# SIEMENS

# **Product data sheet**

## 3RH2140-1BG40



CONTACTOR RELAY, 4NO, DC 125V, SIZE S00, SCREW TERMINAL

General technical data:			
Product brand name		SIRIUS	
Size of the contactor		S00	
Identification number and letter for switching elements		40 E	
Product extension / auxiliary switch		Yes	
Protection class IP / on the front		IP20	
Protection against electrical shock		finger-safe	
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 storage	°C	-55 80	
Ambient temperature / during operating	°C	-25 60	
Shock resistance			
• at rectangular impulse			
• at DC		10g / 5 ms, 5g / 10 ms	
• at sine pulse			
• at DC		15g / 5 ms, 8g / 10 ms	
Impulse voltage resistance / rated value	kV	6	
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	
<ul> <li>of the contactor with added electronics-compatible auxiliary</li> </ul>	10,000,000		
switch block / typical			
Control circuit:			
Type of voltage / of the controlled supply voltage		DC	
Control supply voltage / 1	-		
for DC / rated value		125	
Operating range factor control supply voltage rated value / of the solenoid	_		
• for DC		0.8 1.1	
Holding power / of the solenoid / for DC	W	4	
Pull-in power / of the solenoid / for DC		4	
Closing delay			
• at DC	ms	30 100	
Opening delay	_		
• at DC	ms	25 90	
Arcing time	S	10 15	
Auxiliary circuit:			
Contact reliability / of the auxiliary contacts		1 faulty switching per 100 million (17 V, 1 mA)	
Number of NC contacts / for auxiliary contacts / instantaneous switching	_	0	
Number of NO contacts / for auxiliary contacts / instantaneous switching	_	4	
Operating current / of the auxiliary contacts / at AC-12 / maximum	А	10	
Operating current / of the auxiliary contacts / at AC-15			
• at 230 V	А	6	
• at 400 V	А	3	
• at 500 V	А	2	
• at 690 V	A	1	
• at 690 V Operating current	A	1	
	A	1	
Operating current	A	6	
Operating current • of the auxiliary contacts / with 1 current path / at DC-12	_		
Operating current • of the auxiliary contacts / with 1 current path / at DC-12 • at 24 V	A	6	
Operating current <ul> <li>of the auxiliary contacts / with 1 current path / at DC-12</li> <li>at 24 V</li> <li>at 110 V</li> </ul>	A	6 3	
Operating current <ul> <li>of the auxiliary contacts / with 1 current path / at DC-12</li> <li>at 24 V</li> <li>at 110 V</li> <li>at 220 V</li> </ul>	A	6 3	
Operating current <ul> <li>of the auxiliary contacts / with 1 current path / at DC-12</li> <li>at 24 V</li> <li>at 110 V</li> <li>at 220 V</li> <li>with 2 current paths in series / at DC-12</li> </ul>	A A A	6 3 1	
Operating current <ul> <li>of the auxiliary contacts / with 1 current path / at DC-12</li> <li>at 24 V</li> <li>at 110 V</li> <li>at 220 V</li> </ul> <li>with 2 current paths in series / at DC-12 <ul> <li>at 24 V / rated value</li> </ul></li>	A A A A	6 3 1 10	

A	1.3
А	0.65
А	10
А	10
А	10
А	3.6
А	2.5
А	1.8
-	
А	6
А	1
А	0.3
А	10
А	3.5
А	1.3
А	0.9
А	0.2
А	0.1
А	10
А	4.7
А	3
А	1.2
А	0.5
А	0.26
-	
1/h	10,000
1/h	10,000
1/h	1,000
	A A A A A A A A A A A A A A A A A A A

# Design of the fuse link / for short-circuit protection of the auxiliary switch

#### required

Fuse gL/gG: 10 A, miniature circuit breaker C 6 A (short-circuit current Ik < 400 A)

Installation/mounting/dimensions:			
Built in orientation		vertical	
Type of mounting		screw and snap-on mounting onto 35 mm standard mounting rail	
Width	mm	45	
Height	mm	57.5	
Depth	mm	73	
Distance, to be maintained, to the ranks assembly / sidewards	mm	0	

Connections:			
Design of the electrical connection			
<ul> <li>for auxiliary and control current circuit</li> </ul>	screw-type terminals		
Type of the connectable conductor cross-section			
for auxiliary contacts			
• solid	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²		
finely stranded			
with conductor end processing	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)		
<ul> <li>for AWG conductors / for auxiliary contacts</li> </ul>	2x (20 16), 2x (18 14), 2x 12		

Certificates/approvals:

General Product Ap	proval			Test Certificates	
cqc	(SA	ROSTEST		Manufacturer	
Shipping Approval					
ABS		GL	Lloyd's Register Lrs	PRS	
Shipping Approval	other				
RMRS					
UL/CSA ratings:					
Contact rating designation / for auxiliary contacts / according to			A600 / Q600		

Safety:related Parameter:

UL

B10 value / with high demand rate		
according to SN 31920		1,000,000
T1 value / for proof test interval or service life	-	
according to IEC 61508	а	10
Proportion of dangerous failures		
with low demand rate / according to SN 31920	%	40
with high demand rate / according to SN 31920	%	73
Failure rate (FIT value) / with low demand rate		
according to SN 31920	FIT	100
Product function / positively driven operation to IEC 60947-5-1		Yes
• comment		with 3RH29

## Further information:

### Information- and Downloadcenter (Catalogs, Brochures,...) http://www.siemens.com/industrial-controls/catalogs

# Industry Mall (Online ordering system)

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

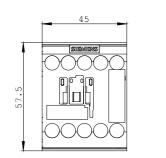
#### Cax online generator:

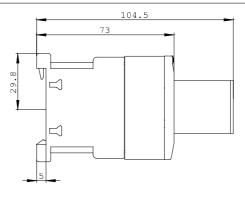
http://www.siemens.com/cax

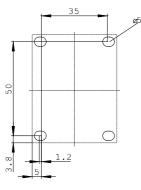
#### Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

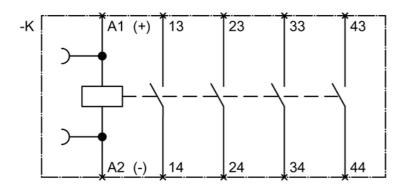
http://support.automation.siemens.com/WW/view/en/3RH2140-1BG40/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3RH2140-1BG40









last change:

Oct 24, 2011