SIEMENS

Product data sheet

3RH2140-1AP00



CONTACTOR RELAY, 4NO, AC 230V, 50/60 HZ, SIZE S00, SCREW TERMINAL

General technical data:			
product brand name		SIRIUS	
Size of the contactor		S00	
Identification number and letter for switching elements		40 E	
Product extension / auxiliary switch		Yes	
Protection class IP / on the front		IP20	
Protection against electrical shock		finger-safe	
Degree of pollution		3	
Insulation voltage / with degree of pollution 3 / rated value	V	690	
Installation altitude / at a height over sea level / maximum	m	2,000	
Ambient temperature			
during storage	°C	-55 +80	
during operating	°C	-25 +60	
Shock resistance			
• at rectangular impulse			
• at AC		7,3g / 5 ms, 4,7g / 10 ms	
• at sine pulse			
• at AC		11,4g / 5 ms, 7,3g / 10 ms	
Impulse voltage resistance / rated value	kV	6	
Mechanical operating cycles as operating time			

• of the contactor / typical	30,000,000
• of the contactor with added auxiliary switch block / typical	10,000,000
of the contactor with added electronics-compatible auxiliary switch block / typical	10,000,000

Control circuit:		
Type of voltage / of the controlled supply voltage		AC
Operating range factor control supply voltage rated value / of the magnet coil		
• at 50 Hz / for AC		0.8 1.1
• at 60 Hz / for AC		0.85 1.1
Apparent pull-in power / of the solenoid / for AC	V·A	37
Apparent holding power / of the solenoid / for AC	V·A	5.7
Inductive power factor		
• with the pull-in power of the coil		0.8
• with the pull-in power of the coil		0.25
Closing delay		
• at AC	ms	8 33
Opening delay		
• at AC	ms	6 25
Arcing time	S	10 15

Auxiliary circuit:		
Contact reliability / of the auxiliary contacts		1 faulty switching per 100 million (17 V, 1 mA)
Number of NO contacts / for auxiliary contacts / instantaneous switching	_	4
[nicht versorgt: PMD_ABP551_001_000]	-	
•	А	2
• at 690 V	А	1
[nicht versorgt: PMD_ABP553_001_000]		
 [nicht versorgt: PMD_ABP553_001_000] 		
•	А	10
•	А	3
•	А	1
• with 2 current paths in series / at DC-12		
• at 24 V / rated value	А	10
• at 60 V / rated value	А	10
• at 110 V / rated value	А	4
• at 220 V / rated value	А	2
• at 440 V / rated value	А	1.3
• at 600 V / rated value	А	0.65

• with 3 current paths in series / at DC-12		
• at 24 V / rated value	А	10
• at 60 V / rated value	А	10
• at 110 V / rated value	А	10
• at 220 V / rated value	А	3.6
• at 440 V / rated value	А	2.5
• at 600 V / rated value	А	1.8
Operating current		
• [nicht versorgt: PMD_ABP558_001_000]		
•	А	10
•	А	1
•	А	0.3
• with 2 current paths in series / at DC-13		
• at 24 V / rated value	А	10
• at 60 V / rated value	А	3.5
• at 110 V / rated value	А	1.3
• at 220 V / rated value	А	0.9
• at 440 V / rated value	А	0.2
• at 600 V / rated value	А	0.1
• with 3 current paths in series / at DC-13		
• at 24 V / rated value	А	10
• at 60 V / rated value	А	4.7
• at 110 V / rated value	А	3
at 220 V / rated value	А	1.2
• at 440 V / rated value	А	0.5
• at 600 V / rated value	А	0.26
Off-load operating frequency		
• at AC	1/h	10,000
• at DC	1/h	10,000
Frequency of operation		
• at AC-12 / maximum	1/h	1,000
• at AC-14 / maximum	1/h	1,000
• at AC-15 / maximum	1/h	1,000
• at DC-12 / maximum	1/h	1,000

Short-circuit:

Design of the fuse link / for short-circuit protection of the auxiliary switch

required

Fuse gL/gG: 10 A, miniature circuit breaker C 6 A (short-circuit current Ik < 400 A)

Installation/mounti	ng/dimensions:						
mounting position				can be tilte	ation possible on ver ed forward and backw punting surface	tical mounting surface; /ard by +/- 22.5° on	
Type of mounting	ype of mounting		-		screw and snap-on mounting onto 35 mm standa mounting rail		
Width			mm	45	45		
Height			mm	57.5			
Depth			mm	73			
Connections:							
Design of the electric	al connection						
• for auxiliary and co	ontrol current circuit			screw-type terminals			
Type of the connecta	ble conductor cross-	section					
 for auxiliary contact 	ots						
• solid				2x (0.5 ?	1.5 mm²), 2x (0.75	2.5 mm²), 2x 4 mm²	
 finely stranded 							
 with conducted 	 with conductor end processing 			2x (0.5 ?	1.5 mm²), 2x (0.75	2.5 mm²)	
 for AWG conducto 	rs / for auxiliary contac	ts		2x (20 16), 2x (18 14), 2x 12			
Certificates/approv	als:						
General Product Ap	proval			S	unctional Safety / afety of lachinery	Declaration of Conformity	
	(SA)	GOST		Ţ	ype Examination	EG-Konf.	
Test Certificates							
Special Test Certificate	Type Test Certificates/Test Report						
Shipping Approval							
ABS	BUREAU VERITAS	DNV DNV	GL GL	ļ	Lloyd's Register _{LRS}	PRS	
Shipping Approval		other					
RINA	RMRS	VDE					
UL/CSA ratings:							
Contact rating design UL	nation / for auxiliary c	ontacts / according to		A600 / Q60	00		

Sicherheitsrelevante Kenngrößen:			
B10 value / with high demand rate			
according to SN 31920		1,000,000	
• note		With 0.3 x le	
T1 value / for proof test interval or service life			
according to IEC 61508	а	20	
Proportion of dangerous failures			
with low demand rate / according to SN 31920	%	40	
• with high demand rate / according to SN 31920	%	73	
Failure rate (FIT value) / with low demand rate			
according to SN 31920	FIT	100	
Product function / positively driven operation to IEC 60947-5-1		Yes	
• comment		with 3RH29	

Further information:

Information- and Downloadcenter (Catalogs, Brochures,...) http://www.siemens.com/industrial-controls/catalogs

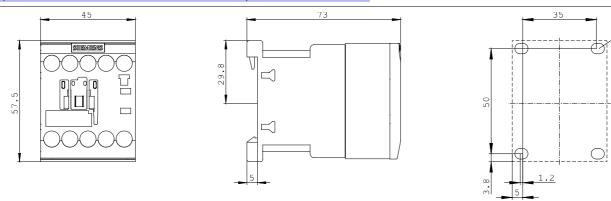
Industry Mall (Online ordering system) http://www.siemens.com/industrial-controls/mall

Cax online generator:

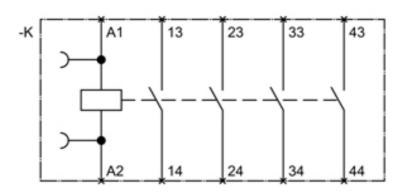
http://www.siemens.com/cax

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RH2140-1AP00/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RH2140-1AP00



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last change:

Feb 15, 2013