## SIEMENS

## Data sheet

## 3RH2122-1AP60

CONTACTOR RELAY, 2NO+2NC, AC 220V 50HZ, 240V 60HZ, SIZE S00, SCREW TERMINAL



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)	
<ul> <li>of contactor typical</li> </ul>	30 000 000

<ul> <li>of the contactor with added electronics- compatible auxiliary switch block typical</li> </ul>	5 000 000
<ul> <li>of the contactor with added auxiliary switch block typical</li> </ul>	10 000 000
Equipment marking	7
• acc. to DIN EN 61346-2	K
• acc. to DIN EN 81346-2	к
Ambient conditions:	
Installation altitude at height above sea level	2 000 m
maximum	
Ambient temperature	
<ul> <li>during operation</li> </ul>	-25 +60 °C
<ul> <li>during storage</li> </ul>	-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
● rated value	50 Hz
Control supply voltage frequency 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	2

— instantaneous contact	2
Number of NO contacts	
<ul> <li>for auxiliary contacts</li> </ul>	2
— instantaneous contact	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			
• 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 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				
<ul> <li>for short-circuit protection of the auxiliary switch required</li> </ul>	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				
<ul> <li>for grounded parts</li> </ul>				
— at the side	6 mm			
● for live parts				
— at the side	6 mm			
Connections/ Terminals:				

Type of electrical connection					
<ul> <li>for auxiliary and control current circuit</li> </ul>		screw-type terminals			
Type of connectable conduct	or cross-sections				
<ul> <li>for auxiliary contacts</li> </ul>					
— single or multi-stranded		2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²), 2x 4 mm²			
<ul> <li>finely stranded with</li> </ul>	ι core end processing	2x (0.5 1.5 mm²), 2x (	0.75 2.5 mm²)		
<ul> <li>at AWG conductors for</li> </ul>	auxiliary contacts	2x (20 16), 2x (18 14), 2x 12			
afety related data:	_	_			
B10 value with high demand	rate acc. to SN 31920	1 000 000; With 0.3 x le			
Proportion of dangerous failu		-			
<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		-			
<ul> <li>positively driven operation acc. to IEC 60947-5-</li> </ul>		Yes			
T1 value for proof test interva IEC 61508	I or service life acc. to	20 у	20 у		
General Product Approv			Functional Safety/Safety of Machinery	Declaration of Conformity	
	E HE		Baumusterbescheini gung	EG-Konf.	
Test Certificates	Shipping A	Approval			
	ezielle				
ng/Werkszeugnis Prüfbes	n ABS	BUREAU VERITAS	ĴÅ DNV DNV	GL GL	
ng/Werkszeugnis Prüfbes Shipping Approval	n n	B U R E A U V E R I T A S	other		
	n n	UREAU VERITAS	DNV		

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