SIEMENS

Data sheet 3RH2140-1AP60

CONTACTOR RELAY, 4NO, AC 220V 50HZ, 240V 60HZ, SIZE S00, SCREW TERMINAL



product brand name	SIRIUS	
Product designation	contactor relay	
General technical data:		
Size of contactor	S00	
Product expansion		
Auxiliary switch	Yes	
Insulation voltage		
• with degree of pollution 3 rated value	690 V	
Surge voltage resistance rated value	6 kV	
Protection class IP		
• on the front	IP20	
Degree of pollution	3	
Shock resistance		
at rectangular impulse		
— at AC	7,3g / 5 ms, 4,7g / 10 ms	
• with sine pulse		
— at AC	11,4g / 5 ms, 7,3g / 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
Equipment marking	
• acc. to DIN EN 61346-2	Κ
• acc. to DIN EN 81346-2	К
Ambient conditions:	
Installation altitude at height above sea level	2 000 m
maximum	
Ambient temperature	
during operation	-25 +60 °C
during storage	-55 +80 °C
Main circuit:	
No-load switching frequency	
• at AC	10 000 1/h
• at DC	10 000 1/h
Control circuit/ Control:	
Type of voltage of the control supply voltage	AC
Control supply voltage at AC	000.14
• at 50 Hz rated value	220 V
• at 60 Hz rated value	240 V
rated value	50 Hz
Control supply voltage frequency 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	37 V·A
Inductive power factor with closing power of the coil	0.8
Apparent holding power of magnet coil at AC	5.7 V·A
Inductive power factor with the holding power of the coil	0.25
Closing delay	
• at AC	8 33 ms
Opening delay	
• at AC	4 15 ms
Arcing time	10 15 ms
Auxiliary circuit:	
Number of NO contacts	
• for auxiliary contacts	4
·	

— instantaneous contact	4
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	10 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
• at 440 V rated value	0.3 A
• at 600 V rated value	0.15 A
Operating current with 2 current paths in series at DC-12	
• at 24 V rated value	10 A
• at 60 V rated value	10 A
at 110 V rated value	4 A
at 220 V rated value	2 A
• at 440 V rated value	1.3 A
• at 600 V rated value	0.65 A
Operating current with 3 current paths in series at DC-12	
• at 24 V rated value	10 A
• at 60 V rated value	10 A
at 110 V rated value	10 A
• at 220 V rated value	3.6 A
• at 440 V rated value	2.5 A
at 600 V rated value	1.8 A
Operating frequency at DC-12 maximum	1 000 1/h
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	0.3 A
• at 440 V rated value	0.14 A
• at 600 V rated value	0.1 A
Operating current with 2 current paths in series at DC-13	
• at 24 V rated value	10 A
• at 60 V rated value	3.5 A

• at 110 V rated value	
	1.3 A
• at 220 V rated value	0.9 A
• at 440 V rated value	0.2 A
• at 600 V rated value	0.1 A
Operating current with 3 current paths in series at	
DC-13	
• at 24 V rated value	10 A
• at 60 V rated value	4.7 A
● at 110 V rated value	3 A
• at 220 V rated value	1.2 A
at 440 V rated value	0.5 A
• at 600 V rated value	0.26 A
Operating frequency at DC-13 maximum	1 000 1/h
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 auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)
UL/CSA ratings:	
Contact rating of auxiliary contacts according to UL	A600 / Q600
01	
Short-circuit protection Design of the fuse link	
• for short-circuit protection of the auxiliary switch	fuse gL/gG: 10 A
required	
required Installation/ mounting/ dimensions:	
·	+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface
Installation/ mounting/ dimensions:	tilted forward and backward by +/- 22.5° on vertical mounting
Installation/ mounting/ dimensions: Mounting position	tilted forward and backward by +/- 22.5° on vertical mounting surface
Installation/ mounting/ dimensions: Mounting position Mounting type Height Width	tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting rail
Installation/ mounting/ dimensions: Mounting position Mounting type Height Width Depth	tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting rail 57.5 mm
Installation/ mounting/ dimensions: Mounting position Mounting type Height Width Depth Required spacing	tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting rail 57.5 mm 45 mm
Installation/ mounting/ dimensions: Mounting position Mounting type Height Width Depth Required spacing • for grounded parts	tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting rail 57.5 mm 45 mm 73 mm
Installation/ mounting/ dimensions: Mounting position Mounting type Height Width Depth Required spacing • for grounded parts — at the side	tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting rail 57.5 mm 45 mm
Installation/ mounting/ dimensions: Mounting position Mounting type Height Width Depth Required spacing • for grounded parts	tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting rail 57.5 mm 45 mm 73 mm
Installation/ mounting/ dimensions: Mounting position Mounting type Height Width Depth Required spacing • for grounded parts — at the side	tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting rail 57.5 mm 45 mm 73 mm
Installation/ mounting/ dimensions: Mounting position Mounting type Height Width Depth Required spacing • for grounded parts — at the side • for live parts	tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting rail 57.5 mm 45 mm 73 mm
Installation/ mounting/ dimensions: Mounting position Mounting type Height Width Depth Required spacing • for grounded parts — at the side • for live parts — at the side	tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting rail 57.5 mm 45 mm 73 mm
Installation/ mounting/ dimensions: Mounting position Mounting type Height Width Depth Required spacing • for grounded parts — at the side • for live parts — at the side Connections/ Terminals:	tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting rail 57.5 mm 45 mm 73 mm
Installation/ mounting/ dimensions: Mounting position Mounting type Height Width Depth Required spacing • for grounded parts — at the side • for live parts — at the side Connections/ Terminals: Type of electrical connection	tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting rail 57.5 mm 45 mm 73 mm 6 mm

- single or multi-stranded

- finely stranded with core end processing

• at AWG conductors for auxiliary contacts

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)

2x (20 ... 16), 2x (18 ... 14), 2x 12

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

General Product Approval

Functional Safety/Safety of Machinery

Declaration of Conformity









Baumusterbescheini gung



Test Certificates

Typprüfbescheinigu spezielle Prüfbescheinigunge ng/Werkszeugnis

n



Shipping Approval





other



GL

Shipping Approval



LRS







Umweltbestätigung



Further information

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=3RH21401AP60

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

https://support.industry.siemens.com/cs/ww/en/ps/3RH21401AP60



