SIEMENS

Product data sheet 3RH1140-1AF10



CONTACTOR RELAY, 4NO, 230 V AC/50 HZ, 264 V AC/60 HZ SCREW CONNECTION, SIZE S00

General technical data:		
product brand name		SIRIUS
Product designation		contactor relay
Size of the contactor		S00
Protection class IP / on the front		IP20
Degree of pollution		3
Insulation voltage / with degree of pollution 3 / rated value	V	690
Installation altitude / at a height over sea level / maximum	m	2,000
Ambient temperature		
during transport	°C	-55 + 80
during storage	°C	-55 +80
during operating	°C	-25 +60
Contact reliability		one incorrect switching operation of 100 million switching operations (17 V, 1 mA)
Resistance against shock		10g / 5 ms and 5g / 10 ms
Impulse voltage resistance / rated value	kV	6
Reference code		
• according to DIN EN 61346-2		К
 according to DIN 40719 extended according to IEC 204-2 / according to IEC 750 		К
according to DIN EN 81346-2		К

Mechanical operating cycles as operating time	
of the contactor / typical	30,000,000
• of the contactor with added auxiliary switch block / typical	10,000,000
 of the contactor with added electronics-compatible auxiliary switch block / typical 	5,000,000

Control circuit/ Control:		
Voltage type / of control feed voltage		AC
Control supply voltage frequency		
• 1 / rated value	Hz	60
Control supply voltage		
• at 50 Hz / at AC / rated value	V	230
• at 60 Hz / at AC / rated value	V	264
Operating range factor control supply voltage rated value / of the magnet coil		
• at 60 Hz		
• for AC		0.85 1.1
Apparent pull-in power / of the solenoid / for AC	V-A	27
Apparent holding power / of the solenoid / for AC	V-A	4.6
Inductive power factor		
• with the pull-in power of the coil		0.8
• with the pull-in power of the coil		0.27

Auxiliary circuit:	
Product extension / auxiliary switch	Yes
Identification number and letter for switching elements	40 E
Contact reliability / of the auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)
Number of NC contacts / for auxiliary contacts	0
delayed switching	0
• instantaneous switching	0
asynchronous switching	0
lagging switching	0
Number of NO contacts / for auxiliary contacts	4
• instantaneous switching	4
delayed switching	0
asynchronous switching	0
leading switching	0
Number of changeover contacts	
for auxiliary contacts	0
• of the auxiliary contacts / instantaneous switching	0
Operating current	

		10
• at AC-12 / maximum	Α	10
• at AC-15		
at 230 V / rated value	Α	6
• at 400 V / rated value	Α	3
• at 500 V / rated value	Α	2
• at 690 V / rated value	Α	1
Operating current / with 1 current path		
• at DC-12		
• at 24 V / rated value	Α	10
• at 110 V / rated value	Α	3
• at 220 V / rated value	Α	1
• at DC-13		
• at 24 V / rated value	Α	10
• at 110 V / rated value	Α	1
• at 220 V / rated value	А	0.27
Short-circuit:		
Design of the fuse link / for short-circuit protection of the auxiliary switch / required		fuse gL/gG: 10 A
Installation/ mounting/ dimensions:		
		+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface
mounting position		can be tilted forward and backward by +/- 22.5° on
mounting position Mounting type	mm	can be tilted forward and backward by +/- 22.5° on vertical mounting surface
mounting position Mounting type Width	mm mm	can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting
mounting position Mounting type Width Height		can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting
Mounting position Mounting type Width Height Depth	mm	can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting 45 57.5
Mounting type Width Height Depth Distance, to be maintained, to the ranks assembly / sidewards	mm mm	can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting 45 57.5
Mounting type Width Height Depth Distance, to be maintained, to the ranks assembly / sidewards Connections/ terminals:	mm mm	can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting 45 57.5
Mounting type Width Height Depth Distance, to be maintained, to the ranks assembly / sidewards Connections/ terminals: Design of the electrical connection / for auxiliary and control current circuit	mm mm	can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting 45 57.5 72
Mounting type Width Height Depth Distance, to be maintained, to the ranks assembly / sidewards Connections/ terminals: Design of the electrical connection / for auxiliary and control current circuit	mm mm	can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting 45 57.5 72
Mounting type Width Height Depth Distance, to be maintained, to the ranks assembly / sidewards Connections/ terminals: Design of the electrical connection / for auxiliary and control current circuit Type of the connectable conductor cross-section	mm mm	can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting 45 57.5 72
Mounting type Width Height Depth Distance, to be maintained, to the ranks assembly / sidewards Connections/ terminals: Design of the electrical connection / for auxiliary and control current circuit Type of the connectable conductor cross-section • for auxiliary contacts	mm mm	can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting 45 57.5 72 0 screw-type terminals
Mounting type Width Height Depth Distance, to be maintained, to the ranks assembly / sidewards Connections/ terminals: Design of the electrical connection / for auxiliary and control current circuit Type of the connectable conductor cross-section • for auxiliary contacts • solid	mm mm	can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting 45 57.5 72 0 screw-type terminals
Mounting type Width Height Depth Distance, to be maintained, to the ranks assembly / sidewards Connections/ terminals: Design of the electrical connection / for auxiliary and control current circuit Type of the connectable conductor cross-section • for auxiliary contacts • solid • finely stranded	mm mm	can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting 45 57.5 72 0 screw-type terminals 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²
Design of the electrical connection / for auxiliary and control current circuit Type of the connectable conductor cross-section • for auxiliary contacts • solid • finely stranded • with conductor end processing	mm mm	can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting 45 57.5 72 0 screw-type terminals 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)

General Product Approval

Functional Safety / Safety of Machinery Declaration of Conformity









Type Examination



Test Certificates

Special Test Certificate Type Test
Certificates/Test
Report

Shipping Approval













Shipping Approval

other other





Environmental Confirmations

Safety related data:			
Proportion of dangerous failures			
• with high demand rate / according to SN 31920	%	75	
 with low demand rate / according to SN 31920 	%	40	
Protection against electrical shock		finger-safe	
T1 value / for proof test interval or service life / according to IEC 61508	а	20	
B10 value / with high demand rate			
according to SN 31920		1,000,000	
• note		With 0.3 x le	

Further information:

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

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

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/

Cax online generator

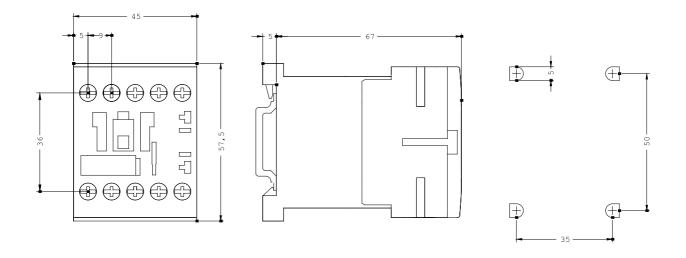
http://www.siemens.com/cax

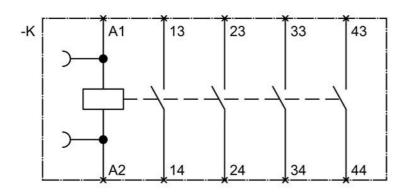
 ${\bf Service \& Support~(Manuals,~Certificates,~Characteristics,~FAQs,...)}$

http://support.automation.siemens.com/WW/view/en/3RH1140-1AF10/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

 $\underline{\text{http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RH1140-1AF10}}$





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