SIEMENS

Data sheet 3RH2140-1AF00



CONTACTOR RELAY, 4NO, AC 110V, 50/60 HZ, SIZE S00, SCREW TERMINAL

product brand name	SIRIUS
Product designation	contactor relay

General technical data:				
Insulation voltage				
 with degree of pollution 3 Rated value 	V	690		
Degree of pollution		3		
Surge voltage resistance Rated value	kV	6		
Mechanical service life (switching cycles)				
 of the contactor typical 		30 000 000		
 of the contactor with added electronics- compatible auxiliary switch block typical 		5 000 000		
 of the contactor with added auxiliary switch block typical 		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	110		
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 V·A	5.7
Inductive power factor	V.A	5.7
with closing power of the coil		0.8
• •		0.25
 with the holding power of the coil 		0.23
Auxiliary circuit:		
Number of NO contacts		
• for auxiliary contacts		4
instantaneous contact		4
Product expansion Auxiliary switch		Yes
Identification number and letter for switching		40 E
elements		
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		
 for short-circuit protection of the auxiliary circuit up to 230 V 		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 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	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					
 for auxiliary and control current circuit 		screw-type terminals			
Type of connectable conductor cross-section					
• 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)			
 for AWG conductors for auxiliary contacts 		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					
 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	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	90	0500			
during operation	°C	-25 +60			
during storage	°C	-55 + 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











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=3RH21401AF00

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

http://support.automation.siemens.com/WW/view/en/3RH21401AF00/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=3RH21401AF00&lang=en



