SIEMENS

Data sheet 3RH1131-1AP00

Contactor relay, 3 NO + 1 NC 230 V AC 50 / 60 Hz Screw terminal size $\rm S00$



Figure similar

Product brand name	SIRIUS	
Product designation	contactor relay	
General technical data		
Size of contactor	S00	
Product extension		
Auxiliary switch	Yes	
Insulation voltage		
 with degree of pollution 3 rated value 	690 V	
Degree of pollution	3	
Surge voltage resistance rated value	6 kV	
Protection class IP		
• on the front	IP20	
Shock resistance	10g / 5 ms and 5g / 10 ms	
Mechanical service life (switching cycles)		
• of 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

Ambient conditions		
Installation altitude at height above sea level		
• maximum	2 000 m	
Ambient temperature		
during operation	-25 +60 °C	
during storage	-55 +80 °C	
during transport	-55 +80 °C	

Control circuit/ Control	
Type of voltage of the control supply voltage	AC
Control supply voltage at AC	
● at 50 Hz rated value	230 V
• at 60 Hz rated value	230 V
Control supply voltage frequency	
• 1 rated value	50 Hz
• 2 rated value	60 Hz
Operating range factor control supply voltage rated	
value of magnet coil at AC	
● at 50 Hz	0.8 1.1
● at 60 Hz	0.85 1.1
Apparent pick-up power of magnet coil at AC	27 V·A
Inductive power factor with closing power of the coil	0.8
Apparent holding power of magnet coil at AC	4.6 V·A
Inductive power factor with the holding power of the coil	0.27

Auxiliary circuit	
Number of NC contacts	
● for auxiliary contacts	1
 instantaneous contact 	1
delayed switching	0
 lagging switching 	0
 make-before-break switching 	0
Number of NO contacts	
● for auxiliary contacts	3
 instantaneous contact 	3
delayed switching	0
— leading contact	0
 make-before-break switching 	0
Number of CO contacts	
• for auxiliary contacts	0

 of auxiliary contacts instantaneous contact 	0
Identification number and letter for switching elements	31 E
Operating current at AC-12 maximum	10 A
Operating current at AC-15	
● at 230 V rated value	6 A
● at 400 V rated value	3 A
● at 500 V rated value	2 A
● at 690 V rated value	1 A
Operating current at 1 current path at DC-12	
• at 24 V rated value	10 A
• at 110 V rated value	3 A
• at 220 V rated value	1 A
Operating current at 1 current path at DC-13	
• at 24 V rated value	10 A
• at 110 V rated value	1 A
• at 220 V rated value	0.27 A
Contact reliability of auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)
Short-circuit protection	
Design of the fuse link	
 for short-circuit protection of the auxiliary switch 	fuse gL/gG: 10 A
required	
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
Height	57.5 mm
Width	45 mm
Depth	72 mm
Required spacing	
with side-by-side mounting	
— at the side	0 mm
Connections/Terminals	
Type of electrical connection	
for auxiliary and control current circuit	screw-type terminals
Type of connectable conductor cross-sections	
for auxiliary contacts	
— solid	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)
 at AWG conductors for auxiliary contacts 	2x (20 16), 2x (18 14), 1x 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 	75 %
T1 value for proof test interval or service life acc. to IEC 61508	20 y

Certificates/approvals

General Product Approval Functional Safety/Safety Of Machinery Declaration of Safety/Safety









Type Examination



Test Certificates

Marine / Shipping

Special Test Certificate Type Test
Certificates/Test
Report









Marine / Shipping

other







Miscellaneous

Confirmation

Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

http://www.siemens.com/industrial-controls/catalogs

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RH1131-1AP00

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RH1131-1AP00

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

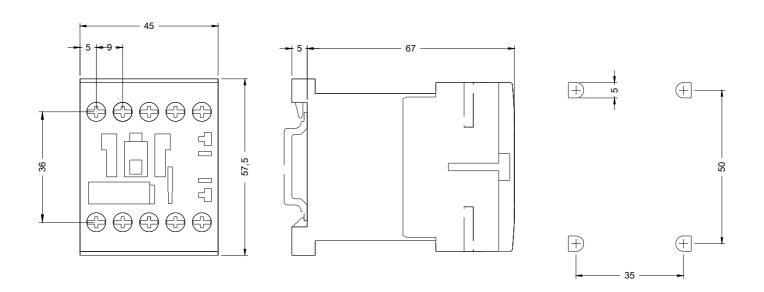
https://support.industry.siemens.com/cs/ww/en/ps/3RH1131-1AP00

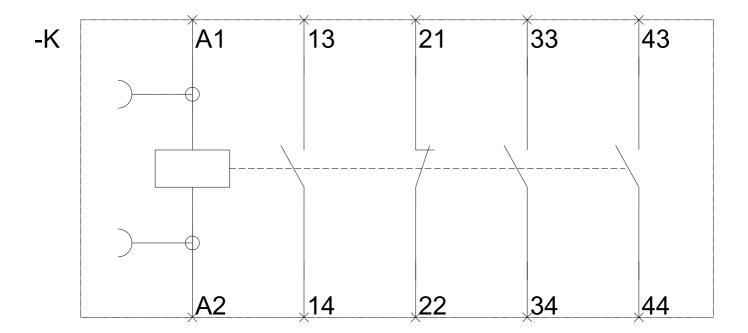
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RH1131-1AP00&lang=en

Characteristic: Tripping characteristics, I²t, Let-through current https://support.industry.siemens.com/cs/ww/en/ps/3RH1131-1AP00/char

Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RH1131-1AP00&objecttype=14&gridview=view1





last modified: 03/02/2018