## **SIEMENS**

Data sheet 3RH2131-2LB40



COUPLING CONTACTOR RELAY RAIL, 3NO+1NC, DC 24V, 0.7...1.25\*US, VARISTOR INTEGRATED, SZ S00, SPRING-LOADED TERMINAL

product brand name	SIRIUS
Product designation	Coupling relay for switching auxiliary circuits

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
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		0.7 1.25
value of the magnet coil for DC		
Design of the surge suppressor		with varistor
Closing power of the magnet coil for DC	W	2.8
Holding power of the magnet coil for DC	W	2.8

#### Auxiliary circuit

Number of NC contacts		
for auxiliary contacts		1
instantaneous contact		1
Number of NO contacts		
for auxiliary contacts		3
— instantaneous contact		3
Product expansion Auxiliary switch		No
Identification number and letter for switching elements		31 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	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
Connections/ Terminals:		
Type of electrical connection		
for auxiliary and control current circuit		spring-loaded terminals
Type of connectable conductor cross-section		
for auxiliary contacts		

— single or multi-stranded	2x (0,5 4 mm²)
— finely stranded with core end processing	2x (0.5 2.5 mm²)
— finely stranded without core end	2x (0.5 2.5 mm²)
processing	
<ul> <li>for AWG conductors for auxiliary contacts</li> </ul>	2x (20 12)

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		
<ul><li>during operation</li></ul>	°C	-40 <b>+</b> 70
<ul> <li>during operation Note</li> </ul>		Railway application: -40 70 °C with 10 mm
		clearance. See catalog for other rated conditions
during storage	°C	-55 <b>+</b> 80

## Certificates/ approvals:

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





Type Examination



Special Test Certificate



### **Shipping Approval**







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

 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RH21312LB40}$ 

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

http://support.automation.siemens.com/WW/view/en/3RH21312LB40/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=3RH21312LB40&lang=en



