SIEMENS

Data sheet

3RT2017-1FB41

power contactor, AC-3 12 A, 5.5 kW / 400 V 1 NO, 24 V DC with diode integrated, 3-pole Size S00, screw terminal



product brand name	SIRIUS
Product designation	Power contactor
Product type designation	3RT2

General technical data	
Size of contactor	S00
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 	3.6 W
 at AC in hot operating state per pole 	1.2 W
Power loss [W] for rated value of the current without load current share typical	4 W
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 acc. to EN 60947-1 	400 V

 protection class IP on the front 	IP20		
 Protection class IP of the terminal 	IP20		
Shock resistance at rectangular impulse			
● at DC	7.3g / 5 ms, 4.7g / 10 ms		
Shock resistance with sine pulse			
● at DC	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- 	5 000 000		
compatible auxiliary switch block typical			
 of the contactor with added auxiliary switch block typical 	10 000 000		
Reference code acc. to DIN EN 81346-2	Q		
mbiont conditions			
Installation altitude at height above sea level			
• maximum	2 000 m		
Ambient temperature			
during operation	-25 +60 °C		
	-55 +80 °C		
during storage			
<i>l</i> ain circuit			
Number of poles for main current circuit	3		
Number of NO contacts for main contacts	3		
Operating voltage			
 at AC-3 rated value maximum 	690 V		
Operating current			
• at AC-1 at 400 V			
— at ambient temperature 40 °C rated value	22 A		
● at AC-1			
— up to 690 V at ambient temperature 40 °C rated value	22 A		
— up to 690 V at ambient temperature 60 °C rated value	20 A		
• at AC-2 at 400 V rated value	12 A		
● at AC-3			
— at 400 V rated value	12 A		
— at 500 V rated value	9.2 A		
— at 690 V rated value	6.7 A		
• at AC-4 at 400 V rated value	8.5 A		
	19.4 A		
at AC-5a up to 690 V rated value			
• at AC-5b up to 400 V rated value	9.9 A		
● at AC-6a			

 — up to 230 V for current peak value n=20 rated value 	7.2 A
— up to 400 V for current peak value n=20 rated value	7.2 A
— up to 500 V for current peak value n=20 rated value	7.2 A
— up to 690 V for current peak value n=20 rated value	6.7 A
● at AC-6a	
— up to 230 V for current peak value n=30 rated value	4.8 A
— up to 400 V for current peak value n=30 rated value	4.8 A
— up to 500 V for current peak value n=30 rated value	4.8 A
— up to 690 V for current peak value n=30 rated value	4.8 A
Minimum cross-section in main circuit	
 at maximum AC-1 rated value 	4 mm ²
Operating current for approx. 200000 operating cycles at AC-4	
• at 400 V rated value	4.1 A
• at 690 V rated value	3.3 A
Operating current	
• at 1 current path at DC-1	
— at 24 V rated value	20 A
— at 110 V rated value	2.1 A
— at 220 V rated value	0.8 A
— at 440 V rated value	0.6 A
— at 600 V rated value	0.6 A
 with 2 current paths in series at DC-1 	
— at 24 V rated value	20 A
— at 110 V rated value	12 A
— at 220 V rated value	1.6 A
— at 440 V rated value	0.8 A
— at 600 V rated value	0.7 A
 with 3 current paths in series at DC-1 	
— at 24 V rated value	20 A
— at 110 V rated value	20 A
— at 220 V rated value	20 A
— at 440 V rated value	1.3 A
— at 600 V rated value	1 A
Operating current	

 at 1 current path at DC-3 at DC-5 	
— at 24 V rated value	20 A
— at 110 V rated value	0.1 A
 with 2 current paths in series at DC-3 at DC-5 	
— at 24 V rated value	20 A
— at 110 V rated value	0.35 A
 with 3 current paths in series at DC-3 at DC-5 	
— at 24 V rated value	20 A
— at 110 V rated value	20 A
— at 220 V rated value	1.5 A
— at 440 V rated value	0.2 A
— at 600 V rated value	0.2 A
Operating power	
• at AC-2 at 400 V rated value	5.5 kW
● at AC-3	
— at 230 V rated value	3 kW
— at 400 V rated value	5.5 kW
— at 500 V rated value	5.5 kW
— at 690 V rated value	5.5 kW
Operating power for approx. 200000 operating cycles	
at AC-4	
• at 400 V rated value	2 kW
• at 690 V rated value	2.5 kW
Operating apparent output at AC-6a	
 up to 230 V for current peak value n=20 rated value 	2.8 kV·A
 up to 400 V for current peak value n=20 rated value 	4.9 kV·A
• up to 500 V for current peak value n=20 rated	6.2 kV·A
value	013/4
 up to 690 V for current peak value n=20 rated value 	8 kV·A
Operating apparent output at AC-6a	
 up to 230 V for current peak value n=30 rated value 	1.9 kV·A
 up to 400 V for current peak value n=30 rated value 	3.3 kV·A
 up to 500 V for current peak value n=30 rated value 	4.1 kV·A
 up to 690 V for current peak value n=30 rated value 	5.7 kV·A
Short-time withstand current in cold operating state	
up to 40 °C	

 limited to 1 s switching at zero current maximum 	200 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 5 s switching at zero current maximum 	123 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 10 s switching at zero current maximum 	96 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 30 s switching at zero current maximum 	74 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 60 s switching at zero current maximum 	61 A; Use minimum cross-section acc. to AC-1 rated value
No-load switching frequency	
• at DC	10 000 1/h
Operating frequency	
• at AC-1 maximum	1 000 1/h
• at AC-2 maximum	750 1/h
● at AC-3 maximum	750 1/h
• at AC-4 maximum	250 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	
• initial value	0.8
• Full-scale value	1.1
Design of the surge suppressor	with diode
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
Control version of the switch operating mechanism	Standard A1 - A2
Auxiliary circuit	
Number of NO contacts for auxiliary contacts	
 instantaneous contact 	1
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 DC-12 • • at 24 V rated value 6 A • at 84 V rated value 6 A • at 100 V rated value 6 A • at 100 V rated value 6 A • at 125 V rated value 6 A • at 220 V rated value 1 A • at 220 V rated value 1 A • at 220 V rated value 1 A • at 230 V rated value 0.15 A Operating current at DC-13 • • at 24 V rated value 2 A • at 60 V rated value 2 A • at 60 V rated value 2 A • at 24 V rated value 0 A • at 25 V rated value 0 A • at 25 V rated value 0.3 A • at 200 V rated value 0.14 context reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) IV/CSA ratings • Full-back current (FLA) for three-phase AC motor • • at 400 V rated value 11 A • at 600 V rated value 2 hp • for three-phase AC motor • • at 200/208 V rated value <td< th=""><th></th><th></th></td<>					
 at 24 V rated value at 48 V rated value 6 A at 60 V rated value 6 A at 110 V rated value 3 A at 125 V rated value 2 A at 220 V rated value 1 A at 600 V rated value 0.15 A Operating current at DC-13 at 24 V rated value 10 A at 48 V rated value 10 A at 48 V rated value 10 A at 40 V rated value 10 A at 40 V rated value 2 A at 60 V rated value 2 A at 10 V rated value 2 A at 10 V rated value 3 A at 220 V rated value 3 A at 20 V rated value 3 A at 20 V rated value 3 A at 20 V rated value 3 A at 60 V rated value 1 A <l< td=""><td>• at 690 V rated value</td><td>1 A</td></l<>	• at 690 V rated value	1 A			
at 48 V rated value 6 A • at 60 V rated value 6 A • at 110 V rated value 3 A • at 125 V rated value 2 A • at 220 V rated value 0.15 A Operating current at DC-13	Operating current at DC-12				
at 60 V rated value 6 A at 110 V rated value 3 A at 125 V rated value 2 A at 220 V rated value 1 A at 600 V rated value 0.15 A Operating current at DC-13 • • at 24 V rated value 0 A • at 24 V rated value 2 A • at 48 V rated value 2 A • at 48 V rated value 2 A • at 10 V rated value 2 A • at 24 V rated value 0 A • at 25 V rated value 2 A • at 10 V rated value 0 A • at 220 V rated value 0 A • at 220 V rated value 0.1 A contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) UL/CSA ratings Ful-load current (FLA) for three-phase AC motor • at 480 V rated value 11 A • at 480 V rated value 11 A • at 600 V rated value 2 hp • for three-phase AC motor - - at 200/208 V rated value 3 hp - at 200/208 V rated value 3 hp - at 200/208 V rated value 3 hp	• at 24 V rated value	10 A			
at 110 V rated value 3 A • at 125 V rated value 1 A • at 220 V rated value 1 A • at 600 V rated value 0.15 A Operating current at DC-13	• at 48 V rated value	6 A			
at 125 V rated value 2 A • at 220 V rated value 1 A • at 600 V rated value 0.15 A Operating current at DC-13 0 A • at 24 V rated value 2 A • at 24 V rated value 2 A • at 48 V rated value 2 A • at 48 V rated value 2 A • at 10 V rated value 2 A • at 110 V rated value 0.9 A • at 220 V rated value 0.3 A • at 600 V rated value 0.1 A contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) UL/CSA ratings	• at 60 V rated value	6 A			
at 22 V rated value 1 A • at 600 V rated value 0.15 A Operating current at DC-13 10 A • at 24 V rated value 2 A • at 60 V rated value 2 A • at 10 V rated value 2 A • at 10 V rated value 0.9 A • at 110 V rated value 0.3 A • at 220 V rated value 0.1 A contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) ULCCA ratings 11 A Full-load current (FLA) for three-phase AC motor 1 faulty switching per 100 million (17 V, 1 mA) ULCCA ratings 11 A Vielded mechanical performance [np] • for single-phase AC motor • at 800 V rated value 11 A • at 200/208 V rated value 0.5 hp • at 200/208 V rated value 2 hp • for three-phase AC motor - • at 200/208 V rated value 3 hp • at 200/208 V rated value 3 hp • at 460480 V rated value 7.5 hp • at 46040 V rated value 10 hp Contact rating of auxiliary contacts according to UL A600 / 0600 Stort-circuit protection	• at 110 V rated value	3 A			
at 600 V rated value 0.15 A Operating current at DC-13 10 A at 24 V rated value 2 A at 48 V rated value 2 A at 60 V rated value 2 A at 10 V rated value 2 A at 10 V rated value 0.9 A at 220 V rated value 0.3 A at 800 V rated value 0.1 A contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) UL/CSA ratings Full-load current (FLA) for three-phase AC motor at 480 V rated value 11 A et 480 V rated value 11 A is for single-phase AC motor at 600 V rated value 11 A Vielded mechanical performance [hp] eff or single-phase AC motor - - at 200/208 V rated value 2 hp eff or three-phase AC motor - - at 200/208 V rated value 3 hp - at 200/208 V rated value 3 hp - at 460/480 V rated value 10 hp Contact rating of auxiliary contacts according to UL A600 / Q600 Stort-circuit protection G is son (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) - with type of coordination 1 required <t< td=""><td>• at 125 V rated value</td><td>2 A</td></t<>	• at 125 V rated value	2 A			
Operating current at DC-13 10 A • at 24 V rated value 2 A • at 48 V rated value 2 A • at 60 V rated value 2 A • at 110 V rated value 1 A • at 220 V rated value 0.9 A • at 220 V rated value 0.1 A contact reliability of audilary contacts 1 faulty switching per 100 million (17 V, 1 mA) UL/CSA ratings Full-load current (FLA) for three-phase AC motor • at 480 V rated value 11 A • at 600 V rated value 11 A • at 200 V rated value 11 A • at 200 V rated value 11 A • at 200 V rated value 2 hp • for single-phase AC motor - at 200/208 V rated value • at 200 V rated value 3 hp - at 200/208 V rated value 3 hp - at 200/208 V rated value 3 hp - at 460/480 V rated value 3 hp - at 575/600 V rated value 10 hp	• at 220 V rated value	1 A			
• at 24 V rated value 10 Å • at 48 V rated value 2 Å • at 60 V rated value 2 Å • at 110 V rated value 1 Å • at 125 V rated value 0.9 Å • at 220 V rated value 0.3 Å • at 220 V rated value 0.1 Å contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mÅ) UL/CSA ratings Full-load current (FLA) for three-phase AC motor • at 480 V rated value 11 Å • at 600 V rated value 1 Å • at 600 V rated value 1 Å • at 600 V rated value 1 Å • at 200 V rated value 0.5 hp - at 200/208 V rated value 3 hp - at 200/208 V rated value 3 hp - at 200/208 V rated value 3 hp - at 460/480 V rated value 7.5 hp - at 460/480 V rated value 7.5 hp - at 575/600 V rated value 10 hp C	• at 600 V rated value	0.15 A			
eat 48 V rated value 2 A eat 60 V rated value 2 A eat 110 V rated value 1 A eat 125 V rated value 0.9 A eat 220 V rated value 0.3 A eat 600 V rated value 0.1 A contract reliability of auxiliary contacts I faulty switching per 100 million (17 V, 1 mA) UL/CSA ratings Full-load current (FLA) for three-phase AC motor eat 480 V rated value 11 A eat 600 V rated value 11 A Valleded mechanical performance [hp] • for single-phase AC motor 0.5 hp - at 100/120 V rated value 0.5 hp - at 230 V rated value 2 hp • for three-phase AC motor - - at 200/208 V rated value 3 hp - at 200/208 V rated value 3 hp - at 460/480 V rated value 7.5 hp - at 460/480 V rated value 10 hp Contact rating of auxiliary contacts according to UL A600 / Q600 Short-circuit protection of the main circuit - with type of coordination 1 required gG: 50A (690V,100kA), aM: 20A (690V,	Operating current at DC-13				
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e at 110 V rated value1 A• at 115 V rated value0.9 A• at 220 V rated value0.3 A• at 600 V rated value0.1 Acontact reliability of auxiliary contacts1 faulty switching per 100 million (17 V, 1 mA)UL/CSA ratingsFull-load current (FLA) for three-phase AC motor• at 480 V rated value11 A• at 600 V rated value11 A• at 600 V rated value11 A• for single-phase AC motor- at 110/120 V rated value• for single-phase AC motor- at 210/208 V rated value• at 200 / 208 V rated value2 hp• for three-phase AC motor- at 220/208 V rated value- at 200/208 V rated value3 hp- at 200/208 V rated value3 hp- at 200/208 V rated value7.5 hp- at 575/600 V rated value10 hpContact rating of auxiliary contacts according to ULA600 / Q600Short-circuit protectiong: 50A (690V, 100kA), aM: 20A (690V, 100kA), BS88: 35A (415V, 80kA)- with type of assignment 2 requiredg: 50A (690V, 100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA)	• at 48 V rated value	2 A			
e at 125 V rated value 0.9 A e at 220 V rated value 0.3 A e at 600 V rated value 0.1 A contact reliability of auxiliary contacts I faulty switching per 100 million (17 V, 1 mA) UL/CSA ratings Full-load current (FLA) for three-phase AC motor e at 480 V rated value 11 A e at 600 V rated value 11 A Vielded mechanical performance [hp] e for single-phase AC motor 0.5 hp - at 110/120 V rated value 2 hp e for three-phase AC motor - at 230 V rated value - at 200/208 V rated value 3 hp - at 200/208 V rated value 3 hp - at 460/480 V rated value 7.5 hp - at 575/600 V rated value 10 hp Contact rating of auxiliary contacts according to UL A600 / Q600 Short-circuit protection of the main circuit - with type of coordination 1 required gG: 50A (690V, 100kA), aM: 20A (690V, 100kA), BS88: 35A (415V, 80kA) - with type of assignment 2 required gG: 20A (690V, 100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA)	• at 60 V rated value	2 A			
e at 220 V rated value 0.3 A e at 600 V rated value 0.1 A contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) UL/CSA ratings 1 Full-load current (FLA) for three-phase AC motor 11 A • at 480 V rated value 11 A • at 600 V rated value 11 A Vielded mechanical performance [hp] • • for single-phase AC motor - - at 110/120 V rated value 0.5 hp - at 230 V rated value 2 hp • for three-phase AC motor - - at 200/208 V rated value 3 hp - at 200/208 V rated value 3 hp - at 200/208 V rated value 3 hp - at 460/480 V rated value 7.5 hp - at 460/480 V rated value 10 hp Contact rating of auxiliary contacts according to UL A600 / Q600 Short-circuit protection gG: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) - with type of coordination 1 required gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V,80kA)	• at 110 V rated value	1 A			
• at 600 V rated value 0.1 A contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) 1 faulty switching per 100 million (17 V, 1 mA) 11 A 11 A 11 A VI/CSA ratings 11 A Full-load current (FLA) for three-phase AC motor 11 A • at 600 V rated value 11 A Yielded mechanical performance [hp] 6 for single-phase AC motor - at 110/120 V rated value 0.5 hp - at 200/208 V rated value 2 hp • for three-phase AC motor - - at 200/208 V rated value 3 hp - at 200/208 V rated value 3 hp - at 460/480 V rated value 7.5 hp - at 575/600 V rated value 10 hp Contact rating of auxiliary contacts according to UL A600 / Q600 Short-circuit protection 4600 / Q600 Design of the fuse link 9G: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) - with type of coordination 1 required gG: 20A (690V,100kA), aM: 16A (690V,100kA), BS8	• at 125 V rated value	0.9 A			
contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) ULCSA ratings Full-load current (FLA) for three-phase AC motor • at 480 V rated value 11 A • at 600 V rated value 11 A Yielded mechanical performance [hp] • • for single-phase AC motor 0.5 hp - at 110/120 V rated value 2 hp • for three-phase AC motor - - at 230 V rated value 3 hp - at 200/208 V rated value 3 hp - at 220/230 V rated value 3 hp - at 220/230 V rated value 7.5 hp - at 460/480 V rated value 7.5 hp - at 575/600 V rated value 10 hp Contact rating of auxiliary contacts according to UL A600 / Q600 Short-circuit protection Design of the fuse link • for short-circuit protection of the main circuit G: 50A (690V, 100kA), aM: 20A (690V, 100kA), BS88: 35A (415V, 80kA) - with type of assignment 2 required gG: 20A (690V, 100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA)	• at 220 V rated value	0.3 A			
UL/CSA ratings Full-load current (FLA) for three-phase AC motor • at 480 V rated value 11 A • at 600 V rated value 11 A • at 600 V rated value 11 A Yielded mechanical performance [hp] • for single-phase AC motor 0.5 hp - at 110/120 V rated value 0.5 hp - at 230 V rated value 2 hp • for three-phase AC motor - - at 200/208 V rated value 3 hp - at 200/208 V rated value 3 hp - at 200/208 V rated value 10 hp Contact rating of auxiliary contacts according to UL A600 / Q600 Short-circuit protection Design of the fuse link • for short-circuit protection of the main circuit gG: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) - with type of coordination 1 required gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V,80kA)	• at 600 V rated value	0.1 A			
Full-load current (FLA) for three-phase AC motor 11 A • at 480 V rated value 11 A • at 600 V rated value 11 A Yielded mechanical performance [hp] • for single-phase AC motor - at 110/120 V rated value 0.5 hp - at 230 V rated value 2 hp • for three-phase AC motor - at 200/208 V rated value - at 200/208 V rated value 3 hp - at 220/230 V rated value 3 hp - at 460/480 V rated value 7.5 hp - at 575/600 V rated value 10 hp Contact rating of auxiliary contacts according to UL A600 / Q600 Short-circuit protection	contact reliability of auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)			
Full-load current (FLA) for three-phase AC motor 11 A • at 480 V rated value 11 A • at 600 V rated value 11 A Yielded mechanical performance [hp] • for single-phase AC motor - at 110/120 V rated value 0.5 hp - at 230 V rated value 2 hp • for three-phase AC motor - at 200/208 V rated value - at 200/208 V rated value 3 hp - at 220/230 V rated value 3 hp - at 460/480 V rated value 7.5 hp - at 4575/600 V rated value 10 hp Contact rating of auxillary contacts according to UL A600 / Q600 Short-circuit protection	LIL/CSA ratings				
• at 480 V rated value 11 A • at 600 V rated value 11 A Yielded mechanical performance [hp] 11 A • for single-phase AC motor 0.5 hp - at 110/120 V rated value 2 hp • for three-phase AC motor 2 hp • for three-phase AC motor 3 hp - at 200/208 V rated value 3 hp - at 200/208 V rated value 3 hp - at 460/480 V rated value 7.5 hp - at 4575/600 V rated value 10 hp Contact rating of auxiliary contacts according to UL A600 / Q600 Short-circuit protection gG: 50A (690V, 100kA), aM: 20A (690V, 100kA), BS88: 35A (415V, 80kA) - with type of coordination 1 required gG: 20A (690V, 100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA)					
• at 600 V rated value 11 A Yielded mechanical performance [hp] • for single-phase AC motor - at 110/120 V rated value 0.5 hp - at 230 V rated value 2 hp • for three-phase AC motor 2 hp • for three-phase AC motor 3 hp - at 200/208 V rated value 3 hp - at 220/230 V rated value 3 hp - at 220/230 V rated value 3 hp - at 460/480 V rated value 7.5 hp - at 575/600 V rated value 10 hp Contact rating of auxiliary contacts according to UL A600 / Q600 Short-circuit protection 4600 / Q600 Contact rating of the fuse link 9G: 50A (690V, 100kA), aM: 20A (690V, 100kA), BS88: 35A (415V, 80kA) - with type of coordination 1 required gG: 20A (690V, 100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA)		11 A			
Yielded mechanical performance [hp] • for single-phase AC motor - at 110/120 V rated value 0.5 hp - at 230 V rated value 10 for three-phase AC motor - at 200/208 V rated value 3 hp - at 220/230 V rated value 3 hp - at 220/230 V rated value 3 hp - at 460/480 V rated value 7.5 hp - at 575/600 V rated value 10 hp Contact rating of auxiliary contacts according to UL A600 / Q600 Short-circuit protection Design of the fuse link • for short-circuit protection of the main circuit - with type of coordination 1 required gG: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) - with type of assignment 2 required gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA)		11 A			
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at 110/120 V rated value0.5 hp at 230 V rated value2 hp• for three-phase AC motor at 200/208 V rated value3 hp at 220/230 V rated value3 hp at 220/230 V rated value3 hp at 460/480 V rated value7.5 hp at 575/600 V rated value10 hpContact rating of auxiliary contacts according to ULA600 / Q600Short-circuit protectionDesign of the fuse link• for short-circuit protection of the main circuit with type of coordination 1 requiredgG: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) with type of assignment 2 requiredgG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA)					
 for three-phase AC motor at 200/208 V rated value bp at 220/230 V rated value bp at 460/480 V rated value cat 460/480 V rated value bp at 575/600 V rated value bp Contact rating of auxiliary contacts according to UL A600 / Q600 Short-circuit protection Ge: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) with type of assignment 2 required gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA) 	— at 110/120 V rated value	0.5 hp			
- at 200/208 V rated value3 hp- at 220/230 V rated value3 hp- at 220/230 V rated value3 hp- at 460/480 V rated value7.5 hp- at 575/600 V rated value10 hpContact rating of auxiliary contacts according to ULA600 / Q600Short-circuit protectionDesign of the fuse link• for short-circuit protection of the main circuit- with type of coordination 1 requiredgG: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA)- with type of assignment 2 requiredgG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA)	— at 230 V rated value	2 hp			
- at 200/208 V rated value3 hp- at 220/230 V rated value3 hp- at 220/230 V rated value3 hp- at 460/480 V rated value7.5 hp- at 575/600 V rated value10 hpContact rating of auxiliary contacts according to ULA600 / Q600Short-circuit protectionDesign of the fuse link• for short-circuit protection of the main circuit- with type of coordination 1 requiredgG: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA)- with type of assignment 2 requiredgG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA)	 for three-phase AC motor 				
at 460/480 V rated value7.5 hp at 575/600 V rated value10 hpContact rating of auxiliary contacts according to ULA600 / Q600Short-circuit protectionExample of the fuse link• for short-circuit protection of the main circuit - with type of coordination 1 requiredgG: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA)- with type of assignment 2 requiredgG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA)		3 hp			
at 575/600 V rated value10 hpContact rating of auxiliary contacts according to ULA600 / Q600Short-circuit protectionEnd of the fuse link• for short-circuit protection of the main circuit with type of coordination 1 requiredgG: 50A (690V, 100kA), aM: 20A (690V, 100kA), BS88: 35A (415V,80kA) with type of assignment 2 requiredgG: 20A (690V, 100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA)	— at 220/230 V rated value	3 hp			
at 575/600 V rated value10 hpContact rating of auxiliary contacts according to ULA600 / Q600Short-circuit protectionEnd of the fuse link• for short-circuit protection of the main circuit with type of coordination 1 requiredgG: 50A (690V, 100kA), aM: 20A (690V, 100kA), BS88: 35A (415V,80kA) with type of assignment 2 requiredgG: 20A (690V, 100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA)	— at 460/480 V rated value	7.5 hp			
Short-circuit protection Design of the fuse link • for short-circuit protection of the main circuit gG: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) with type of assignment 2 required gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA)		10 hp			
Design of the fuse link • for short-circuit protection of the main circuit - with type of coordination 1 required gG: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) - with type of assignment 2 required gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA)	Contact rating of auxiliary contacts according to UL	A600 / Q600			
Design of the fuse link • for short-circuit protection of the main circuit - with type of coordination 1 required gG: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) - with type of assignment 2 required gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA)	Short-circuit protection				
 for short-circuit protection of the main circuit with type of coordination 1 required gG: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) with type of assignment 2 required gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA) 					
 with type of coordination 1 required gG: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) with type of assignment 2 required gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA) 	•				
(415V, 80kA)					
	— with type of assignment 2 required	gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A			
• for short-circuit protection of the auxiliary switch gG: 10 A (500 V, 1 kA) required	 for short-circuit protection of the auxiliary switch required 	gG: 10 A (500 V, 1 kA)			

stallation/ mounting/ dimensions	1/ 400° relation manapilla an us that we then the			
 mounting position 	+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface			
lounting type	screw and snap-on mounting onto 35 mm standard mounting rail			
	according to DIN EN 60715			
 Side-by-side mounting 	Yes			
leight	58 mm			
/idth	45 mm			
epth	73 mm			
lequired 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			
onnections/ Terminals				
• Type of electrical connection for main current circuit	screw-type terminals			
 Type of electrical connection for auxiliary and control current circuit 	screw-type terminals			
 Type of electrical connection at contactor for auxiliary contacts 	Screw-type terminals			
 Type of electrical connection of magnet coil 	Screw-type terminals			
ype of connectable conductor cross-sections				
 for main contacts 				
— solid	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²			
— 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)			
	2x (20 16), 2x (18 14), 2x 12			

• solid	0.5 4 mm²
• stranded	0.5 4 mm²
 finely stranded with core end processing 	0.5 2.5 mm²
Connectable conductor cross-section for auxiliary	
contacts	
 single or multi-stranded 	0.5 4 mm²
 finely stranded with core end processing 	0.5 2.5 mm ²
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
AWG number as coded connectable conductor cross	
section	
 for main contacts 	20 12
 for auxiliary contacts 	20 12
Safety related data	
B10 value	
 with high demand rate acc. to SN 31920 	1 000 000
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	
 Mirror contact acc. to IEC 60947-4-1 	Yes; with 3RH29
T1 value for proof test interval or service life acc. to	20 у
IEC 61508	
Protection against electrical shock	finger-safe
Suitability for use safety-related switching OFF	Yes
	165
Certificates/ approvals	

General Product	Approval				EMC
CCC	CSA		KC	EHC	RCM
Functional Safety/Safety of Machinery	Declaration o	f Conformity	Test Certificates	i	Marine / Ship- ping
Type Examination Certificate	EG-Konf.	Miscellaneous	Type Test Certific- ates/Test Report	Special Test Certi- ficate	ABS
Marine / Shippin	g				
B U R E A U V E R I TA S	Llovd's Register LRS	PRS	RINA	RMRS	DNVGLCOM/AF
other					
<u>Confirmation</u>	VDE				

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=3RT2017-1FB41

Cax online generator

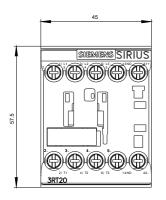
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2017-1FB41

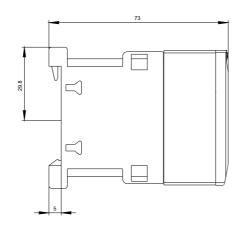
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RT2017-1FB41

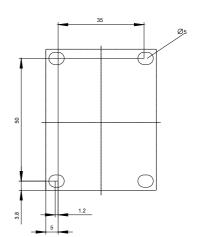
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2017-1FB41&lang=en

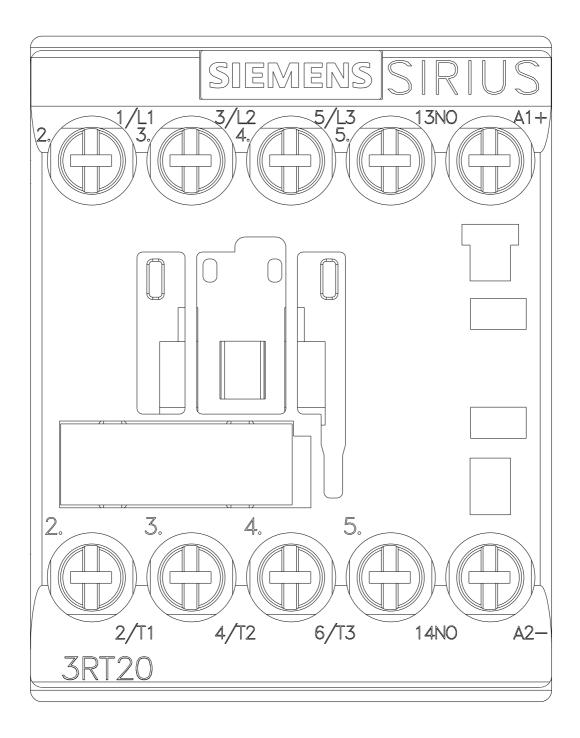
Characteristic: Tripping characteristics, I²t, Let-through current https://support.industry.siemens.com/cs/ww/en/ps/3RT2017-1FB41/char

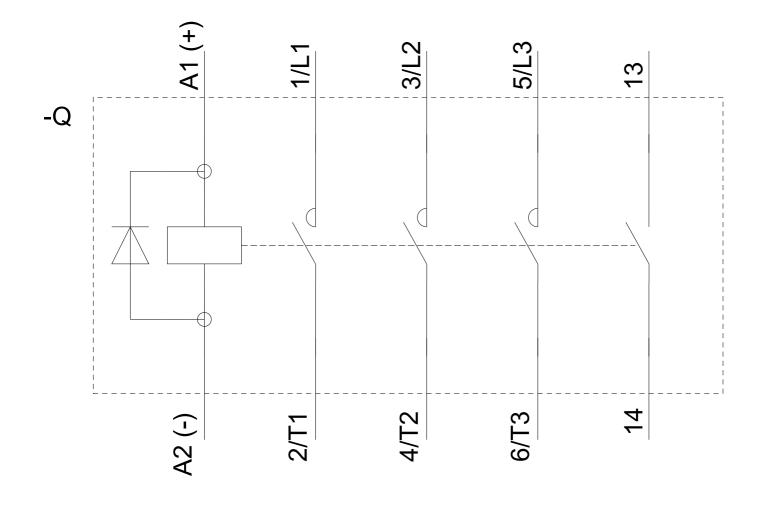
Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2017-1FB41&objecttype=14&gridview=view1











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