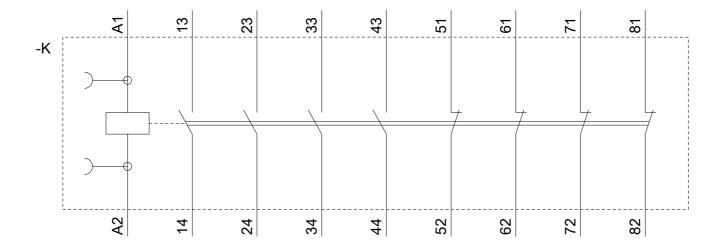
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RH2244-1AP60&objecttype=14&gridview=view1











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