SIEMENS

Product brand name

Data sheet 3RH1140-1AP00

Contactor relay, 4 NO 230 V AC 50 / 60 Hz Screw terminal size S00 !!! Phased-out product !!! Successor is SIRIUS 3RH2 Preferred successor type is >>3RH2140-1AP00<<



Product designation	Auxiliary contactor
General technical data	
Size of contactor	S00
Product extension	
Auxiliary switch	Yes
Insulation voltage	
 with degree of pollution 3 at AC 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- 	5 000 000

10 000 000

SIRIUS

block typical

compatible auxiliary switch block typical

• of the contactor with added auxiliary switch

Reference code acc. to DIN EN 81346-2	K
Reference code acc. to DIN EN 61346-2	K
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	0
Number of NC contacts for auxiliary contacts • instantaneous contact	0
	0
delayed switching	0
lagging switching make before break switching	0
make-before-break switching Number of NO contacts for auxiliary contacts	4
• instantaneous contact	4
delayed switching	0
leading contact	0
make-before-break switching	0
Number of CO contacts	
• for auxiliary contacts	0
of auxiliary contacts of auxiliary contacts instantaneous contact	0
or advindry contacts instantaneous contact	

Identification number and letter for switching elements	40 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	Design	of the	fuse	link
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• 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		
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 Prod	uct Approval		Functional Safety/Safety of Machinery	Declaration of Conformity
			Type Examination	









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Certificate



Declaration of Conformity	Test Certificates		Marine / Shipping		
Miscellaneous	Type Test Certificates/Test Report	Special Test Certificate			Lloyd's

ABS BUREAU VERITAS

Marine / Shipping other Railway









Confirmation

Special Test Certificate

LRS

Further information

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

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RH1140-1AP00

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RH1140-1AP00

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

https://support.industry.siemens.com/cs/ww/en/ps/3RH1140-1AP00

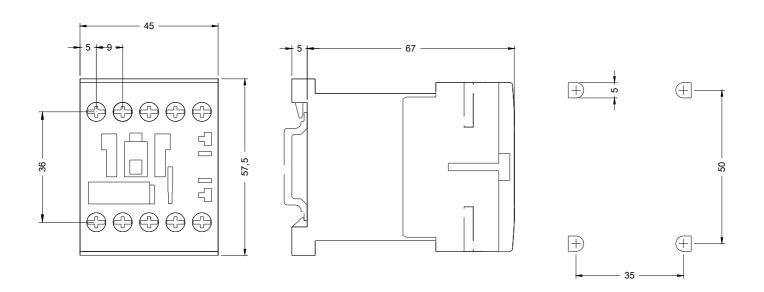
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RH1140-1AP00&lang=en

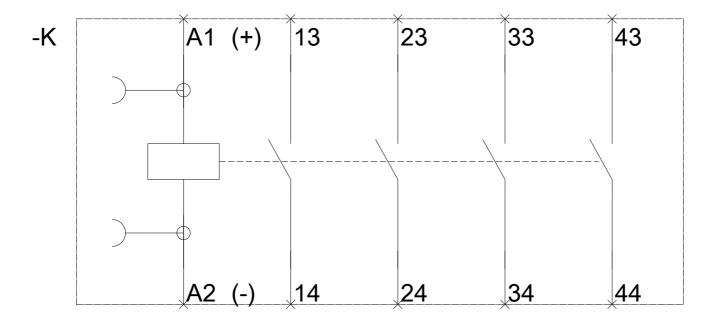
Characteristic: Tripping characteristics, I2t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RH1140-1AP00/char

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

 $\underline{\text{http://www.automation.siemens.com/bilddb/index.aspx?view=Search\&mlfb=3RH1140-1AP00\&objecttype=14\&gridview=view1}\\$





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