SIEMENS

Data sheet

3RH2122-4BB40



Contactor relay, 2 NO + 2 NC, 24 V DC, Size S00, ring cable lug connection

product brand name	SIRIUS
product designation	Auxiliary contactor
product type designation	3RH2
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
shock resistance at rectangular impulse	
• at DC	10g / 5 ms, 5g / 10 ms
shock resistance with sine pulse	
at DC	15g / 5 ms, 8g / 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	К
Substance Prohibitance (Date)	10/01/2009
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
relative humidity minimum	10 %
relative humidity at 55 °C according to IEC 60068-2-30 maximum	95 %
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 value of magnet coil at DC	

• Inite Value • Inite		0.0
closing power of magnet coll at DC 4W holding power of magnet coll at DC 4W closing datay 30 100 ms opening delay 30 100 ms e t1 CC 7 13 ms arcing time 10 15 ms Auxiliary circuit 10 15 ms number of N Contacts for auxiliary contacts 2 e instantaneous contact 3 e instantaneous contact 10 A e instantaneous contact 3 e instantaneous contact 10 A e instantaneous contac	• initial value	0.8
holding power of magnet coil at DC 4W closing delay autor • at DC 30 100 ms • at DC 7 13 ms arcing time 10 15 ms Auxiliary contacts 2 number of NC contacts for auxiliary contacts 2 - instainaneous contact 2 dentification number and letter for switching 22 E operational current at AC-12 maximum 10 A operational current at AC-12 maximum		
closing delay at DC opening delay at DC • at DC 7 13 ms arcling time 1015 ms Auxiliary vircuit 1015 ms Auxiliary vircuit 2 • Instantaneous contact 2		
• et DC 30 100 ms opening delay - • et DC 7 13 ms arcing time 10 15 ms Axiliary circuit 2 number of MC contacts for auxiliary contacts 2 - instantaneous contact 2 dentification number and letter for switching 2 operational current at AC-15 maximum 10.A of 400 V rated value 10.A of 400 V rated value 10.A of 410 V rated value 10.A of 410 V rated value 0.3 A of 410 V rated value 10.A of 420 V rated value 10.A		4 VV
opening delay 7 13 ms arcing time 10 15 ms Anxilary circuit 10 15 ms Anxilary circuit 2 Instantancous contact 2 operational current at AC-15 2 extra to the state of t		22 422
• at DC 713 ms arcing time 1015 ms Auxiliary crited 2 number of MC contacts for auxiliary contacts 2 - instantaneous contact 2 operational current of AC-12 maximum 10 A operational current of AC-13 maximum 10 A operational current of AC-14 maximum 10 A operational current of AC-12 maximum 10 A operational current of AC-13 maximum 10 A operational current of AC-14 maximum 10 A operational current of AC-15 10 A • at 280 V rated value 2A • at 800 V rated value 10 A • at 24 V rated value 10 A • at 60 V rated value		30 100 ms
arcing time 10 15 ms Auxiliary circuit 10 15 ms Auxiliary circuit 2 • instantaneous contact 10 A • at 230 V rated value 3A • at 300 V rated value 10 A • at 200 V rated value 10 A • at 200 V rated value 10 A • at 200 V rated value 10 A • at 210 V rated value 10 A • at 220 V rated value 10 A • at 220 V rated value 10 A • at 200 V rated value 10 A • at 200 V rated value 10 A • at 20 V rated value 10 A <td< td=""><td></td><td>7 40</td></td<>		7 40
Auxiliary circuit 2 Inumber of NC contacts for auxiliary contacts 2 Initiatraneous contact 2 Identification number and letter for switching elements 2 operational current at AC-12 maximum 10 A ot 1300 V rated value 2 A ot 1400 V rated value 10 A ot 22 V rated value <td></td> <td></td>		
number of NC contacts for auxiliary contacts 2 • instantaneous contact 10 • instantaneous contact 10 • instantaneous contact 10 • instantaneous contact 10 • instantaneous contacts for auxiliary contacts 10 • instantaneous contacts 10 • instantaneous contacts 10 • instantaneous contacts 10 • instantaneous contacts 10 • instoo V rated value 10	-	10 15 ms
• instantaneous contact 2 number of NO contacts for auxiliary contacts 2 Identification number and letter for switching elements 22 operational current at AC-12 maximum 10 A operational current at AC-12 maximum 10 A operational current at AC-12 maximum 10 A eit 320 V rated value 2A eit 400 V rated value 2A eit 400 V rated value 10 A eit 400 V rated value 10 A eit 24 V rated value 10 A eit 60 V rated value 10 A eit 60 V rated value 10 A eit 60 V rated value 2A eit 40 V rated value 10 A eit 100 V rated value 2A eit 100 V rated value 10 A eit 20 V rated value 10 A eit 400 V rated value 10 A <td></td> <td></td>		
number of NO contacts for auxiliary contacts 2 • instantaneous contact 2 (borntfication number and letter for switching elements 22 E • operational current at AC-12 maximum 10 A operational current at AC-15 10 A • at 200 V rated value 3 A • at 300 V rated value 10 A • at 300 V rated value 10 A • at 300 V rated value 10 A • at 200 V rated value 0.15 A 0perational current with 2 current paths in series at DC-12 0.15 A • at 200 V rated value 10 A • at 200 V rated value 10 A • at 400 V rated value 10 A • at 400 V rated value 10 A • at 400 V rated value 10 A • at 20 V rated value 10 A • at 400 V rated value 10 A	-	
• instantaneous contact 2 Identification number and letter for switching 22 E operational current at AC-12 maximum 10 A operational current at AC-12 maximum 10 A • at 230 V rated value 10 A • at 300 V rated value 3 A • at 600 V rated value 1A • at 600 V rated value 1A • at 600 V rated value 1A • at 24 V rated value 10 A • at 220 V rated value 1A • at 220 V rated value 1A • at 220 V rated value 1A • at 220 V rated value 0.15 A operational current with 2 current paths in series at DC-12 • • at 600 V rated value 10 A • at 600 V rated value 10 A • at 20 V rated value 10 A • at 20 V rated value 10 A • at 20 V rated value 10 A • at 400 V rated value 10 A • at 200 V rated value 10 A • at 400 V rated value 10 A • at 400 V rated value		
Identification number and letter for switching dements 22 E operational current at AC-12 maximum 10 A operational current at AC-15 10 A • at 300 V rated value 3A • at 500 V rated value 1A operational current at AC-12 maximum 10 A • at 600 V rated value 1A operational current at AC-12 maximum 10 A • at 400 V rated value 3A • at 500 V rated value 1A operational current at 1 current path at DC-12 0 A • at 400 V rated value 03 A • at 400 V rated value 015 A operational current with 2 current paths in series at DC-12 0.15 A operational current with 2 current paths in series at DC-12 0.15 A operational current with 3 current paths in series at DC-12 0.5 A • at 400 V rated value 10 A • at 600 V rated value 10 A • at 600 V rated value 0.6 A • at 600 V rated value 10 A • at 400 V rated value 10 A • at 600 V rated value </td <td>-</td> <td></td>	-	
elements 10 A operational current at AC-12 maximum 10 A operational current at AC-15 10 A • at 300 V rated value 10 A • at 400 V rated value 2 A • at 600 V rated value 10 A • at 24 V rated value 10 A • at 250 V rated value 10 A • at 400 V rated value 10 A • at 40 V rated value 0.5 A • at 600 V rated value 0.15 A • at 600 V rated value 10 A • at 60		
operational current at AC-12 maximum10 Aoperational current at AC-1510 A• at 200 V rated value3 A• at 500 V rated value3 A• at 600 V rated value1 Aoperational current at 1 current path at DC-121 A• at 20 V rated value1 A• at 200 V rated value1 A• at 200 V rated value0 A• at 200 V rated value1 A• at 200 V rated value0 A• at 400 V rated value0 A• at 400 V rated value0 A• at 400 V rated value0 A• at 600 V rated value0 A• at 600 V rated value0 A• at 600 V rated value10 A• at 600 V rated value10 A• at 600 V rated value2 A• at 600 V rated value0 A• at 600 V rated value10 A• at 400 V rated value10 A• at 400 V rated value10 A• at 600 V rated value10 A </td <td>-</td> <td>22 E</td>	-	22 E
operational current at AC-15ID A• at 200 V rated value10 A• at 400 V rated value2 A• at 600 V rated value1 Aoperational current at 1 current path at DC-121 A• at 24 V rated value1 A• at 24 V rated value1 A• at 400 V rated value0.3 A• at 400 V rated value0.3 A• at 400 V rated value0.16 A• at 60 V rated value10 A• at 60 V rated value0.65 A• at 22 V rated value1.3 A• at 400 V rated value0.65 A• at 400 V rated value0.65 A• at 20 V rated value10 A• at 20 V rated value10 A• at 220 V rated value1.3 A• at 220 V rated value0.65 A• at 220 V rated value10 A• at 220 V rated value10 A• at 220 V rated value1.3 A• at 220 V rated value1.3 A• at 220 V rated value10 A• at 24 V rated value10 A• at 24 V rated value10 A• at 24 V rated value10 A• at 220 V rated value10 A <td></td> <td>10 A</td>		10 A
• at 230 V rated value10 A• at 400 V rated value3 A• at 600 V rated value1 A• at 600 V rated value1 A• at 240 V rated value10 A• at 240 V rated value10 A• at 240 V rated value1 A• at 240 V rated value0.3 A• at 240 V rated value0.15 A• operational current with 2 current paths in series at0.15 A• operational current with 2 current paths in series at0.15 A• operational current with 3 current paths in series at0.65 A• operational current with 3 current paths in series at0.65 A• operational current with 3 current paths in series at0.65 A• operational current with 3 current paths in series at0.10 A• operational current with 3 current paths in series at0.65 A• operational current with 3 current paths in series at0.65 A• operational current with 3 current paths in series at0.65 A• operational current with 3 current paths in series at0.10 A• ot 220 V rated value10 A• at 240 V rated value10 A• at 240 V rated value2.5 A• at 400 V rated value2.5 A• at 600 V rated value10 A• at 240 V rated value10 A• at 600 V rated value10 A• at 600 V rated value0.3 A• at 600 V rated value0.3 A• at 600 V rated value0.3		
• at 400 V rated value3 A• at 500 V rated value1 Aoperational current at 1 current path at DC-121 A• at 24 V rated value10 A• at 24 V rated value3 A• at 240 V rated value3 A• at 200 V rated value3 A• at 400 V rated value0.3 A• at 400 V rated value0.15 A• at 600 V rated value0.15 A• at 600 V rated value10 A• at 200 V rated value10 A• at 200 V rated value10 A• at 200 V rated value2 A• at 400 V rated value0.5 A• at 400 V rated value0.5 A• at 600 V rated value10 A• at 200 V rated value10 A• at 210 V rated value10 A• at 220 V rated value10 A• at 400 V rated value36 A• at 400 V rated value10 A• at 60 V rated value10 A <tr< td=""><td>-</td><td>10 A</td></tr<>	-	10 A
• at 500 V rated value2 A• at 650 V rated value1 Aoperational current at 1 current path at DC-1210 A• at 24 V rated value3 A• at 24 V rated value3 A• at 240 V rated value0.3 A• at 420 V rated value0.3 A• at 620 V rated value0.15 Aoperational current with 2 current paths in series at0.15 Aoperational current with 2 current paths in series at0.5 Aoperational current with 2 current paths in series at0.65 Aoperational current with 3 current paths in series at0.65 Aoperational current with 3 current paths in series at0.65 Aoperational current with 3 current paths in series at0.65 Aoperational current with 3 current paths in series at0.65 Aoperational current with 3 current paths in series at0.65 Aoperational current with 3 current paths in series at0.65 Aoperational current with 3 current paths in series at0.65 Aoperational current with 3 current paths in series at0.65 Aoperational current with 3 current path at DC-1310 A• at 600 V rated value10 A• at 220 V rated value10 A• at 220 V rated value0.1 A• at 220 V rated value0.3 A• at 240 V rated value10 A• at 250 V rated value0.3 A• at 440 V rated value10 A• at 250 V rated value0.3 A• at 260 V rated value0.3 A• at 270 V rated value0.3 A• at 440 V rated value </td <td></td> <td></td>		
• at 880 V rated value 1 A operational current at 1 current path at DC-12 10 A • at 24 V rated value 3 A • at 220 V rated value 3 A • at 220 V rated value 0.4 A • at 440 V rated value 0.5 A operational current with 2 current paths in series at DC-12 0 A • at 60 V rated value 0.15 A operational current with 2 current paths in series at DC-12 0 A • at 24 V rated value 10 A • at 24 V rated value 10 A • at 60 V rated value 10 A • at 20 V rated value 10 A • at 40 V rated value 2 A • at 40 V rated value 0.65 A operational current with 3 current paths in series at DC-12 0 A • at 400 V rated value 10 A • at 60 V rated value 10 A • at 60 V rated value 10 A • at 20 V rated value 10 A • at 20 V rated value 10 A • at 40 V rated value 10 A • at 20 V rated value 10 A • at 20 V rated value 10 A • at 20 V rated value 10 A		
operational current at 1 current path at DC-12• at 24 V rated value10 A• at 24 V rated value10 A• at 200 V rated value1 A• at 400 V rated value0.15 Aoperational current with 2 current paths in series at DC-120.16 A• at 600 V rated value10 A• at 220 V rated value10 A• at 220 V rated value10 A• at 60 V rated value10 A• at 220 V rated value2 A• at 440 V rated value1.3 A• at 220 V rated value0.66 Aoperational current with 3 current paths in series at DC-12• at 440 V rated value10 A• at 60 V rated value0.66 Aoperational current with 3 current paths in series at DC-12• at 24 V rated value10 A• at 60 V rated value10 A• at 40 V rated value10 A• at 60 V rated value10 A• at 60 V rated value10 A• at 40 V rated value10 A• at 40 V rated value10 A• at 24 V rated value10 A• at 24 V rated value10 A• at 24 V rated value10 A• at 25 V rated value10 A• at 24 V rated value10 A• at 400 V rated value10 A• at 400 V rated value10 A• at 24 V rated value10 A• at 24 V rated value10 A• at 24 V rated value0.3 A• at 440 V rated value0.1 A• at 440 V rated value0.1 A• at 440 V rated value<		
 at 24 V rated value at 110 V rated value at 24 V rated value at 440 V rated value at 600 V rated value at 600 V rated value at 24 V rated value at 440 V rated value at 440 V rated value at 600 V rated value at 440 V r		
• at 220 V rated value1 A• at 440 V rated value0.3 Aoperational current with 2 current paths in series at DC-120.15 A• at 24 V rated value10 A• at 24 V rated value10 A• at 24 V rated value10 A• at 10 V rated value2 A• at 240 V rated value1.3 A• at 400 V rated value0.65 Aoperational current with 3 current paths in series at DC-120.65 Aoperational current with 3 current paths in series at DC-120.65 Aoperational current with 3 current paths in series at CD-120.65 Aoperational current with 3 current paths in series at DC-120.65 Aoperational current with 3 current paths in series at DC-120.65 Aoperational current with 3 current path at DC-1310 A• at 240 V rated value10 A• at 440 V rated value10 A• at 240 V rated value0.14 A <td></td> <td>10 A</td>		10 A
 e at 440 V rated value 0.3 A operational current with 2 current paths in series at DC-12 e at 24 V rated value 10 A e at 60 V rated value 10 A e at 60 V rated value 10 A e at 60 V rated value 2 A e at 440 V rated value 13 A e at 60 V rated value 0.66 A operational current with 3 current paths in series at DC-12 e at 60 V rated value 10 A e at 24 V rated value 25 A e at 440 V rated value 26 A e at 440 V rated value 10 A e at 24 V rated value 0.14 A e at 60 V rated value 0.14 A e at 60 V rated value 10 A e at 20 V rated value 10 A e at 60 V rated value 10 A e at 60 V rated value<	 at 110 V rated value 	3 A
• at 600 V rated value0.15 Aoperational current with 2 current paths in series at DC-120• at 24 V rated value10 A• at 60 V rated value10 A• at 110 V rated value4 A• at 220 V rated value2 A• at 440 V rated value0.65 Aoperational current with 3 current paths in series at DC-120.66 Aoperational current with 3 current paths in series at DC-120.66 Aoperational current with 3 current paths in series at DC-120.66 Aoperational current with 3 current paths in series at DC-120.66 Aoperational current with 3 current paths in series at DC-120.66 Aoperational current with 3 current paths in series at DC-120.66 Aoperational current with 3 current paths in series at DC-130.66 A• at 20 V rated value10 A• at 40 V rated value10 A• at 60 V rated value10 A• at 220 V rated value10 A• at 220 V rated value0.14 A• at 220 V rated value0.14 A• at 60 V rated value10 A• at 60 V rated value0.14 A• at 60 V rated value0.9 A• at 40 V rated value0.9 A <t< td=""><td> at 220 V rated value </td><td>1 A</td></t<>	 at 220 V rated value 	1 A
operational current with 2 current paths in series at DC-12• at 24 V rated value10 A• at 10 V rated value10 A• at 110 V rated value10 A• at 220 V rated value2 A• at 440 V rated value1.3 A• at 600 V rated value0.65 Aoperational current with 3 current paths in series at DC-12• at 220 V rated value10 A• at 220 V rated value10 A• at 220 V rated value10 A• at 220 V rated value3.6 A• at 220 V rated value1.8 Aoperating frequency at DC-12 maximum1000 1/hoperational current with 3 current paths in series at DC-20• at 220 V rated value0.3 A• at 220 V rated value0.3 A• at 220 V rated value0.3 A• at 400 V rated value0.1 Aoperational current with 2 current paths in series at DC-13• at 240 V rated value0.3 A• at 240 V rated value0.3 A• at 240 V rated value0.3 A• at 600 V rated value0.1 Aoperational current with 2 current paths in series at DC-13• at 20 V rated value0.2 A• at 20 V rated value0.3 A• at 20 V rated value0.1 Aoperational current with 2 current paths in series at00 V rated value0.1 Aoperational current with 3 current paths in series at0 A0.1 Aoperational current with 3 current paths in series at	• at 440 V rated value	0.3 A
DC-12 • at 24 V rated value • at 60 V rated value • at 110 V rated value • at 220 V rated value • at 220 V rated value • at 440 V rated value • at 600 V rated value • at 60 V rated value • at 400 V rated value • at 200 V rated value • at 400 V rated value • at 400 V rated value • at 600 V rated value • at 600 V rated value	• at 600 V rated value	0.15 A
• at 24 V rated value10 A• at 60 V rated value10 A• at 110 V rated value4 A• at 220 V rated value2 A• at 440 V rated value0.65 Aoperational current with 3 current paths in series at DC-120• at 24 V rated value10 A• at 60 V rated value10 A• at 24 V rated value10 A• at 240 V rated value2.5 A• at 440 V rated value1.8 Aoperational current at 1 current path at DC-13• at 24 V rated value10 A• at 24 V rated value0.14 A• at 24 V rated value0.14 A• at 60 V rated value0.14 A• at 60 V rated value0.14 A• at 60 V rated value10 A• at 20 V rated value0.9 A• at 44 V rated value0.1 A• at 60 V rated value0.1 A• at 60 V rated value0.9 A• at 60 V rated value0.9 A• at 60 V rated value0.9 A• at 60 V rated value0.1 A• at 60 V rated value0.2	operational current with 2 current paths in series at	
• at 60 V rated value10 A• at 110 V rated value4 A• at 220 V rated value2 A• at 440 V rated value0.65 Aoperational current with 3 current paths in series at DC-120 A• at 24 V rated value10 A• at 24 V rated value10 A• at 24 V rated value10 A• at 400 V rated value10 A• at 400 V rated value10 A• at 24 V rated value10 A• at 24 V rated value10 A• at 24 V rated value10 A• at 440 V rated value2.5 A• at 440 V rated value1.8 Aoperational current at 1 current path at DC-13• at 24 V rated value10 A• at 24 V rated value0.3 A• at 440 V rated value0.1 A• at 440 V rated value0.1 A• at 600 V rated value0.1 A• at 20 V rated value0.3 A• at 20 V rated value0.1 A• at 20 V rated value0.1 A• at 60 V rated value0.2 A• at 40 V rated value0.9 A• at 40 V rated value0.1 A• at 60 V rated value0.2 A• at 60 V rated value0.1 A• at 60 V rated value0.1 A• at 60 V rated value0.1 A• at 60 V rated value	DC-12	
at 110 V rated value4 A• at 220 V rated value2 A• at 440 V rated value1.3 A• at 600 V rated value0.65 Aoperational current with 3 current paths in series at0.65 ADC-120 A• at 24 V rated value10 A• at 60 V rated value10 A• at 110 V rated value10 A• at 20 V rated value3.6 A• at 20 V rated value3.6 A• at 440 V rated value1.8 Aoperating frequency at DC-12 maximum100 n/hoperating frequency at DC-13 maximum10 A• at 24 V rated value1.8 Aoperating frequency at DC-13 maximum0.14 A• at 440 V rated value0.3 A• at 440 V rated value0.14 A• at 440 V rated value0.14 A• at 440 V rated value0.1 A• at 42 V rated value10 A• at 440 V rated value0.1 A• at 24 V rated value0.1 A• at 24 V rated value0.1 A• at 20 V rated value0.1 A• at 40 V rated value0.1 A• at 40 V rated value0.2 A• at 400 V rated value0.2 A•		10 A
• at 220 V rated value2 A• at 440 V rated value1.3 A• at 600 V rated value0.65 Aoperational current with 3 current paths in series at0.65 ADC-12• at 24 V rated value10 A• at 24 V rated value10 A• at 100 V rated value10 A• at 220 V rated value3.6 A• at 240 V rated value2.5 A• at 600 V rated value1.8 Aoperational current at 1 current path at DC-13• at 24 V rated value10 A• at 24 V rated value1.8 Aoperational current at 1 current path at DC-13• at 24 V rated value0.1 A• at 240 V rated value0.2 A• at 440 V rated value <td< td=""><td></td><td></td></td<>		
• at 440 V rated value1.3 A• at 600 V rated value0.65 Aoperational current with 3 current paths in series at DC-120• at 24 V rated value10 A• at 60 V rated value10 A• at 10 V rated value10 A• at 40 V rated value3.6 A• at 400 V rated value1.8 Aoperational current at 1 current path at DC-13• at 24 V rated value10 A• at 24 V rated value0.3 A• at 400 V rated value0.14 A• at 24 V rated value0.14 A• at 24 V rated value0.1 Aoperational current with 2 current paths in series at DC-130 A• at 24 V rated value0.1 Aoperational current with 2 current paths in series at DC-130.1 Aoperational current with 2 current paths in series at DC-130.1 Aoperational current with 2 current paths in series at DC-130.1 Aoperational current with 2 current paths in series at DC-130.1 Aoperational current with 2 current paths in series at DC-130.1 Aoperational current with 2 current paths in series at DC-130.1 Aoperational current with 2 current paths in series at DC-130.1 Aoperational current with 3 current paths in series at DC-130.1 A		
• at 600 V rated value0.65 Aoperational current with 3 current paths in series at DC-120• at 24 V rated value10 A• at 60 V rated value10 A• at 60 V rated value10 A• at 10 V rated value3.6 A• at 440 V rated value2.5 A• at 600 V rated value1.8 Aoperational current at 1 current path at DC-131000 1/h• at 220 V rated value10 A• at 24 V rated value0.3 A• at 440 V rated value0.14 A• at 20 V rated value0.14 A• at 24 V rated value0.1 A• at 250 V rated value0.2 A• at 400 V rated value0.2 A• at 400 V rated value0.2 A• at 400 V rated value0.1 A• at 600 V rated value0.1 A <t< td=""><td>at 220 V rated value</td><td>2 A</td></t<>	at 220 V rated value	2 A
operational current with 3 current paths in series at DC-1210 A• at 24 V rated value10 A• at 60 V rated value10 A• at 110 V rated value10 A• at 220 V rated value3.6 A• at 440 V rated value2.5 A• at 600 V rated value1.8 Aoperational current at 1 current path at DC-13• at 24 V rated value10 A• at 220 V rated value10 A• at 24 V rated value10 A• at 24 V rated value10 A• at 24 V rated value0.3 A• at 240 V rated value0.14 A• at 240 V rated value0.14 A• at 24 V rated value0.1 Aoperational current with 2 current paths in series at DC-13• at 24 V rated value0.1 Aoperational current with 2 current paths in series at DC-13• at 24 V rated value0.1 Aoperational current with 2 current paths in series at DC-13• at 24 V rated value0.1 Aoperational current with 2 current paths in series at DC-13• at 24 V rated value0.1 Aoperational current with 2 current paths in series at DC-13• at 24 V rated value0.2 A• at 440 V rated value0.2 A• at 440 V rated value0.2 A• at 600 V rated value0.2 A• at 600 V rated value0.1 A		
DC-12• at 24 V rated value10 A• at 60 V rated value10 A• at 110 V rated value10 A• at 110 V rated value3.6 A• at 440 V rated value2.5 A• at 600 V rated value1.8 Aoperating frequency at DC-12 maximum1000 1/hoperational current at 1 current path at DC-1310 A• at 24 V rated value10 A• at 24 V rated value0.3 A• at 440 V rated value0.3 A• at 440 V rated value0.14 A• at 600 V rated value0.1 Aoperational current with 2 current paths in series at0.1 Aoperational current with 2 current paths in series at0.9 A• at 20 V rated value0.9 A• at 600 V rated value0.9 A• at 600 V rated value0.1 Aoperational current with 2 current paths in series at0.1 Aoperational current with 2 current paths in series at0.1 Aoperational current with 2 current paths in series at0.1 Aoperational current with 2 current paths in series at0.1 Aoperational current with 3 current paths in series at0.1 A		0.65 A
• at 24 V rated value10 A• at 60 V rated value10 A• at 110 V rated value10 A• at 220 V rated value3.6 A• at 440 V rated value2.5 A• at 600 V rated value1.8 A• operational current at 1 current path at DC-131000 1/h• at 220 V rated value10 A• at 220 V rated value0.3 A• at 440 V rated value0.14 A• at 440 V rated value0.14 A• at 24 V rated value0.14 A• at 60 V rated value0.5 A• at 24 V rated value0.1 A• at 40 V rated value0.1 A• at 40 V rated value0.1 A• at 40 V rated value0.2 A• at 40 V rated value0.1 A• at 60 V rated value0.1 A• at 60 V rated value <td></td> <td></td>		
e at 60 V rated value10 A• at 110 V rated value10 A• at 220 V rated value3.6 A• at 440 V rated value2.5 A• at 600 V rated value1.8 Aoperating frequency at DC-12 maximum1 000 1/hoperational current at 1 current path at DC-13• at 24 V rated value• at 24 V rated value10 A• at 220 V rated value0.3 A• at 440 V rated value0.14 A• at 600 V rated value0.14 A• at 24 V rated value0.14 A• at 24 V rated value0.1 Aoperational current with 2 current paths in series at DC-130 A• at 24 V rated value0.1 Aoperational current with 2 current paths in series at DC-130 A• at 24 V rated value0.1 A• at 24 V rated value0.1 A• at 24 V rated value0.1 A• at 600 V rated value0.1 A• at 24 V rated value0.1 A• at 600 V rated value0.1 A• at 200 V rated value0.1 A• at 600 V rated valu		10 A
e at 110 V rated value10 A• at 220 V rated value3.6 A• at 440 V rated value2.5 A• at 600 V rated value1.8 Aoperating frequency at DC-12 maximum1 000 1/hoperational current at 1 current path at DC-13• at 24 V rated value10 A• at 24 V rated value10 A• at 220 V rated value0.3 A• at 440 V rated value0.14 A• at 600 V rated value0.1 Aoperational current with 2 current paths in series at DC-13• at 24 V rated value0.1 A• at 24 V rated value0.9 A• at 440 V rated value0.9 A• at 440 V rated value0.1 A		
• at 220 V rated value3.6 A• at 440 V rated value2.5 A• at 600 V rated value1.8 Aoperating frequency at DC-12 maximum1 000 1/hoperational current at 1 current path at DC-131 0 A• at 24 V rated value1 A• at 220 V rated value0.3 A• at 440 V rated value0.14 A• at 600 V rated value0.14 A• at 600 V rated value0.1 Aoperational current with 2 current paths in series at DC-13• at 24 V rated value0.1 Aoperational current with 2 current paths in series at DC-13• at 24 V rated value0.0 A• at 24 V rated value0.1 Aoperational current with 2 current paths in series at DC-13• at 24 V rated value0.1 A• at 60 V rated value0.9 A• at 440 V rated value0.9 A• at 440 V rated value0.1 A• at 600 V rated value0.1 A		
• at 440 V rated value2.5 A• at 600 V rated value1.8 Aoperating frequency at DC-12 maximum1000 1/hoperational current at 1 current path at DC-13000 1/h• at 24 V rated value10 A• at 24 V rated value10 A• at 20 V rated value0.3 A• at 440 V rated value0.14 A• at 600 V rated value0.1 Aoperational current with 2 current paths in series at DC-1301 A• at 24 V rated value0.1 A• at 20 V rated value0.1 A• at 40 V rated value0.1 A• at 40 V rated value0.1 A• at 60 V rated value0.1 A• at 20 V rated value0.1 A• at 20 V rated value0.1 A• at 20 V rated value0.1 A• at 400 V rated value0.1 A• at 400 V rated value0.1 A• operational current with 3 current paths in series at0.1 A		
• at 600 V rated value1.8 Aoperating frequency at DC-12 maximum1 000 1/hoperational current at 1 current path at DC-1310 A• at 24 V rated value10 A• at 210 V rated value10 A• at 220 V rated value0.3 A• at 440 V rated value0.14 A• at 600 V rated value0.14 A• at 600 V rated value0.1 A• at 24 V rated value0.1 A• at 600 V rated value0.1 A• at 24 V rated value0.1 A• at 24 V rated value0.0 A• at 24 V rated value0.1 A• at 60 V rated value0.0 A• at 24 V rated value0.1 A• at 24 V rated value0.1 A• at 60 V rated value0.1 A• at 60 V rated value0.1 A• at 60 V rated value0.1 A• at 20 V rated value0.1 A• at 20 V rated value0.1 A• at 200 V rated value0.1 A• at 200 V rated value0.1 A• at 400 V rated value0.1 A		
operating frequency at DC-12 maximum1 000 1/hoperational current at 1 current path at DC-1310 A• at 24 V rated value10 A• at 110 V rated value1 A• at 220 V rated value0.3 A• at 440 V rated value0.14 A• at 600 V rated value0.1 Aoperational current with 2 current paths in series at DC-13• at 24 V rated value10 A• at 24 V rated value0.1 Aoperational current vith 2 current paths in series at at 110 V rated value10 A• at 24 V rated value0.9 A• at 440 V rated value0.9 A• at 440 V rated value0.1 A		
operational current at 1 current path at DC-1310 A• at 24 V rated value1 A• at 110 V rated value0.3 A• at 220 V rated value0.14 A• at 600 V rated value0.1 Aoperational current with 2 current paths in series at DC-1310 A• at 60 V rated value10 A• at 24 V rated value0.1 Aoperational current with 2 current paths in series at DC-130.1 A• at 24 V rated value10 A• at 60 V rated value3.5 A• at 110 V rated value1.3 A• at 220 V rated value0.9 A• at 440 V rated value0.1 A		
• at 24 V rated value10 A• at 110 V rated value1 A• at 220 V rated value0.3 A• at 440 V rated value0.14 A• at 600 V rated value0.1 Aoperational current with 2 current paths in series at DC-1310 A• at 24 V rated value10 A• at 24 V rated value3.5 A• at 110 V rated value1.3 A• at 220 V rated value0.9 A• at 440 V rated value0.1 A		
 at 220 V rated value at 440 V rated value at 600 V rated value 0.14 A 0.1 A operational 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 3.5 A at 220 V rated value 0.9 A at 440 V rated value 0.9 A 0.1 A 		10 A
• at 440 V rated value0.14 A• at 600 V rated value0.1 Aoperational current with 2 current paths in series at DC-130.1 A• at 24 V rated value10 A• at 60 V rated value3.5 A• at 110 V rated value1.3 A• at 220 V rated value0.9 A• at 440 V rated value0.1 A• at 440 V rated value0.1 A	• at 110 V rated value	1 A
• at 600 V rated value0.1 Aoperational current with 2 current paths in series at DC-130.1 A• at 24 V rated value10 A• at 60 V rated value3.5 A• at 110 V rated value1.3 A• at 220 V rated value0.9 A• at 440 V rated value0.2 A• at 600 V rated value0.1 A	• at 220 V rated value	0.3 A
operational current with 2 current paths in series at DC-1310 A• at 24 V rated value10 A• at 60 V rated value3.5 A• at 110 V rated value1.3 A• at 220 V rated value0.9 A• at 440 V rated value0.2 A• at 600 V rated value0.1 A	• at 440 V rated value	0.14 A
DC-1310 A• at 24 V rated value10 A• at 60 V rated value3.5 A• at 110 V rated value1.3 A• at 220 V rated value0.9 A• at 440 V rated value0.2 A• at 600 V rated value0.1 A	at 600 V rated value	0.1 A
 at 24 V rated value at 60 V rated value at 110 V rated value at 110 V rated value at 220 V rated value at 440 V rated value 0.2 A at 600 V rated value 0.1 A 		
 at 60 V rated value at 110 V rated value at 220 V rated value at 440 V rated value at 600 V rated value at 600 V rated value 0.1 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		
• at 220 V rated value0.9 A• at 440 V rated value0.2 A• at 600 V rated value0.1 A• operational current with 3 current paths in series at		
at 440 V rated value 0.2 A 0.1 A 0.1 A		
• at 600 V rated value 0.1 A 0.1 A		
operational current with 3 current paths in series at		
		0.1 A

 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
fastening method	screw and snap-on mounting onto 35 mm standard mounting rail
height	57.5 mm
width	45 mm
depth	73 mm
required spacing	
 with side-by-side mounting 	
— forwards	10 mm
— upwards	10 mm
— downwards	10 mm
— at the side	0 mm
 for grounded parts 	
— forwards	10 mm
— upwards	10 mm
— at the side	6 mm
— downwards	10 mm
for live parts	
— forwards	10 mm
— upwards	10 mm
— downwards	10 mm
— at the side	6 mm
	0 11111
Connections/ Terminals	
type of electrical connection for auxiliary and control circuit	ring terminal lug connection
Safety related data	
B10 value with high demand rate according to SN 31920	1 000 000; With 0.3 x le
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] with low demand rate according to SN 31920	100 FIT
T1 value for proof test interval or service life according to IEC 61508	20 у
protection class IP on the front according to IEC 60529	IP00
Certificates/ approvals	
General Product Approval	
Confirmation	
CSA CCC	
EMC Functional Declaration of	of Conformity Test Certificates

7/4/2022

Subject to change without notice © Copyright Siemens

	Safety/Safety of Machinery						
RCM	<u>Type Examination</u> <u>Certificate</u>		CE EG-Konf.	<u>Type Test Certific-</u> ates/Test Report	Special Test Certific- ate		
Marine / Shipping							
ABS	B U REAU VERITAS		Lloyd's Register uts	PRS	RINA		
Marine / Shipping	other			Dangerous Good			
RMRS	Environmental Con- firmations	<u>Confirmation</u>	VDE	<u>Transport Informa-</u> tion			
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=3RH2122-4BB40 Cax online generator http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RH2122-4BB40 Service&Support (Manuals, Certificates, Characteristics, FAQs,) https://support.industry.siemens.com/cs/ww/en/ps/3RH2122-4BB40 Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros,) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RH2122-4BB40& Characteristic: Tripping characteristics, I ² t, Let-through current							
https://support.industry.siemens.com/cs/ww/en/ps/3RH2122-4BB40/char Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RH2122-4BB40&objecttype=14&gridview=view1							

last modified:

1/26/2022 🖸