SIEMENS

Data sheet 3RH2140-1FB40



CONTACTOR RELAY, 4NO, DC 24V, W/ INTEGRATED DIODE, 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		DC	
Control supply voltage for DC			
Rated value	V	24	
Operating range factor control supply voltage rated		0.8 1.1	
value of the magnet coil for DC			
Design of the surge suppressor		with diode	

Auxiliary circuit: Number of NO contacts	Closing power of the magnet coil for DC	W	4
Number of NO contacts • for auxiliary contacts — instantaneous contact Product expansion Auxiliary switch Identification number and letter for switching elements Operating current at AC-15 • at 230 V Rated value A 10 Peslgn of the miniature circuit breaker • for short-circuit protection of the auxiliary circuit up to 230 V Contact rating of the auxiliary contacts Contact rating of the auxiliary contacts acc. to UL Posign of the Use link • for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions: mounting position Width Mounting type • for grounded parts — at the side • for grounded parts — at the side • for inauxiliary and control current circuit product expansion 4 10	Holding power of the magnet coil for DC	W	4
• for auxiliary contacts — instantaneous contact — instantaneous contacts — instanta	Auxiliary circuit:		
instantaneous contact instantaneous contact Product expansion Auxiliary switch Identification number and letter for switching elements Operating current at AC-15 • at 230 V Rated value • at 400 V Rated value • at 690 V Rated value • for short-circuit protection of the auxiliary circuit up to 230 V Contact reliability of the auxiliary contacts Contact reliability of the auxiliary contacts Short-circuit Design of the fuse link • for short-circuit protection of the auxiliary switch required Short-circuit Design of the fuse link • for short-circuit protection of the auxiliary switch required Short-circuit protection of the auxiliary switch fuse gL/gG: 10 A Short-circuit protection possible on vertical mounting surface; can be tilted forward and backward by +/-22.5° on vertical mounting surface; can be tilted forward and backward by +/-22.5° on vertical mounting surface; can be tilted forward and backward by +/-22.5° on vertical mounting surface; can be tilted forward and backward by +/-22.5° on vertical mounting surface; can be tilted forward and backward by +/-22.5° on vertical mounting surface; can be tilted forward and backward by +/-22.5° on vertical mounting surface; can be tilted forward and backward by +/-22.5° on vertical mounting surface; can be tilted forward and backward by +/-22.5° on vertical mounting su	Number of NO contacts		
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Required spacing • for grounded parts — at the side • for live parts — at the side mm 6 Connections/ Terminals: Type of electrical connection • for auxiliary and control current circuit screw-type terminals		mm	45
for grounded parts — at the side for live parts — at the side mm 6 Connections/ Terminals: Type of electrical connection for auxiliary and control current circuit screw-type terminals		mm	73
— at the side • for live parts — at the side mm 6 Connections/ Terminals: Type of electrical connection • for auxiliary and control current circuit mm 6 screw-type terminals	Required spacing		
for live parts — at the side Connections/ Terminals: Type of electrical connection • for auxiliary and control current circuit screw-type terminals	• for grounded parts		
— at the side mm 6 Connections/ Terminals: Type of electrical connection • for auxiliary and control current circuit screw-type terminals	— at the side	mm	6
Connections/ Terminals: Type of electrical connection • for auxiliary and control current circuit screw-type terminals	● for live parts		
Type of electrical connection ● for auxiliary and control current circuit screw-type terminals	— at the side	mm	6
• for auxiliary and control current circuit screw-type terminals	Connections/ Terminals:		
	Type of electrical connection		
Type of connectable conductor cross-section	 for auxiliary and control current circuit 		screw-type terminals
	Type of connectable conductor cross-section		

 for auxiliary contact 	cts
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- single or multi-stranded

— finely stranded with core end processing

• for AWG conductors for auxiliary contacts

2x (0,5 ... 1,5 mm²), 2x (0,75 ... 2,5 mm²), 2x 4 mm² 2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²) 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		
during operation	°C	-25 + 60
during storage	°C	-55 + 80

General Product Approval

Functional Safety/Safety of Machinery Declaration of Conformity









Type Examination



Test Certificates

Shipping Approval

Special Test Certificate Type Test
Certificates/Test
Report







other



GL

Shipping Approval











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=3RH21401FB40

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

http://support.automation.siemens.com/WW/view/en/3RH21401FB40/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=3RH21401FB40&lang=en



