## **SIEMENS**

Data sheet 3RH2122-2AK60



CONTACTOR RELAY, 2NO+2NC, AC 110V 50HZ, 120V 60HZ, SZ S00, SPRING-LOADED TERMINAL

product brand name	SIRIUS
Product designation	contactor relay

General technical data:			
Insulation voltage			
<ul> <li>with degree of pollution 3 Rated value</li> </ul>	V	690	
Degree of pollution		3	
Surge voltage resistance Rated value	kV	6	
Mechanical service life (switching cycles)			
<ul><li>of the 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	
Protection class IP			
• on the front		IP20	
Equipment marking			
• acc. to DIN EN 61346-2		К	
• acc. to DIN EN 81346-2		К	

Control circuit/ Control:		
Type of voltage of the control supply voltage		AC
Control supply voltage with AC		
● at 50 Hz Rated value	V	110
• at 60 Hz Rated value	V	120
Rated value	Hz	50
Control supply voltage frequency 2 Rated value	Hz	60

Operating range factor control supply voltage rated		
value of the magnet coil with AC		
● at 50 Hz		0.8 1.1
● at 60 Hz		0.85 1.1
Apparent pick-up power of the magnet coil with AC	V·A	37
Apparent holding power of the magnet coil with AC	V·A	5.7
Inductive power factor		
<ul><li>with closing power of the coil</li></ul>		0.8
<ul> <li>with the holding power of the coil</li> </ul>		0.25
Auxiliary circuit:		
Number of NC contacts		
<ul> <li>for auxiliary contacts</li> </ul>		2
<ul><li>instantaneous contact</li></ul>		2
Number of NO contacts		
<ul> <li>for auxiliary contacts</li> </ul>		2
— instantaneous contact		2
Product expansion Auxiliary switch		Yes
Identification number and letter for switching elements		22 E
Operating current at AC-15		
• at 230 V Rated value	Α	10
• at 400 V Rated value	Α	3
• at 690 V Rated value	Α	1
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
Short-circuit:		
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
Mounting type		screw and snap-on mounting onto 35 mm standard
Mounting type		mounting rail
Height	mm	70
Width	mm	45
Depth	mm	73

Required spacing		
• for grounded parts		
— at the side	mm	6
• for live parts		
— at the side	mm	6
— at the side		
Connections/ Terminals:		
Type of electrical connection		
for auxiliary and control current circuit		spring-loaded terminals
Type of connectable conductor cross-section		
• for auxiliary contacts		
<ul><li>— single or multi-stranded</li></ul>		2x (0,5 4 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>		2x (0.5 2.5 mm²)
<ul> <li>finely stranded without core end processing</li> </ul>		2x (0.5 2.5 mm²)
<ul> <li>for AWG conductors for auxiliary contacts</li> </ul>		2x (20 12)
Safety related data:		
B10 value with high demand rate acc. to SN 31920		1 000 000
Note		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
Failure rate [FIT] with low demand rate acc. to SN 31920	FIT	100
T1 value for proof test interval or service life acc. to IEC 61508	У	20
Protection against electrical shock		finger-safe
Mechanical data:		
Size of contactor		S00
Ambient conditions:		
Installation altitude at height above sea level	m	2 000
maximum		
Ambient temperature	°C	25 +00
during operation	°C	-25 +60
during storage	°C	-55 <b>+</b> 80

## **Functional Declaration of Test General Product Approval** Safety/Safety Conformity Certificates of Machinery







Type Examination



**Special Test** Certificate

Test	Shipping Approval
Cortificatos	

Type Test Certificates/Test Report









GL



**Shipping Approval** 

other







Environmental Confirmations



## Further information

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

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

Industry Mall (Online ordering system)

http://www.siemens.com/industrymall

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RH21222AK60

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RH21222AK60/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RH21222AK60&lang=en



