SIEMENS

product brand name

Data sheet 3RH2244-1BB40

CONTACTOR RELAY, 4NO+4NC, DC 24V, SIZE S00, SCREW TERMINAL, PERMANENT AUX. SWITCH, FOR SUVA APPLICATIONS



F		
Product designation	contactor relay	
General technical data:		
Size of contactor	S00	
Product extension		
Auxiliary switch	No	
Insulation voltage		
 with degree of pollution 3 rated value 	690 V	
Degree of pollution	3	
Surge voltage resistance rated value	6 kV	
Protection class IP		
• on the front	IP20	
Shock resistance		
at rectangular impulse		
— at DC	10g / 5 ms, 5g / 10 ms	
• with sine pulse		
— at DC	15g / 5 ms, 8g / 10 ms	
Mechanical service life (switching cycles)		
of contactor typical	10 000 000	

SIRIUS

Equipment marking	
	K
• acc. to DIN EN 61346-2	
• acc. to DIN EN 81346-2	K
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	DC
Control supply voltage at DC	
● rated value	24 V
Operating range factor control supply voltage rated	0.8 1.1
value of magnet coil at DC	
Closing power of magnet coil at DC	4 W
Holding power of magnet coil at DC	4 W
Closing delay	
• at DC	30 100 ms
Opening delay	
• at DC	7 13 ms
Arcing time	10 15 ms
Auxiliary circuit:	
Number of NC contacts	
for auxiliary contacts	4
 instantaneous contact 	4
Number of NO contacts	
for auxiliary contacts	4
— instantaneous contact	4
Identification number and letter for switching	44 E
elements	
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
• 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	6 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		
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		
Mounting type	screw and snap-on mounting onto 35 mm standard mounting rail		
Height	57,5 mm		

0° rotation possible on vertical mounting surface; can be forward and backward by +/- 22.5° on vertical mounting
•
and snap-on mounting onto 35 mm standard mounting rail
mm
m
nm

Connections/ Terminals:	
Type of electrical connection	
 for auxiliary and control current circuit 	screw-type terminals
Type of connectable conductor cross-sections	
 for auxiliary contacts 	
 single or multi-stranded 	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), 2x 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 	73 %	

Failure rate [FIT]	
 with low demand rate acc. to SN 31920 	100 FIT
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

Certificates/approvals

General Product Approval

Functional Safety/Safety of Machinery Declaration of Conformity









Baumusterbescheini gung



Test Certificates

Shipping Approval

Typprüfbescheinigu ng/Werkszeugnis

spezielle Prüfbescheinigunge

n









GL

Shipping Approval



LRS







other

Umweltbestätigung

Bestätigungen

other



Further information

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

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

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RH22441BB40

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RH22441BB40

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

https://support.industry.siemens.com/cs/ww/en/ps/3RH22441BB40



