SIEMENS

Data sheet

3RT2037-3AG20



Contactor, AC-3, 30 kW / 400 V, 1 NO + 1 NC, 110 V AC, 50 / 60 Hz, 3-pole, Size S2, Spring-type terminal

product brand name	SIRIUS	
product designation	Power contactor	
product type designation	3RT2	
General technical data		
size of contactor	S2	
product extension		
 function module for communication 	No	
auxiliary switch	Yes	
power loss [W] for rated value of the current		
 at AC in hot operating state 	11.4 W	
 at AC in hot operating state per pole 	3.8 W	
 without load current share typical 	17.2 W	
insulation voltage		
 of main circuit with degree of pollution 3 rated value 	690 V	
 of auxiliary circuit with degree of pollution 3 rated value 	690 V	
surge voltage resistance		
 of main circuit rated value 	6 kV	
 of auxiliary circuit rated value 	6 kV	
maximum permissible voltage for safe isolation between coil and main contacts according to EN 60947-1	400 V	
shock resistance at rectangular impulse		
• at AC	11.8g / 5 ms, 7.4g / 10 ms	
shock resistance with sine pulse		
• at AC	18.5g / 5 ms, 11.6g / 10 ms	
mechanical service life (switching cycles)		
 of contactor typical 	10 000 000	
 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	Q	
Substance Prohibitance (Date)	10/01/2014	
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 %	

number of 0 contacts for main control circuit 3 operating voltage 4 • at AC-3 rated value maximum 680 V • at AC-1 rated value 80 A - up to 680 V at ambient temperature 40 °C 80 A - rated value 65 A - at 400 V rated value 65 A - at 800 V rated value 65 A - at 800 V rated value 70 A • at AC-3 to te 500 V rated value 55 A • at AC-4 at 400 V rated value 53 A • at AC-4 at 400 V rated value 53 A • at AC-5 to tp 640 V for current pask value n=20 rated 56 A • at AC-6 at Current pask value n=30 rated 38 A • at 400 V rated v	Main circuit	
operating voltageend AC-3 raided value maximum680 voperational current680 voperational current80 A- at AC-1 4t AU V at minient temperature 40 °C80 A- at AC-1 4t AU V at minient temperature 40 °C80 A- at AC-1 4t AU V at minient temperature 40 °C80 A- at AC-1 4t AU V at minient temperature 40 °C80 A- at AC-1 4t AU V at minient temperature 40 °C80 A- at AC-1 4t AU V at minient temperature 40 °C80 A- at AC-1 4t AU80 A- at AC-1 4t AU85 A- at AC-1 4t AU85 A- at AC-1 4t AU85 A- at AC-1 At AU85 A- at AD V rated value65 A- at AD V rated value65 A- at AD V rated value85 A- at AC-58 up to 400 V rated value85 A- at AC-68 up to 400 V rated value85 A- au to 500 V for current peak value n=20 rated86 A- up to 520 V for current peak value n=20 rated87 A- up to 520 V for current peak value n=30 rated88 A- up to 500 V for current peak value n=30 rated88 A- aut AD V rated value88 A- at AD V rated value88 A- at AD V rated value81 A- at AD V rated value8		3
• # AC-3 raied value maximum 600 V • # AC-3 raied value maximum 600 V • # AC-1 at 400 V at ambient temperature 40 °C 80 A • raied value 80 A • at AC-1 at 400 V at ambient temperature 40 °C 80 A • raied value 80 A up to 600 V at ambient temperature 60 °C 70 A at 400 V rated value 65 A at 400 V rated value 65 A at 600 V rated value 65 A at 400 V rated value 56 A at 400 V rated value 56 A at 400 V rated value 70 A at 400 V rated value 56 A at 500 V rated value 56 A	number of NO contacts for main contacts	3
• # AC-3c rated value maximum600 Voperational currentB0 A• # AC-1B0 A• - ub 05 600 V at ambient temperature 40 °C80 A• at AC-1B0 A- ub 05 600 V at ambient temperature 60 °C70 A• at AC-3F- at 400 V rated value55 A• at AC-3B5 A- at 600 V rated value55 A- at 600 V rated value56 A- at 600 V rated value55 A- at 600 V rated value56 A- up 10 500 V for current peak value n=20 rated56 A- up 10 500 V for current peak value n=30 rated38 A- up 10 500 V for current peak value n=30 rated38 A- up 10 500 V for current peak value n=30 rated38 A- up 10 500 V for current peak value n=30 rated38 A- up 10 500 V for current peak value n=30 rated38 A- at 600 V rated value28 A- at 600 V rated value28	operating voltage	
operational current al AC 14 400 via ambient temperature 40 °C B0 A • at AC 14 400 via ambient temperature 40 °C 80 A A	 at AC-3 rated value maximum 	690 V
• at AC-1 at 400 v1 ambient temperature 40 °C B0 A • at AC-1 • 00 A • up to 680 v1 ambient temperature 60 °C 70 A • up to 680 v1 ambient temperature 60 °C 70 A • up to 800 v1 ambient temperature 60 °C 70 A • up to 800 v1 ambient temperature 60 °C 70 A • up to 800 v1 ambient temperature 60 °C 70 A • up to 800 v1 ambient temperature 60 °C 70 A • up to 800 v1 ambient temperature 60 °C 70 A • up to 800 v1 ambient temperature 60 °C 70 A • up to 800 v1 ambient temperature 60 °C 70 A • up to 800 v1 ambient temperature 60 °C 70 A • up to 900 v1 rated value 65 A • up to 70 v1 rated value 65 A • up to 70 v1 rated value 70 A • up to 200 v1 rated value 70 A • up to 200 v1 rated value 70 A • up to 200 v1 rated value 70 A • up to 200 v1 rated value 66.0 A • up to 200 v1 rated value 70 A • up to 800 v1 rated value 70 A • up to 800 v1 rated value 80.A • up to 8	 at AC-3e rated value maximum 	690 V
reta Ac-1 B0 A	operational current	
 ai AC-1 up to 800 V at ambient temperature 40 °C rede Vaulue - up to 800 V at ambient temperature 60 °C rede Vaulue ai At AC-3 - at 400 V rated value - at 600 V for current peak value n=20 rated - at 600 V for current peak value n=20 rated - at 600 V for current peak value n=30 rated - at 600 V for current peak value n=30 rated - at 600 V for current peak value n=30 rated - at 600 V for current peak value n=30 rated - at 600 V for current peak value n=30 rated - at 600 V for current peak value n=30 rated - at 600 V for current peak value n=30 rated - at 600 V for current peak value n=30 rated - at 600 V for current peak value n=30 rated - at 600 V for current peak value n=30 rated - at 600 V for current peak value n=30 rated		80 A
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		00 A
raide value in the construction of the constru		70 A
	rated value	
	• at AC-3	
	— at 400 V rated value	65 A
• at AC-3e65 A- at 500 V rated value65 A- at 600 V rated value65 A- at 600 V rated value7 A• at AC-4 at 400 V rated value53 9 A• at AC-5 up 16 400 V rated value53.9 A• at AC-5 up 10 400 V rated value56.9 A- up 10 230 V for current peak value n=20 rated56.9 Avalue- up 10 500 V for current peak value n=20 rated- up 10 500 V for current peak value n=20 rated56.9 Avalue- up 10 500 V for current peak value n=20 rated- up 10 500 V for current peak value n=20 rated38 Avalue- up 10 500 V for current peak value n=30 rated- up 10 500 V for current peak value n=30 rated38 Avalue- up 10 500 V for current peak value n=30 rated- up 10 500 V for current peak value n=30 rated38 Avalue- up 10 500 V for current peak value n=30 ratedvalue- up 10 500 V for current peak value n=30 ratedvalue- up 10 500 V for current peak value n=30 ratedvalue- up 10 500 V for current peak value n=30 ratedvalue- up 10 500 V for current peak value n=30 ratedvalue- up 10 500 V for current peak value n=30 ratedvalue- up 10 500 V for current peak value n=30 ratedvalue- up 10 500 V for current peak value n=30 ratedvalue- up 10 V rated value- at 400 V rated value22 Aoperational current for approx. 200000 operatingcycles at AC-6- at 24 V rated value- at 100 V rated value0.4 A- at 1	— at 500 V rated value	65 A
	— at 690 V rated value	47 A
- at 500 V rated value65 Å- at 690 V rated value47 Å- at 690 V rated value55 Å- at 4 400 V rated value50 Å- at AC-5a up to 690 V rated value50 Å- at AC-5a up to 100 V for current peak value n=20 rated56.9 Å- up to 500 V for current peak value n=20 rated56.9 Å- up to 500 V for current peak value n=20 rated56.9 Å- up to 500 V for current peak value n=20 rated56.9 Å- up to 500 V for current peak value n=20 rated38 Å- up to 500 V for current peak value n=30 rated38 Å- up to 500 V for current peak value n=30 rated38 Å- up to 500 V for current peak value n=30 rated38 Å- up to 500 V for current peak value n=30 rated38 Å- up to 500 V for current peak value n=30 rated38 Å- up to 500 V for current peak value n=30 rated38 Å- up to 500 V for current peak value n=30 rated38 Å- up to 500 V for current peak value n=30 rated38 Å- up to 500 V for current peak value n=30 rated38 Å- up to 500 V for current peak value n=30 rated38 Å- up to 500 V rated value28 Å- at 400 V rated value55 Å- at 4100 V rated value47 Å- at 420 V rated value45 Å- at 420 V rated value55 Å-	• at AC-3e	
	— at 400 V rated value	65 A
• at AC-4 at 400 V rated value 55 Å • at AC-5a up to 690 V rated value 70.4 Å • at AC-5a up to 400 V for durient peak value n=20 rated 55.9 Å - up to 500 V for current peak value n=20 rated 56.9 Å - up to 500 V for current peak value n=20 rated 56.9 Å - up to 500 V for current peak value n=20 rated 56.9 Å - up to 500 V for current peak value n=20 rated 74 Å - up to 600 V for current peak value n=20 rated 88 Å - up to 500 V for current peak value n=30 rated 38 Å - up to 500 V for current peak value n=30 rated 38 Å - up to 500 V for current peak value n=30 rated 38 Å - up to 600 V for current peak value n=30 rated 38 Å value 25 mm² out out out out out out out out out at maximum AC-11 25 mm² operational current for approx. 200000 operating 22 Å et at 000 V rated value 28 Å - at 110 V rated value 55 Å - at 110 V rated value 45 Å - at 220 V rated value 55 Å - at 420 V rated value 65 Å - at 420 V rated value 0.4 Å - at 600 V rated value 0.4 Å <	— at 500 V rated value	65 A
• at AC-5a up to 690 V rated value 70.4 A • at AC-5b up to 400 V rated value 53.9 A • at AC-5a	— at 690 V rated value	47 A
 at AC.5b up to 400 V rated value at AC.5a 	 at AC-4 at 400 V rated value 	55 A
 at AC-6a -up to 230 V for current peak value n=20 rated value -up to 400 V for current peak value n=20 rated value -up to 500 V for current peak value n=20 rated value -up to 500 V for current peak value n=20 rated value -up to 500 V for current peak value n=20 rated value -up to 500 V for current peak value n=20 rated value -up to 230 V for current peak value n=30 rated value -up to 500 V for current peak value n=30 rated value -up to 500 V for current peak value n=30 rated value -up to 500 V for current peak value n=30 rated value -up to 500 V for current peak value n=30 rated value -up to 500 V for current peak value n=30 rated value -up to 500 V for current peak value n=30 rated value -up to 690 V for current peak value n=30 rated value -up to 690 V for current peak value n=30 rated value -up to 690 V for current peak value n=30 rated value -up to 690 V for current peak value n=30 rated value -up to 690 V for current peak value n=30 rated value -up to 690 V for current peak value n=30 rated value -up to 20000 operating cycles at AC-4 -at 400 V rated value 28 A -at 24 V rated value -at 24 V rated value -at 24 V rated value -at 400 V rated value -at 220 V rated value -at 220 V rated value -at 4100 V rated value -at 440 V rated value	 at AC-5a up to 690 V rated value 	70.4 A
	• at AC-5b up to 400 V rated value	53.9 A
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valuevalue		56.9 A
valueA		56.9 A
value• at AC-6a up to 230 V for current peak value n=30 rated value38 A up to 400 V for current peak value n=30 rated value38 A up to 500 V for current peak value n=30 rated value38 A up to 500 V for current peak value n=30 rated value38 A up to 6300 V for current peak value n=30 rated value38 A up to 6300 V for current peak value n=30 rated value38 A up to 6300 V for current peak value n=30 rated value25 mm²operational current for approx. 200000 operating cycles at AC-425 mm²• at 400 V rated value28 A• at 400 V rated value28 A• at 400 V rated value55 A- at 24 V rated value4.5 A- at 24 V rated value0.4 A- at 240 v rated value0.25 A• at 400 V rated value55 A- at 220 V rated value0.25 A• at 110 V rated value55 A- at 220 V rated value55 A- at 220 V rated value55 A- at 220 V rated value65 A- at 220 V rated value55 A- at 240 V rated value55 A- at 240 V rated value55 A- at 440 V rated value55 A- at 440 V rated value55 A- at 240 V rated value55 A- at 240 V rated value55 A- at 240 V rated value56 A- at 240 V rated value56 A- at 440 V rated value56 A- at 440 V rated value56 A- at 440 V rated value<	value	
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value up to 500 V for current peak value n=30 rated value38 A up to 680 V for current peak value n=30 rated value38 A up to 680 V for current peak value n=30 rated value38 Aminimum cross-section in main circuit at maximum AC-1 rated value25 mm²operational current for approx. 20000 operating cycles at AC-422 m²• at 400 V rated value28 A• at 400 V rated value22 Aoperational current22 Aoperational current55 A- at 24 V rated value55 A- at 24 V rated value4.5 A- at 440 V rated value0.4 A- at 440 V rated value0.25 A- at 440 V rated value55 A- at 24 V rated value35 A- at 24 V rated value0.25 A- at 440 V rated value55 A- at 24 V rated value55 A- at 440 V rated value0.25 A- at 440 V rated value55 A- at 24 V rated value55 A- at 24 V rated value55 A- at 24 V rated value55 A- at 440 V rated value55 A- at 440 V rated value55 A- at 24 V rated value55 A- at 440 V rated value56 A- at 440 V ra	value	
valuea up to 690 V for current peak value n=30 rated value38 Aminimum cross-section in main circuit at maximum AC-1 rated value25 mm²operational current for approx. 200000 operating cycles at AC-428 A• at 400 V rated value28 A• at 400 V rated value22 A• at 690 V rated value55 A• at 1 current path at DC-1 at 24 V rated value55 A- at 24 V rated value1A- at 220 V rated value0.4 A- at 440 V rated value0.4 A- at 440 V rated value55 A- at 440 V rated value55 A- at 440 V rated value55 A- at 440 V rated value0.4 A- at 240 V rated value55 A- at 440 V rated value55 A- at 440 V rated value1A- at 240 V rated value55 A- at 440 V rated value55 A- at 240 V rated value55 A- at 240 V rated value56 A- at 240 V rated value56 A- at 240 V rated value50 A- at 440 V rated value <t< td=""><td>value</td><td></td></t<>	value	
valuevalueminimum cross-section in main circuit at maximum AC-1 rated value25 mm²operational current for approx. 20000 operating cycles at AC-428 A• at 400 V rated value28 A• at 690 V rated value22 Aoperational current25 A• at 1 current path at DC-1 at 24 V rated value55 A- at 210 V rated value0.4 A- at 220 V rated value0.4 A- at 440 V rated value0.25 A- at 600 V rated value55 A- at 24 V rated value0.4 A- at 24 V rated value0.4 A- at 200 V rated value0.4 A- at 200 V rated value0.4 A- at 440 V rated value0.5 A- at 440 V rated value1A- at 440 V rated value1A- at 24 V rated value1A- at 440 V rated value1A- at 440 V rated value1A- at 24 V rated value1A- at 24 V rated value1A- at 440 V rated value1A- at 24 V rated value1A- at 24 V rated value1A- at 24 V rated value1A- at 240 V rated value1A- at 440 V rated value1A- at 440 V rated value </td <td>value</td> <td></td>	value	
rated valueoperational current for approx. 200000 operating cycles at AC-4• at 400 V rated value28 A• at 400 V rated value22 Aoperational current22 A• at 1 current path at DC-1 at 24 V rated value55 A- at 24 V rated value4.5 A- at 20 V rated value0.4 A- at 400 V rated value0.25 A- at 400 V rated value0.55 A- at 200 V rated value0.55 A- at 200 V rated value0.55 A- at 200 V rated value1.4- at 200 V rated value55 A- at 400 V rated value55 A- at 400 V rated value1.4- at 200 V rated value50 A- at 200 V rated value50 A- at 200 V rated value50 A- at 400 V rated value50 A	value	
cycles at AC-4 28 A • at 690 V rated value 22 A operational current 22 A • at 1 current path at DC-1 - - at 24 V rated value 55 A - at 110 V rated value 4.5 A - at 220 V rated value 0.4 A - at 600 V rated value 0.25 A - at 24 V rated value 55 A - at 24 V rated value 0.4 A - at 24 V rated value 0.4 A - at 24 V rated value 0.55 A - at 240 V rated value 0.4 A - at 240 V rated value 55 A - at 240 V rated value 55 A - at 210 V rated value 5 A - at 220 V rated value 5 A - at 440 V rated value 5 A - at 440 V rated value 1 A - at 600 V rated value 0.8 A	rated value	
• at 690 V rated value 22 A operational current - • at 1 current path at DC-1 - - at 24 V rated value 55 A - at 110 V rated value 4.5 A - at 220 V rated value 1 A - at 440 V rated value 0.4 A - at 600 V rated value 0.25 A - at 24 V rated value 55 A - at 24 V rated value 55 A - at 24 V rated value 0.25 A - at 24 V rated value 55 A - at 24 V rated value 55 A - at 24 V rated value 55 A - at 24 V rated value 1.4 - at 24 V rated value 55 A - at 24 V rated value 55 A - at 24 V rated value 55 A - at 220 V rated value 5 A - at 440 V rated value 1 A - at 440 V rated value 5 A - at 440 V rated value 0.8 A		
operational current• at 1 current path at DC-1- at 24 V rated value55 A- at 24 V rated value4.5 A- at 220 V rated value1 A- at 440 V rated value0.4 A- at 600 V rated value0.25 A• with 2 current paths in series at DC-1	• at 400 V rated value	28 A
• at 1 current path at DC-1 - - at 24 V rated value 55 A - at 110 V rated value 4.5 A - at 220 V rated value 1 A - at 440 V rated value 0.4 A - at 600 V rated value 0.25 A • with 2 current paths in series at DC-1 - - at 24 V rated value 55 A - at 20 V rated value 0.25 A • with 2 current paths in series at DC-1 - - at 24 V rated value 55 A - at 20 V rated value 55 A - at 20 V rated value 55 A - at 110 V rated value 55 A - at 220 V rated value 50 A - at 440 V rated value 10 A - at 600 V rated value 0.8 A	• at 690 V rated value	22 A
- at 24 V rated value 55 A - at 110 V rated value 4.5 A - at 220 V rated value 1 A - at 440 V rated value 0.4 A - at 600 V rated value 0.25 A • with 2 current paths in series at DC-1 - - at 24 V rated value 55 A - at 20 V rated value 55 A - at 24 V rated value 55 A - at 24 V rated value 55 A - at 24 V rated value 55 A - at 20 V rated value 55 A - at 440 V rated value 1 A - at 200 V rated value 5 A - at 440 V rated value 5 A - at 440 V rated value 5 A - at 600 V rated value 0.8 A	operational current	
- at 110 V rated value 4.5 A - at 220 V rated value 1 A - at 440 V rated value 0.4 A - at 600 V rated value 0.25 A • with 2 current paths in series at DC-1 - - at 24 V rated value 55 A - at 110 V rated value 45 A - at 220 V rated value 5 A - at 220 V rated value 5 A - at 240 V rated value 5 A - at 440 V rated value 5 A - at 600 V rated value 1 A - at 600 V rated value 0.8 A	• at 1 current path at DC-1	
 at 220 V rated value at 440 V rated value at 600 V rated value 0.4 A at 600 V rated value 0.25 A • with 2 current paths in series at DC-1 at 24 V rated value 55 A at 110 V rated value 45 A at 220 V rated value 5 A at 440 V rated value 5 A at 440 V rated value 0.8 A 	— at 24 V rated value	55 A
at 440 V rated value0.4 A at 600 V rated value0.25 A• with 2 current paths in series at DC-1 at 24 V rated value at 24 V rated value55 A at 110 V rated value45 A at 220 V rated value5 A at 440 V rated value1 A at 600 V rated value0.8 A	— at 110 V rated value	4.5 A
at 600 V rated value0.25 A• with 2 current paths in series at DC-1 at 24 V rated value55 A at 110 V rated value45 A at 220 V rated value5 A at 440 V rated value1 A at 600 V rated value0.8 A	— at 220 V rated value	1 A
with 2 current paths in series at DC-1	— at 440 V rated value	0.4 A
at 24 V rated value55 A at 110 V rated value45 A at 220 V rated value5 A at 440 V rated value1 A at 600 V rated value0.8 A	— at 600 V rated value	0.25 A
at 110 V rated value45 A at 220 V rated value5 A at 440 V rated value1 A at 600 V rated value0.8 A	 with 2 current paths in series at DC-1 	
at 220 V rated value5 A at 440 V rated value1 A at 600 V rated value0.8 A	— at 24 V rated value	55 A
	— at 110 V rated value	45 A
- at 600 V rated value 0.8 A	— at 220 V rated value	5 A
	— at 440 V rated value	1 A
with 3 current paths in series at DC-1	— at 600 V rated value	0.8 A
	 with 3 current paths in series at DC-1 	

— at 24 V rated value	55 A
— at 110 V rated value	55 A
— at 220 V rated value	45 A
— at 440 V rated value	2.9 A
— at 600 V rated value	1.4 A
 at 1 current path at DC-3 at DC-5 	
— at 24 V rated value	35 A
— at 110 V rated value	2.5 A
— at 220 V rated value	1 A
— at 440 V rated value	0.1 A
— at 600 V rated value	0.06 A
 with 2 current paths in series at DC-3 at DC-5 	
— at 24 V rated value	55 A
— at 110 V rated value	25 A
— at 220 V rated value	5 A
— at 440 V rated value	0.27 A
— at 600 V rated value	0.16 A
 with 3 current paths in series at DC-3 at DC-5 	
— at 24 V rated value	55 A
— at 110 V rated value	55 A
— at 220 V rated value	25 A
— at 440 V rated value	0.6 A
— at 600 V rated value	0.35 A
operating power	
at AC-2 at 400 V rated value	30 kW
• at AC-3	
— at 230 V rated value	18.5 kW
— at 400 V rated value	30 kW
— at 500 V rated value	37 kW
— at 690 V rated value	37 kW
• at AC-3e	
- at 230 V rated value	18.5 kW
— at 400 V rated value	30 kW
— at 500 V rated value	37 kW
— at 690 V rated value	37 kW
operating power for approx. 200000 operating cycles	57 KW
at AC-4	
 at 400 V rated value 	14.7 kW
 at 690 V rated value 	20 kW
operating apparent power at AC-6a	
• up to 230 V for current peak value n=20 rated value	22.6 kVA
• up to 400 V for current peak value n=20 rated value	39.4 kVA
• up to 500 V for current peak value n=20 rated value	49.2 kVA
 up to 690 V for current peak value in 20 rated value 	56.1 kVA
operating apparent power at AC-6a	
up to 230 V for current peak value n=30 rated value	15.1 kVA
• up to 400 V for current peak value n=30 rated value	26.2 kVA
• up to 500 V for current peak value n=30 rated value	32.8 kVA
 up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value 	45.3 kVA
short-time withstand current in cold operating state	
up to 40 °C	
 limited to 1 s switching at zero current maximum 	1 055 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 5 s switching at zero current maximum 	730 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 10 s switching at zero current maximum 	520 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 30 s switching at zero current maximum 	336 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 60 s switching at zero current maximum 	272 A; Use minimum cross-section acc. to AC-1 rated value
no-load switching frequency	
• at AC	5 000 1/h
operating frequency	
• at AC-1 maximum	800 1/h
• at AC-2 maximum	400 1/h

a at AC 2 maying the	700.1/h
• at AC-3 maximum	700 1/h
 at AC-3e maximum at AC-4 maximum 	700 1/h 200 1/h
	200 1/h
Control circuit/ Control	
type of voltage of the control supply voltage	AC
control supply voltage at AC	440.14
at 50 Hz rated value	110 V
at 60 Hz rated value	110 V
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	
• at 50 Hz	210 VA
• at 60 Hz	188 VA
inductive power factor with closing power of the coil	
• at 50 Hz	0.69
• at 60 Hz	0.65
apparent holding power of magnet coil at AC	(7.0)//
• at 50 Hz	17.2 VA
• at 60 Hz	16.5 VA
inductive power factor with the holding power of the coil	
• at 50 Hz	0.36
• at 60 Hz	0.39
closing delay	
• at AC	10 80 ms
opening delay	
• at AC	10 18 ms
arcing time	10 20 ms
control version of the switch operating mechanism	Standard A1 - A2
Auxiliary circuit	
	1
number of NC contacts for auxiliary contacts instantaneous contact	
	1
instantaneous contact number of NO contacts for auxiliary contacts	
instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact	1
instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum	1
instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15	1 10 A
instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value	1 10 A 10 A
instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value	1 10 A 10 A 3 A
instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value operational current at DC-12	1 10 A 10 A 3 A 2 A 1 A
instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value	1 10 A 10 A 3 A 2 A 1 A 10 A
instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value operational current at DC-12	1 10 A 10 A 3 A 2 A 1 A
instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value • at 24 V rated value	1 10 A 10 A 3 A 2 A 1 A 10 A 6 A 6 A
instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value • at 690 V rated value • at 24 V rated value • at 48 V rated value	1 10 A 10 A 3 A 2 A 1 A 10 A 6 A 6 A 3 A
instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value • at 24 V rated value • at 24 V rated value • at 48 V rated value • at 60 V rated value	1 10 A 10 A 3 A 2 A 1 A 10 A 6 A 6 A
instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value operational current at DC-12 • at 24 V rated value • at 48 V rated value • at 48 V rated value • at 60 V rated value • at 110 V rated value	1 10 A 10 A 3 A 2 A 1 A 10 A 6 A 6 A 3 A 2 A 1 A
instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value • at 690 V rated value • at 24 V rated value • at 24 V rated value • at 48 V rated value • at 48 V rated value • at 40 V rated value • at 60 V rated value • at 110 V rated value • at 220 V rated value • at 600 V rated value	1 10 A 10 A 3 A 2 A 1 A 10 A 6 A 6 A 3 A 2 A
instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value operational current at DC-12 • at 24 V rated value • at 48 V rated value • at 48 V rated value • at 40 V rated value • at 60 V rated value • at 110 V rated value • at 220 V rated value • at 600 V rated value • at 600 V rated value • at 600 V rated value	1 10 A 10 A 3 A 2 A 1 A 10 A 6 A 6 A 3 A 2 A 1 A
instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value • at 690 V rated value • at 24 V rated value • at 48 V rated value • at 48 V rated value • at 60 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 600 V rated value • at 220 V rated value	1 10 A 10 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A 1 A 10 A
instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value • at 690 V rated value • at 24 V rated value • at 48 V rated value • at 48 V rated value • at 10 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 220 V rated value • at 220 V rated value • at 600 V rated value	1 10 A 10 A 3 A 2 A 1 A 10 A 6 A 6 A 3 A 2 A 1 A 10 A 6 A 1 A 10 A 1
instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value • at 690 V rated value • at 24 V rated value • at 48 V rated value • at 60 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 600 V rated value • at 24 V rated value • at 24 V rated value • at 24 V rated value • at 20 V rated value • at 600 V rated value • at 20 V rated value • at 600 V rated value • at 20 V rated value • at 600 V rated value • at 600 V rated value • at 600 V rated value	1 10 A 10 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A 1 A 10 A 10 A 2 A 1 A 10 A 2 A 1 A 10 A 2 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A 1
instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value • at 690 V rated value • at 24 V rated value • at 48 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 220 V rated value • at 600 V rated value • at 600 V rated value • at 600 V rated value • at 210 V rated value • at 48 V rated value • at 48 V rated value • at 48 V rated value • at 410 V rated value	1 10 A 10 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 6 A 3 A 2 A 1 A 10 A 2 A 1 A 10 A 2 A 1 A 10 A
instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value operational current at DC-12 • at 24 V rated value • at 48 V rated value • at 48 V rated value • at 48 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 600 V rated value • at 220 V rated value • at 220 V rated value • at 600 V rated value • at 600 V rated value • at 24 V rated value • at 25 V rated value • at 25 V rated value • at 260 V rated value • at 270 V rated value	1 10 A 10 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A 1 A 10 A
instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value • at 690 V rated value • at 24 V rated value • at 48 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 220 V rated value • at 600 V rated value • at 600 V rated value • at 600 V rated value • at 210 V rated value • at 48 V rated value • at 48 V rated value • at 48 V rated value • at 410 V rated value	1 10 A 10 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A 1 A 10 A
instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value operational current at DC-12 • at 24 V rated value • at 48 V rated value • at 48 V rated value • at 48 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 600 V rated value • at 220 V rated value • at 220 V rated value • at 600 V rated value • at 600 V rated value • at 24 V rated value • at 25 V rated value • at 25 V rated value • at 260 V rated value • at 270 V rated value	1 10 A 10 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 6 A 10 A 10 A 6 A 10 A 6 A 6 A 10 A 2 A 1 A 0.15 A 10 A 2 A 1 A 0.15 A
instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value • at 690 V rated value • at 24 V rated value • at 24 V rated value • at 48 V rated value • at 48 V rated value • at 60 V rated value • at 110 V rated value • at 220 V rated value • at 220 V rated value • at 600 V rated value • at 220 V rated value • at 24 V rated value • at 24 V rated value • at 25 V rated value • at 260 V rated value • at 260 V rated value • at 270 V rated value	1 10 A 10 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A 1 A 10 A
instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value • at 690 V rated value • at 24 V rated value • at 48 V rated value • at 48 V rated value • at 60 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 600 V rated value • at 600 V rated value • at 220 V rated value • at 600 V rated value • at 125 V rated value • at 125 V rated value • at 125 V rated value • at 600 V rated value • at 125 V rated value • at 600 V rated value • at 125 V rated value • at 100 V rated value	1 10 A 10 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 6 A 10 A 10 A 6 A 10 A 10 A 2 A 1 A 0.15 A 10 A 2 A 1 A 0.15 A
instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value • at 690 V rated value • at 24 V rated value • at 48 V rated value • at 60 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 600 V rated value • at 600 V rated value • at 220 V rated value • at 24 V rated value • at 25 V rated value • at 20 V rated value • at 60 V rated value • at 600 V rated value	1 10 A 10 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 6 A 10 A 10 A 6 A 10 A 10 A 2 A 1 A 0.15 A 10 A 2 A 1 A 0.15 A

• at 480 V rated value	65 A		
at 600 V rated value	52 A		
	52 A		
yielded mechanical performance [hp] • for single-phase AC motor			
- at 110/120 V rated value	5 hz		
	5 hp		
— at 230 V rated value	10 hp		
for 3-phase AC motor at 200/200 V retact value	20 hz		
- at 200/208 V rated value	20 hp		
— at 220/230 V rated value	20 hp		
— at 460/480 V rated value	50 hp		
— at 575/600 V rated value	50 hp		
contact rating of auxiliary contacts according to UL	A600 / P600		
Short-circuit protection			
design of the fuse link			
 for short-circuit protection of the main circuit 			
— with type of coordination 1 required	gG: 250 A (690 V, 100 kA), aM: 160 A (690 V, 100 kA), BS88: 200 A (415 V, 80 kA)		
 — with type of assignment 2 required 	gG: 125A (690V,100kA), aM: 63A (690V,100kA), BS88: 100A (415V,80kA)		
 for short-circuit protection of the auxiliary switch required 	gG: 10 A (500 V, 1 kA)		
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 according to DIN EN 60715		
 side-by-side mounting 	Yes		
height	114 mm		
width	55 mm		
depth	130 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		
Connections/ Terminals			
type of electrical connection			
for main current circuit	screw-type terminals		
for auxiliary and control circuit	spring-loaded terminals		
 at contactor for auxiliary contacts 	Spring-tope terminals		
-			
of magnet coil type of connectable conductor cross sections	Spring-type terminals		
type of connectable conductor cross-sections • for main contacts			
for main contacts — solid or stranded	$2x (1 - 35 \text{ mm}^2) 1x (1 - 50 \text{ mm}^2)$		
	$2x (1 35 mm^2), 1x (1 50 mm^2)$ $2x (1 25 mm^2), 1x (1 25 mm^2)$		
— finely stranded with core end processing	2x (1 25 mm ²), 1x (1 35 mm ²)		
at AWG cables for main contacts	2x (18 2), 1x (18 1)		
connectable conductor cross-section for main contacts			
finely stranded with core end processing	1 35 mm²		
connectable conductor cross-section for auxiliary			

contacts						
 solid or strande 	ed		0.5 2.5 mm ²			
 finely stranded 	with core end processing	ng	0.5 1.5 mm²			
	without core end proce		0.5 2.5 mm²			
•••	conductor cross-sect	tions				
 for auxiliary cor 						
— solid or str			2x (0.5 2.5 mm ²)			
	nded with core end proc	•	2x (0.5 1.5 mm²)			
	nded without core end p	processing	2x (0.5 2.5 mm²)			
	for auxiliary contacts		2x (20 14)			
AWG number as coo section	ded connectable cond	luctor cross				
 for main contact 	to		10 1			
			18 1 20 14			
for auxiliary cor	liacis		20 14			
Safety related data						
product function	1. 1. 150 000 17		X			
	according to IEC 60947		Yes			
 positively driver 5-1 	n operation according to	DIEC 60947-	No			
-	lemand rate according t	O SN 31020	1 000 000			
proportion of dange		0 311 3 1920	1000000			
• • •	nd rate according to SN	21020	40 %			
	-					
-	nd rate according to SN low demand rate accord		73 % 100 FIT			
31920						
T1 value for proof tes IEC 61508	t interval or service life	according to	20 у			
protection class IP on the front according to IEC 60529		IP20				
touch protection on	the front according to	DIEC 60529	finger-safe, for vertical contact from the front			
suitability for use						
 safety-related s 	witching OFF		Yes			
Certificates/ approval	S					
General Product Ap	proval					
	-	Confirmatio	n o	KC		
(SP	(ooninnado			FAL	
CSA	ccc		UL			
EMC	Functional Safety/Safety of	Declaration o	f Conformity	Test Certificates		
	Machinery		· · · · · · · · · · · · · · · · · · ·			
<u>^</u>	Type Examination		שוו	Special Test Certific-	Type Test Certific-	
<i>κ</i> λ	<u>Certificate</u>	CE	UK	ate	ates/Test Report	
يې			ĊÂ			
RCM		EG-Konf.				
Marine / Shipping						
		f &	Lloude	(And a		
	(「気候」)	000	Register		(32)	
ABS	1821	DNV	LRS	PRS	RINA	
	RUREAU					
	VERITAS					
	<u>BUREAU</u> VERITAS					
Marino / Shinning			Paihway	Dangerous Good		
Marine / Shipping	VERITAS		Railway	Dangerous Good		



Confirmation

Confirmation

Transport Information

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=3RT2037-3AG20

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2037-3AG20

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2037-3AG20

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2037-3AG20&lang=en

Characteristic: Tripping characteristics, I²t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RT2037-3AG20/char

Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2037-3AG20&objecttype=14&gridview=view1

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