3RT2017-1BB41-1AA0

Data sheet



power contactor, AC-3 12 A, 5.5 kW / 400 V 1 NO, 24 V DC 3-pole, Size S00 screw terminal upright mounting position

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 	1.5 W
 at AC in hot operating state per pole 	0.5 W
without load current share typical	4 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 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 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)	10/01/2009
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	
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
at AC-3e rated value maximum	690 V
operational current	
 at AC-1 at 400 V at ambient temperature 40 °C 	22 A
rated value	
— up to 690 V at ambient temperature 40 °C	22 A
rated value	22 /
— up to 690 V at ambient temperature 60 °C	20 A
rated value	
• 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-3e	
— 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
 at AC-5a up to 690 V rated value 	19.4 A
 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 mm²
operational 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
operational 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
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
• at AC-3e	
— 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	J.J RVV
at AC-4	
at 400 V rated value	2 kW
at 690 V rated value	2.5 kW
operating apparent power at AC-6a	
up to 230 V for current peak value n=20 rated value	2.8 kVA
 up to 400 V for current peak value n=20 rated value 	4.9 kVA
 up to 500 V for current peak value n=20 rated value 	6.2 kVA
 up to 690 V for current peak value n=20 rated value 	8 kVA
operating apparent power at AC-6a	
up to 230 V for current peak value n=30 rated value	1.9 kVA
• up to 400 V for current peak value n=30 rated value	3.3 kVA
up to 500 V for current peak value n=30 rated value	4.1 kVA
up to 690 V for current peak value n=30 rated value	5.7 kVA
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-3e maximum	750 1/h
• at AC-4 maximum	250 1/h
Control circuit/ Control	
type of voltage of the control supply voltage	DC
type of voltage of the control supply voltage	

e - fated value operating range factor control supply voltage rated value of magnet coil at DC		
Operating range factor control supply voltage rated value of magnet coil at DC	control supply voltage at DC	
value of magnet coil at DC • Initial value • Initial va		24 V
• Intidactor value		
Closing power of magnet coil at DC		0.8
Closing power of magnet coil at DC		
Notifing power of magnet coil at DC		
act DC		
■ at DC opening delay ■ at DC arcing time control version of the switch operating mechanism Standard A1 - A2 Auxiliary circuit purpher of NO contacts for auxiliary contacts instantaneous contact operational current at AC-15 ■ at 230 V rated value ■ at 600 V rated value ■ at		4 **
a th DC		20 100 mg
### at DC ### arcing time 10 15 ms 10		30 100 HIS
arcting time		7 40
Control version of the switch operating mechanism Standard A1 - A2		
Auxiliary circuit number of NO contacts for auxiliary contacts 1		
Inumber of NO contacts for auxiliary contacts instantaneous contact		Standard AT - AZ
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 600 V rated value • at 600 V rated value • at 60 V rated value • at 110 V rated value • at 220 V rated value • at 220 V rated value • at 220 V rated value • at 24 V rated value • at 250 V rated value • at 260 V rated value • at 27 V rated value • at 28 V rated value • at 29 V rated value • at 29 V rated value • at 34 V rated value • at 40 V rated value • at 60 V rated value • at 10 V rated value • at 10 V rated value • at 10 V rated value • at 220 V rated value • at 220 V rated value • at 220 V rated value • at 230 V rated value • at 230 V rated value • at 230 V rated value • at 300 V rated value • at 300 V rated value • at 300 V rated value • at 400 V rated value • at 500 V rated value • at 600 V rated value • at		
Operational current at AC-12 maximum 10 A		1
Operational current at AC-15 et at 230 V rated value		10 A
• at 230 V rated value • at 400 V rated value • at 400 V rated value • at 690 V rated value • at 690 V rated value • at 690 V rated value • at 48 V rated value • at 48 V rated value • at 125 V rated value • at 120 V rated value • at 120 V rated value • at 120 V rated value • at 160 V rated value • at 17 A 18 V rated value • at 18 V rated value • at 19 V rated value • at 10 V rated value • at 11 A 19 V rated value • at 11 A 10 A 11 A 11 A 11 A 11 A 11 A 12 A 13 A 14 A 15 A 16 A 17 A 18 A		10 /
• at 400 V rated value • at 500 V rated value • at 600 V rated value • at 600 V rated value • at 24 V rated value • at 24 V rated value • at 60 V rated value • at 10 V rated value • at 110 V rated value • at 110 V rated value • at 120 V rated value • at 220 V rated value • at 220 V rated value • at 220 V rated value • at 24 V rated value • at 360 V rated value • at 48 V rated value • at 110 V rated value • at 110 V rated value • at 125 V rated value • at 120 V rated value • at 1600 V rated value • at 1600 V rated value • at 1600 V rated value • at 200 V rated value • at 3600 V rated value • at 200 V rated value • at 480 V rated value • at 200 V rated value • at 480 V rated value • at 480 V rated value • at 480 V rated value • at 200 V rated value • at 480 V rated value • at 200 V rated value • at 575600 V rated value • at 680 V ra	•	10 A
• at 500 V rated value		
a 1690 V rated value		
Operational current at DC-12		
• at 24 V rated value • at 48 V rated value • at 60 V rated value • at 10 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 600 V rated value • at 60 V rated value • at 110 V rated value • at 110 V rated value • at 125 V rated value • at 120 V rated value • at 120 V rated value • at 120 V rated value • at 220 V rated value • at 220 V rated value • at 20 V rated value • at 60 V rated value • at 60 V rated value • at 60 V rated value • at 120 V rated value • at 120 V rated value • at 20 V rated value • at 480 V rated value • at 20 V rated value • at 480 V rated value • at 20 V rated value • at 460 V rated value • at 20 V rated value • at 20 V rated value • at 600 V rated value • at 600 V rated value • at 600 V rated value • at 500 V rated value • at 600 V rated value • at 500 V rated value • at 710 rated valu		I A
• 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 220 V rated value • at 600 V rated value • at 48 V rated value • at 48 V rated value • at 48 V rated value • at 10 V rated value • at 110 V rated value • at 110 V rated value • at 125 V rated value • at 22 V rated value • at 22 V rated value • at 22 V rated value • at 125 V rated value • at 22 V rated value • at 80 V rated value • at 600 V rated value • at 110 V rated value • at 110 V rated value • at 230 V rated value • at 230 V rated value • at 230 V rated value • at 110 V rated value • for 3-phase AC motor • at 480 V rated value • for 3-phase AC motor • at 200 V rated value • for 3-phase AC motor • at 200 V rated value • for 3-phase AC motor • at 460 V rated value • for 3-phase AC motor • at 200 V rated value • for 3-phase AC motor • at 460 V rated value • for 3-phase AC motor • at 460 V rated value • for 3-phase AC motor • at 460 V rated value • for 3-phase AC motor • at 460 V rated value • for 3-phase AC motor • at 460 V rated value • for 3-phase AC motor • at 460 V rated value • for 3-phase AC motor • at 460 V rated value • for 3-phase AC motor • at 460 V rated value • for 3-phase AC motor • at 460 V rated value • for 3-phase AC motor • at 460 V rated value • for 3-phase AC motor • at 200 V rated value • for 3-phase AC motor • at 460 V rated value • for 3-phase AC motor • at 600 V rated value • for 3-phase AC motor	•	40.4
• at 60 V rated value • at 110 V rated value • at 220 V rated value • at 220 V rated value • at 220 V rated value • at 600 V rated value • at 600 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 125 V rated value • at 220 V rated value • at 220 V rated value • at 220 V rated value • at 360 V rated value • at 600 V rated value • at 480 V rated value contact reliability of auxiliary contacts I faulty switching per 100 million (17 V, 1 mA) IULOSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value 11 A yielded mechanical performance [hp] • for single-phase AC motor - at 230 V rated value 2 hp • for 3-phase AC motor - at 220/230 V rated value 3 hp - at 220/230 V rated value - at 220/230 V rated value 3 hp - at 220/230 V rated value - at 460/480 V rated value 7.5 hp contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link • for short-circuit protection of the main circuit - with type of coordination 1 required with type of assignment 2 required gG: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) - with type of assignment 2 required gG: 50A (690V,100kA), aM: 16A (690V,100kA), BS88: 20A (415V, V		
• at 600 V rated value 0.15 A operational current at DC-13 • at 24 V rated value 2 A • at 48 V rated value 2 A • at 48 V rated value 2 A • at 110 V rated value 0.3 A • at 125 V rated value 0.3 A • at 220 V rated value 0.3 A • at 600 V rated value 0.1 A • at 125 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 full-load current (FLA) for 3-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 — at 110/120 V rated value 0.5 hp — at 230 V rated value 2 hp • for 3-phase AC motor — at 200/208 V rated value 2 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 475/600 V rated value 7.5 hp — at 4575/600 V rated value 7.5 hp — at 575/600 V rate		
Operational current at DC-13 • at 24 V rated value		
 at 24 V rated value at 48 V rated value at 8 V rated value at 60 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 480 V rated value at 480 V rated value at 600 V rated value at 700 V rated value at 700 V rated value at 11 A yielded mechanical performance [hp] for single-phase AC motor at 200 V rated value at 230 V rated value at 230 V rated value at 220/230 V rated value at 460/480 V rated value at 460/480 V rated value at 460/480 V rated value at 575/600 V rated value by at 4600 V G600 Short-circuit protection design of the fuse link for short-circuit protection of the main circuit with type of coordination 1 required with type of assignment 2 required gG: 50A (690V,100KA), aM: 20A (690V,100KA), BS88: 35A (415V,80KA) gG: 20A (690V,100KA), aM: 16A (690V, 100KA), BS88: 20A (415V,80KA) 		U.15 A
• at 48 V rated value • at 60 V rated value • at 110 V rated value • at 1125 V rated value • at 220 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 contact reliability of auxiliary contacts I faulty switching per 100 million (17 V, 1 mA) UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value • at 600 V rated value	•	40.4
• at 60 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 480 V rated value • at 480 V rated value • at 600 V rated value • at 700 V rated value • at 110 V rated value • for single-phase AC motor • at 110 V rated value • for 3-phase AC motor • at 200 V rated value • for 3-phase AC motor • at 220 V rated value • for 3-phase AC motor • at 220 V rated value • for 3-phase AC motor • at 220 V rated value • for 3-phase AC motor • at 220 V rated value • for 3-phase AC motor • at 2575/600 V rated value • for 575/600 V rated value • for short-circuit protection design of the fuse link • for short-circuit protection of the main circuit • with type of coordination 1 required • with type of assignment 2 required • with type of assignment 2 required • gG: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 25A (415V,80kA) • gG: 20A (690V,100kA), aM: 16A (690V,100kA), BS88: 20A (415V,80kA)		
 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 1 faulty switching per 100 million (17 V, 1 mA) ULCSA ratings full-load current (FLA) for 3-phase AC motor at 480 V rated value at 600 V rated value for single-phase AC motor at 11 A et 110/120 V rated value for 3-phase AC motor at 230 V rated value for 3-phase AC motor at 200/208 V rated value at 220/230 V rated value at 220/230 V rated value at 575/600 V rated value to hp contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link for short-circuit protection of the main circuit with type of assignment 2 required gG: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V,80kA) 		
 at 125 V rated value at 220 V rated value at 600 V rated value full-load current (FLA) for 3-phase AC motor at 480 V rated value at 600 V rated value for single-phase AC motor at 11 A yielded mechanical performance [hp] for single-phase AC motor at 230 V rated value for 3-phase AC motor at 200/230 V rated value at 2575/600 V rated value at 600 / Q600 Short-circuit protection design of the fuse link for short-circuit protection of the main circuit with type of coordination 1 required with type of assignment 2 required gG: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 25A (415V,80kA) gG: 20A (690V,100kA), am: 16A (690V, 100kA), BS88: 20A (415V, 80kA) 		
at 220 V rated value at 600 V rated value contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) UL/CSA ratings full-load current (FLA) for 3-phase AC motor at 480 V rated value 11 A at 600 V rated value 11 A if or single-phase AC motor at 110/120 V rated value at 230 V rated value 2 hp for 3-phase AC motor at 200/208 V rated value 3 hp at 220/230 V rated value 3 hp at 480/480 V rated value 3 hp at 575/600 V rated value 7.5 hp at 575/600 V rated value 7.5 hp contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link for short-circuit protection of the main circuit with type of coordination 1 required with type of assignment 2 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) gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V,80kA)		
at 600 V rated value contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) UL/CSA ratings full-load current (FLA) for 3-phase AC motor at 480 V rated value at 600 V rated value for single-phase AC motor - at 110/120 V rated value for 3-phase AC motor - at 200/208 V rated value at 220/230 V rated value - at 220/230 V rated value - at 460/480 V rated value - at 575/600 V rated value contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link for short-circuit protection of the main circuit - with type of coordination 1 required with type of assignment 2 required at 480 V rated value 0.5 hp 2 hp 0.5 hp 2 hp 0.5 hp 2 hp 0.6 hp 0.7.5 hp 10 hp A600 / Q600 Short-circuit protection design of the fuse link or short-circuit protection of the main circuit with type of assignment 2 required gG: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V,80kA)		
contact reliability of auxiliary contacts I faulty switching per 100 million (17 V, 1 mA) UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value 11 A yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value — at 230 V rated value • for 3-phase AC motor — at 200/208 V rated value — at 220/230 V rated value — at 460/480 V rated value — at 460/480 V rated value — at 575/600 V rated value — at 575/600 V rated value — at 575/600 V rated value — with type of coordination 1 required — with type of coordination 1 required — with type of assignment 2 required I faulty switching per 100 million (17 V, 1 mA) I faulty switched value I		
full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value • for single-phase AC motor — at 110/120 V rated value • for single-phase AC motor — at 230 V rated value • for 3-phase AC motor — at 200/208 V rated value — at 200/208 V rated value — at 200/208 V rated value — at 460/480 V rated value — at 460/480 V rated value — at 575/600 V rated value — to hp contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link • for short-circuit protection of the main circuit — with type of coordination 1 required — with type of assignment 2 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,		
full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value 11 A yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value — at 230 V rated value • for 3-phase AC motor — at 200/208 V rated value • for 3-phase AC motor — at 220/230 V rated value — at 460/480 V rated value — at 460/480 V rated value — at 575/600 V rated value To hp contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link • for short-circuit protection of the main circuit — with type of coordination 1 required — with type of assignment 2 required gG: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V,80kA)		1 faulty switching per 100 million (17 V, 1 mA)
at 480 V rated value at 600 V rated value yielded mechanical performance [hp] for single-phase AC motor	UL/CSA ratings	
interpretation of the fuse link into type of coordination 1 required into type of coordination 1 required into type of coordination 1 required into resingle-phase AC motor into a to 110/120 V rated value into a to 110/120 V rated value into a to 110/120 V rated value into a to 230 V rated value into a to 200/208 V rated value into a to 220/230 V rated value into a to 220/230 V rated value into a to 460/480		
yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value — at 230 V rated value • for 3-phase AC motor — at 200/208 V rated value — at 220/230 V rated value — at 460/480 V rated value — at 575/600 V rated value — at 575/600 V rated value Contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link • for short-circuit protection of the main circuit — with type of coordination 1 required — with type of assignment 2 required gG: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V,80kA)		
 for single-phase AC motor — at 110/120 V rated value — at 230 V rated value 5 for 3-phase AC motor — at 200/208 V rated value — at 220/230 V rated value — at 460/480 V rated value — at 575/600 V rated value To hp contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link for short-circuit protection of the main circuit — with type of coordination 1 required — with type of assignment 2 required G.5 hp 2 hp 3 hp 7.5 hp 10 hp A600 / Q600 Short-circuit protection gG: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V,80kA) gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V,80kA) gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V,80kA) gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V,80kA) gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V,80kA) gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V,80kA) gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V,80kA) gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V,80kA) gG: 20A (690V,100kA), aM: 16A (690V,100kA), BS88: 20A (415V,80kA) gG: 20A (690V,100kA), aM: 16A (690V,100kA), BS88: 20A (415V,80kA) gG: 20A (690V,100kA), aM: 16A (690V,100kA), BS88: 20A (415V,80kA) gG: 20A (690V,100kA), aM: 16A (690V,100kA), BS88: 20A (415V,80kA) gG: 20A (690V,100kA), aM: 16A (690V,100kA), BS88: 20A (415V,80kA) gG: 20A (690V,100kA), aM: 16A (690V,100kA), BS88: 20A (415V,80kA) gG: 20A (690V,100kA), aM: 16A (690V,100kA), BS88: 20A (415V,80kA) gG: 20A (690V,100kA), aM: 16A (6		11 A
- at 110/120 V rated value - at 230 V rated value 9 for 3-phase AC motor - 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 Short-circuit protection design of the fuse link 9 for short-circuit protection of the main circuit - with type of coordination 1 required with type of assignment 2 required 9.5 hp 2 hp 3 hp 4.600 / Q600 A600 / Q600 Short-circuit protection 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 230 V rated value for 3-phase AC motor at 200/208 V rated value 3 hp at 220/230 V rated value 3 hp at 460/480 V rated value at 575/600 V rated value by contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link for short-circuit protection of the main circuit with type of coordination 1 required with type of assignment 2 required gG: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 		
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- at 200/208 V rated value - 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 Short-circuit protection design of the fuse link • for short-circuit protection of the main circuit - with type of coordination 1 required with type of assignment 2 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,		2 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 Short-circuit protection design of the fuse link • for short-circuit protection of the main circuit - with type of coordination 1 required with type of assignment 2 required GG: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) GG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V,	·	
- at 460/480 V rated value - at 575/600 V rated value 10 hp contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link • for short-circuit protection of the main circuit - with type of coordination 1 required with type of assignment 2 required GG: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V,		·
- at 575/600 V rated value contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link • for short-circuit protection of the main circuit - with type of coordination 1 required with type of assignment 2 required gG: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V,		
contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link • for short-circuit protection of the main circuit — with type of coordination 1 required — with type of assignment 2 required GG: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V,		
Short-circuit protection design of the fuse link • for short-circuit protection of the main circuit — with type of coordination 1 required — with type of assignment 2 required gG: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V,		
design of the fuse link ● for short-circuit protection of the main circuit — with type of coordination 1 required — with type of assignment 2 required GG: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V,	contact rating of auxiliary contacts according to UL	A600 / Q600
 for short-circuit protection of the main circuit — with type of coordination 1 required — with type of assignment 2 required gG: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 	Short-circuit protection	
 — with type of coordination 1 required — with type of assignment 2 required — with type of assignment 2 required — gG: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) — gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 	design of the fuse link	
— with type of assignment 2 required gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V,	 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)
80kA)	 — with type of assignment 2 required 	
		80kA)

 for short-circuit protection of the auxiliary switch required 	gG: 10 A (500 V, 1 kA)
required installation/ mounting/ dimensions	
mounting position	standing, on horizontal 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	58 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
connections/ Terminals	Othin
type of electrical connection	
for main current circuit	screw-type terminals
for auxiliary and control circuit	screw-type terminals screw-type terminals
-	
at contactor for auxiliary contacts	Screw-type terminals
of magnet coil type of connectable conductor cross-sections	Screw-type terminals
• for main contacts	
	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²
— solid	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²
— solid or stranded	
— finely stranded with core end processing	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
at AWG cables for main contacts	2x (20 16), 2x (18 14), 2x 12
connectable conductor cross-section for main contacts	
• solid	0.5 4 mm²
stranded	0.5 4 mm ²
finely stranded with core end processing	0.5 2.5 mm²
connectable conductor cross-section for auxiliary contacts	
solid or stranded	0.5 4 mm²
finely stranded with core end processing	0.5 2.5 mm²
type of connectable conductor cross-sections	
for auxiliary contacts	
— solid or 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 cables 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
afety related data	
product function	
 mirror contact according to IEC 60947-4-1 	Yes; with 3RH29
B10 value with high demand rate according to SN 31920	1 000 000
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 y
protection class IP on the front according to IEC 60529	IP20
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front
suitability for use	
safety-related switching OFF	Yes

Certificates/ approvals

General Product Approval



Confirmation





<u>KC</u>





Type Examination Certificate



Type Test Certificates/Test Report

Special Test Certificate

Test Certificates Marine / Shipping

Miscellaneous











Marine / Shipping other Dangerous Good





Confirmation



<u>Transport Information</u>

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=3RT2017-1BB41-1AA0

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2017-1BB41-1AA0

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2017-1BB41-1AA0

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2017-1BB41-1AA0&lang=en

Characteristic: Tripping characteristics, I2t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RT2017-1BB41-1AA0/char

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

 $\underline{\text{http://www.automation.siemens.com/bilddb/index.aspx?view=Search\&mlfb=3RT2017-1BB41-1AA0\&objecttype=14\&gridview=view1}$

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