SIEMENS

Data sheet 3RH1140-1AL00

Figure similar

Contactor relay, 4 NO, 125 V AC 50/60 Hz Screw terminal size S00 !!! Phased-out product !!! Successor is SIRIUS 3RH2 Preferred successor type is >>3RH2140-1AL00<<

product brand name	SIRIUS
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 electronically optimized auxiliary switch block typical	5 000 000
● of the contactor with added auxiliary switch block typical	10 000 000
reference code according to IEC 81346-2	K
Substance Prohibitance (Date)	07/01/2006
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	125 V
● at 60 Hz rated value	125 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 VA
inductive power factor with closing power of the coil	0.8

apparent holding power of magnet coil at AC	4.6 VA
inductive power factor with the holding power of the coil	0.27
Auxiliary circuit	
number of NC contacts for auxiliary contacts	0
● instantaneous contact	0
● delayed switching	0
● lagging switching	0
● make-before-break switching	0
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 instantaneous contact	0
identification number and letter for switching elements	40 E
operational current at AC-12 maximum	10 A
operational 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
operational 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
operational 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 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
fastening method	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 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 cables for auxiliary contacts	2x (20 ... 16), 2x (18 ... 14), 1x 12
Safety related data	
B10 value with high demand rate according to SN 31920	1 000 000; With 0.3 x Ie
proportion of dangerous failures	
● with low demand rate according to SN 31920	40 %
● with high demand rate according to SN 31920	75 %
T1 value for proof test interval or service life according to IEC 61508	20 y
touch protection against electrical shock	finger-safe
contact reliability	one incorrect switching operation of 100 million switching operations (17

V, 1 mA)

Certificates/ approvals

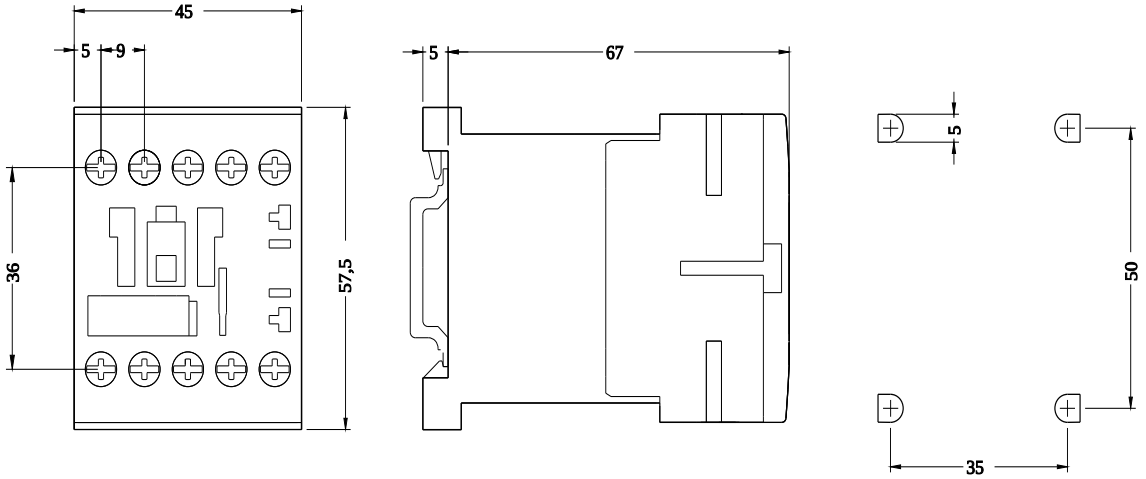
General Product Approval					Functional Safety/Safety of Machinery
CSA	Confirmation	CCC	UL	EAC	Type Examination Certificate

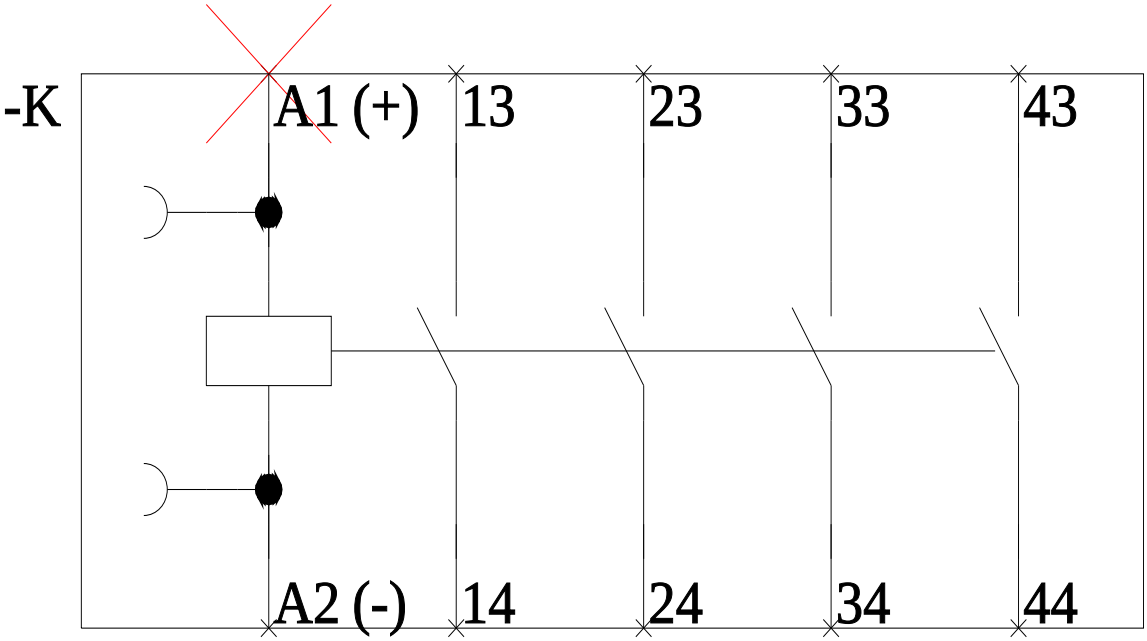
Declaration of Conformity		Test Certificates		Marine / Shipping	
UKCA	CE EG-Konf.	Type Test Certific-ates/Test Report	Special Test Certific-ate	ABS	BUREAU VERITAS

Marine / Shipping			other	Railway
RINA	RMRS	DNV·GL	Confirmation	Special Test Certific-ate

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=3RH1140-1AL00
Cax online generator
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RH1140-1AL00
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3RH1140-1AL00
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RH1140-1AL00&lang=en
Characteristic: Tripping characteristics, I²t, Let-through current
https://support.industry.siemens.com/cs/ww/en/ps/3RH1140-1AL00/char
Further characteristics (e.g. electrical endurance, switching frequency)
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RH1140-1AL00&objecttype=14&gridview=view1





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