# **SIEMENS**

Data sheet 3RH2140-1AP00



CONTACTOR RELAY, 4NO, AC 230V, 50/60 HZ, SIZE S00, SCREW 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	230		
• at 60 Hz Rated value	V	230		
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 NO contacts		
<ul> <li>for auxiliary contacts</li> </ul>		4
<ul> <li>instantaneous contact</li> </ul>		4
Product expansion Auxiliary switch		Yes
Identification number and letter for switching elements		40 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		
<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	mm	57.5
Width	mm	45
Depth	mm	73
Required spacing		
• for grounded parts		
— at the side	mm	6

• for live parts					
— at the side	mm	6			
Connections/ Terminals:					
Type of electrical connection					
<ul> <li>for auxiliary and control current circuit</li> </ul>		screw-type terminals			
Type of connectable conductor cross-section					
• for auxiliary contacts					
<ul><li>— single or multi-stranded</li></ul>		2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²), 2x 4 mm²			
<ul> <li>finely stranded with core end processing</li> </ul>		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			
• 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:	Ambient conditions:				
Installation altitude at height above sea level	m	2 000			
maximum					
Ambient temperature	90	05			
during operation	°C	-25 +60			
during storage	°C	-55 <b>+</b> 80			
Certificates/ approvals:					

### **General Product Approval**

Functional Safety/Safety of Machinery Declaration of Conformity









Type Examination



#### **Test Certificates**

**Shipping Approval** 

Type Test
Certificates/Test
Report

Special Test Certificate







other



GL

## **Shipping Approval**

Lloyd's Register









Environmental Confirmations



#### Further informatior

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=3RH21401AP00

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

http://support.automation.siemens.com/WW/view/en/3RH21401AP00/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=3RH21401AP00&lang=en



