SIEMENS

Data sheet 3RH2131-1AP00



CONTACTOR RELAY, 3NO+1NC, AC 230V, 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 	690 V
Degree of pollution	3
Surge voltage resistance Rated value	6 kV
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	κ
Main circuit:	
No-load switching frequency	
• with AC	10 000 1/h
• for DC	10 000 1/h
Control circuit/ Control:	
Type of voltage of the control supply voltage	AC

Control supply voltage with AC	
● at 50 Hz Rated value	230 V
• at 60 Hz Rated value	230 V
Rated value	50 Hz
Control supply voltage frequency 2 Rated value	60 Hz
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
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	Yes
Identification number and letter for switching elements	31 E
Operating current at AC-15	
• at 230 V Rated value	10 A
• at 400 V Rated value	3 A
• at 690 V Rated value	1 A
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	57.5 mm
Width	45 mm
Depth	73 mm
Required spacing	

for grounded parts	
— at the side	6 mm
• for live parts	
— at the side	6 mm

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; 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 %
Product function	
positively driven operation acc. to IEC 60947-5-	Yes
T1 value for proof test interval or service life acc. to IEC 61508	20 y
Protection against electrical shock	finger-safe

Mechanical data:	
Size of contactor	S00
Ambient conditions:	
Installation altitude at height above sea level	2 000 m
maximum	
Ambient temperature	
during operation	-25 +60 °C

-55 ... +80 °C • during storage Certificates/ approvals:

• during operation

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=3RH21311AP00

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

https://support.industry.siemens.com/cs/ww/en/ps/3RH21311AP00

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RH21311AP00&lang=en



