SIEMENS

Data sheet 3RT2017-2BW42



power contactor, AC-3 12 A, 5.5 kW / 400 V 1 NC, 48 V DC 3-pole, Size S00 Spring-type 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 	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 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 $^{\circ}\text{C}$ rated value	20 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-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 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 operational current for approx. 200000 operating	4 mm ²
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	0.07.
— at 24 V rated value	20 A
	12 A
— at 110 V rated value	1.6 A
— at 220 V rated value	
— 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 OAN material value	00.4
— 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-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	
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
control supply voltage at DC	
· · · · · · · · · · · · · · · · · · ·	

practing range factor control supply voltage rated value of magnet coil at DC * infisi value	rated value	48 V
Value of magnet coil at DC Value		10 1
• full-scale value	_	0.8
closing power of magnet coil at DC holding power of magnet coil at DC closing delay		
Auxiliary circuit Auxiliary contacts Auxiliary contacts Auxiliary circuit Au		
closing delay		
		7 **
opening delay at DC arcing time control version of the switch operating mechanism Auxillary circuit number of NC contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-12 maximum operational current at AC-13 maximum operational current at AC-12 maximum operational current at AC-13 maximum operational current at DC-12 at 200 v rated value at 600 v rated value at 60		30 100 mg
** at DC		30 100 IIIS
arcing time control version of the switch operating mechanism Auxiliary circuit Turmber of NC contacts for auxiliary contacts Instantaneous contact Operational current at AC-12 maximum Operational current at AC-12 maximum Operational current at AC-13 maximum Operational current at AC-14 maximum Operational current at AC-15 • at 230 V rated value • at 590 V rated value • at 690 V rated value • at 48 V rated value • at 100 V rated value • at 110 V rated value • at 120 V rated value • at 220 V rated value • at 48 V rated value • at 48 V rated value • at 120 V rated value • at 120 V rated value • at 220 V rated value • at 220 V rated value • at 48 V rated value • at 80 V rated value • at 10 V rated value • at 80 V rated value • at 80 V rated value • at 10 V rated value • at 80 V rated value • at 10 V rated value • at 80 V rated value • at 10 V rated value • at 80 V rated value • at 10 V rated value • at 80 V r		7 13 ms
Control version of the switch operating mechanism Standard A1 - A2		
Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 600		
Instantaneous contact		Stalldard A1 - A2
instantaneous contact operational current at AC-15 et 230 V rated value et 360 V rated value et 369 V rated value et 369 V rated value et 369 V rated value et 360 V rated value		
Operational current at AC-12 maximum	•	1
at 230 V rated value		10.0
• 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 48 V rated value • at 126 V rated value • at 126 V rated value • at 126 V rated value • at 24 V rated value • at 25 V rated value • at 260 V rated value • at 27 V rated value • at 28 V rated value • at 28 V rated value • at 28 V rated value • at 126 V rated value • at 126 V rated value • at 127 V rated value • at 128 V rated value • at 129 V rated value • at 120 V rated value • at 120 V rated value • at 220 V rated value • at 220 V rated value • at 220 V rated value • at 300 V rated value • at 480 V rated value • at 480 V rated value • at 600 V rated value • at 600 V rated value • at 200 V rated value • at 480 V rated value • at 200 V rated value • at 480 V rated value • at 57500 V rated value • at 57500 V rated value • at 67500 V rated value • at 67000000000000000000000000000000000000	·	10 A
• at 400 V rated value • at 500 V rated value • at 600 V rated value • at 600 V rated value operational current at DC-12 • at 24 V rated value • at 24 V rated value • at 60 V rated value • at 160 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 60 V rated value • at 100 V rated value • at 110 V rated value • at 125 V rated value • at 100 V rated value • at 100 V rated value • at 100 V rated value • at 200 V rated value • at 200 V rated value • at 60 V rated value • at 200 V rated value • at 60 V rated value • at 200 V rated value • at 60 V rat	•	10 A
• 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 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 48 V rated value • at 600 V rated value • at 110 V rated value • at 125 V rated value • at 200 V rated value • at 600 V rated value • at 600 V rated value • at 600 V rated value • at 480 V rated value • at 480 V rated value • at 480 V rated value • at 600 V rated value • at 480 V rated value • at 480 V rated value • at 600 V rated value • for short-circuit protection of the main circuit • at 575600 V rated value • at 575600 V rated value • for short-circuit protection of the main circuit • with type of coordination 1 required • for short-circuit protection of the auxiliary switch		
• at 690 V rated value		
10 A 12		
		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 800 V rated value • at 800 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 125 V rated value • at 220 V rated value • at 800 V rated value • at 480 V rated value • at 230 V rated value	•	40.0
** at 60 V rated value		
** at 110 V rated value 2 A ** at 125 V rated value 2 A ** at 220 V rated value 0.15 A operational current at DC-13 ** at 24 V rated value 10 A ** at 48 V rated value 2 A ** at 160 V rated value 2 A ** at 160 V rated value 2 A ** at 110 V rated value 2 A ** at 110 V rated value 1 A ** at 125 V rated value 2 A ** at 110 V rated value 1 A ** at 125 V rated value 1 A ** at 220 V rated value 2 A ** at 220 V rated value 3 A ** at 200 V rated value 3 A ** at 300 V rated value 3 A ** at 300 V rated value 3 A ** at 300 V rated value 3 A ** at 480 V rated value 3 A ** at 480 V rated value 1 A ** at 480 V rated value 1 A ** at 300 V rated value 1 A ** at 300 V rated value 3 A ** at 300 V r		
* at 125 V rated value		
• at 600 V rated value		
operational current at DC-13 • at 24 V rated value • at 48 V rated value • at 60 V rated value • at 110 V rated value • at 110 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 contact reliability of auxiliary contacts If aulty switching per 100 million (17 V, 1 mA) ULICSA 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		
• 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 110 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 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 200/208 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 — at 600 V q600 Short-circuit protection design of the fuse link • for short-circuit protection of the main circuit — with type of assignment 2 required — with type of assignment 2 required — with type of assignment 2 required • for short-circuit protection of the auxiliary switch • for short-circuit protection of the auxiliary switch • for short-circuit protection of the auxiliary switch • for short-circuit protection of the auxiliary switch • for short-circuit protection of the auxiliary switch • for short-circuit protection of the auxiliary switch • for short-circuit protection of the auxiliary switch • for short-circuit protection of the auxiliary switch		0.15 A
• at 48 V rated value • at 60 V rated value • at 110 V rated value • at 112 V rated value • at 122 V rated value • at 220 V rated value • at 220 V rated value • at 600 V rated value Contact reliability of auxiliary contacts full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 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 • for 3-phase AC motor — at 230 V rated value • for 3-phase AC motor — at 220/230 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 — at 695/600 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 • for short-circuit protection of the auxiliary switch • for short-circuit protection of the auxiliary switch • for short-circuit protection of the auxiliary switch • for short-circuit protection of the auxiliary switch • for short-circuit protection of the auxiliary switch	•	
at 10 V rated value at 125 V rated value at 125 V rated value at 125 V rated value 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 at 600 V rated value at 600 V rated value at 11 A yielded mechanical performance [hp] for single-phase AC motor - at 110/120 V rated value - at 230 V rated value at 200/208 V rated value at 200/208 V rated value - at 460/480 V rated value - at 450/480 V rated value - at 575/600 V rated value - at 575/600 V rated value - at 695/600 V rated value - at 695/600 V rated value - at 696/80 V rated value - at 696/90 V rated value - with type of coordination 1 required - with type of coordination 1 required - with type of assignment 2 required - with type of assignment 2 required - with type of assignment 2 required - for short-circuit protection of the main circuit - with type of assignment 2 required - for short-circuit protection of the auxiliary switch - for short-circuit protection of the auxiliary switch		
 at 110 V rated value at 125 V rated value at 220 V rated value at 30 V rated value at 600 V rated value 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 at 600 V rated value in 1 A at 600 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 575/600 V rated value at 575/600 V rated value both p 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) gG: 10 A (500 V, 1 kA) 	 at 48 V rated value 	
at 125 V rated value at 220 V rated value at 600 V rated value contact reliability of auxiliary contacts full-load current (FLA) for 3-phase AC motor at 480 V rated value for single-phase AC motor - at 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 for 3-phase AC motor - at 200/208 V rated value for 3-phase AC motor - at 200/208 V rated value for 3-phase AC motor - at 200/208 V rated value for 3-phase AC motor - at 200/208 V rated value for 3-phase AC motor - at 200/208 V rated value for 3-phase AC motor - at 200/208 V rated value for 3-phase AC motor - at 200/208 V rated value for 3-phase AC motor - at 200/208 V rated value for 3-phase AC motor - at 200/208 V rated value for 3-phase AC motor - at 200/208 V rated value for 3-phase AC motor - at 200/208 V rated value for 3-phase AC motor - at 200/208 V rated value for 3-phase AC motor - at 200/208 V rated value for 3-phase AC motor - at 200/208 V rated value for 3-phase AC motor - at 200/208 V rated value for 3-phase AC motor - at 200/208 V rated value for 3-phase AC motor ghase AC motor - at 200/208 V rated value for 3-phase AC motor at 200/208 V rated value ghase AC motor ghase AC motor at 200/208 V rated value ghase AC motor at 200/208 V rated value ghase AC motor ghase AC motor at 200/208 V rated value ghase AC motor at 200/208 V rated value ghase AC motor at 200/208 V rated value ghase AC motor ghase AC motor at 480 V rated value ghase AC motor	at 60 V rated value	2 A
at 220 V rated value at 600 V rated value at 600 V rated value contact reliability of auxiliary contacts If aulty switching per 100 million (17 V, 1 mA) ILICSA 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 at 230 V rated value at 230 V rated value at 230 V rated value at 200/208 V rated value at 220/230 V rated value at 220/230 V rated value at 2575/600 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 a for short-circuit protection of the main circuit — with type of coordination 1 required — with type of assignment 2 required at 600 V, 1 MA) • for short-circuit protection of the auxiliary switch	 at 110 V rated value 	1 A
at 600 V rated value contact reliability of auxiliary contacts UL/CSA ratings full-load current (FLA) for 3-phase AC motor	• at 125 V rated value	0.9 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 • at 600 V rated value 11 A yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value • for 3-phase AC motor — at 220/230 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 — 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 • for short-circuit protection of the auxiliary switch	at 220 V rated value	0.3 A
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 — 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 assignment 2 required — with type of assignment 2 required • for short-circuit protection of the auxiliary switch	at 600 V rated value	0.1 A
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 Tontact 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 — with type of assignment 2 required • for short-circuit protection of the auxiliary switch	contact reliability of auxiliary contacts	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 - 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 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 for short-circuit protection of the auxiliary switch for short-circuit protection of the auxiliary switch gG: 20A (690V,100kA), aM: 20A (690V,100kA), BS88: 20A (415V,80kA) gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V,80kA) gG: 10 A (500 V, 1 kA)	UL/CSA ratings	
• at 600 V rated value yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value — at 230 V rated value 9 tor 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 — 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 • for short-circuit protection of the auxiliary switch	full-load current (FLA) for 3-phase AC motor	
yielded mechanical performance [hp] • for 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 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 • for short-circuit protection of the auxiliary switch	 at 480 V rated value 	11 A
 for 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 — at 460/480 V rated value — at 575/600 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 for short-circuit protection of the auxiliary switch for short-circuit protection of the auxiliary switch 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: 10 A (500 V, 1 kA) 	 at 600 V rated value 	11 A
 for 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 — at 460/480 V rated value — at 575/600 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 for short-circuit protection of the auxiliary switch for short-circuit protection of the auxiliary switch 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: 10 A (500 V, 1 kA) 	yielded mechanical performance [hp]	
- at 110/120 V rated value - at 230 V rated value - at 200/208 V rated value - 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 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 - 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) - gG: 10 A (500 V, 1 kA)		
 — 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 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 — with type of assignment 2 required — for short-circuit protection of the auxiliary switch ■ for short-circuit protection of the auxiliary switch ■ for short-circuit protection of the auxiliary switch 2 hp A hp		0.5 hp
 • for 3-phase AC motor — 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 9G: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) • for short-circuit protection of the auxiliary switch 9G: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V,80kA) §G: 10 A (500 V, 1 kA) 	— at 230 V rated value	
- 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 • for short-circuit protection of the auxiliary switch • for short-circuit protection of the auxiliary switch 9 G: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) 8 GG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V,80kA) 9 G: 10 A (500 V, 1 kA)	• for 3-phase AC motor	
- at 220/230 V rated value - 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 • for short-circuit protection of the auxiliary switch • for short-circuit protection of the auxiliary switch 3 hp 7.5 hp 4.600 / Q600 Short-circuit protection Ges 500 (6900 / 100kA), aM: 200 (6900 / 100kA), BS88: 350 (4150 / 80kA) Ges 200 (6900 / 100kA), aM: 160 (6900 / 100kA), BS88: 200 (4150 / 80kA) Ges 10 A (500 V / 1 kA)		3 hp
- 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 • for short-circuit protection of the auxiliary switch • for short-circuit protection of the auxiliary switch 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: 10 A (500 V, 1 kA)		·
- 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 • for short-circuit protection of the auxiliary switch • for short-circuit protection of the auxiliary switch 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: 10 A (500 V, 1 kA)		
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 • for short-circuit protection of the auxiliary switch G: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) g: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V,80kA) g: 10 A (500 V, 1 kA)		
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 • for short-circuit protection of the auxiliary switch 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 short-circuit protection of the auxiliary switch GG: 10 A (500 V, 1 kA)		·
 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 short-circuit protection of the auxiliary switch gG: 10 A (500 V, 1 kA) 		
 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) gG: 10 A (500 V, 1 kA) 		
 — 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 short-circuit protection of the auxiliary switch gG: 10 A (500 V, 1 kA) 	-	
— with type of assignment 2 required gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA) • for short-circuit protection of the auxiliary switch gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA)		aG: 504 (690V 100k4) aM: 204 (690V 100k4) PS99: 254 (415V 90k4)
• for short-circuit protection of the auxiliary switch gG: 10 A (500 V, 1 kA)		
• for short-circuit protection of the auxiliary switch gG: 10 A (500 V, 1 kA)	— with type of assignment 2 required	
	for short-circuit protection of the auxiliary switch	·

nstallation/ 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	70 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
onnections/ Terminals	
type of electrical connection	
• for main current circuit	spring-loaded terminals
 for auxiliary and control circuit 	spring-loaded terminals
at contactor for auxiliary contacts	Spring-type terminals
of magnet coil	Spring-type terminals
type of connectable conductor cross-sections	
• for main contacts	0 (0.5 4 3)
— solid	2x (0.5 4 mm²)
— solid or stranded	2x (0,5 4 mm²)
— finely stranded with core end processing	2x (0.5 2.5 mm²)
— finely stranded without core end processing	2x (0.5 2.5 mm²)
at AWG cables for main contacts	2x (20 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 mm ²
finely stranded without core end processing	0.5 2.5 mm ²
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
• finely stranded without core end processing	0.5 2.5 mm²
type of connectable conductor cross-sections	
for auxiliary contacts	
— solid or stranded	2x (0,5 4 mm²)
 finely stranded with core end processing 	2x (0.5 2.5 mm²)
 finely stranded without core end processing 	2x (0.5 2.5 mm²)
at AWG cables for auxiliary contacts	2x (20 12)
AWG number as coded connectable conductor cross section	
for main contacts	20 12
for auxiliary contacts	20 12

 mirror contact according to IEC 60947-4-1 	Yes
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>



EMC

Functional Safety/Safety of Machinery

Declaration of Conformity

Test Certificates



Type Examination Certificate





Special Test Certificate

Type Test Certificates/Test Report

Marine / Shipping













Marine / Shipping

other

Dangerous Good



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=3RT2017-2BW42

Cax online generator

 $\underline{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RT2017-2BW42}$

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2017-2BW42

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

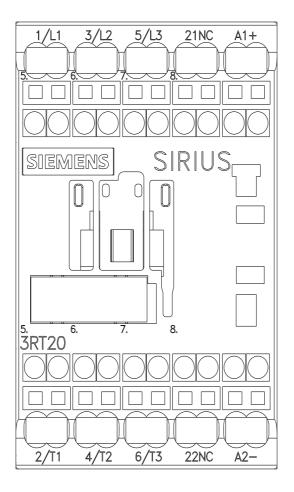
 $\underline{\text{http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2017-2BW42\&lang=en}}$

Characteristic: Tripping characteristics, I2t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RT2017-2BW42/char

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

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2017-2BW42&objecttype=14&gridview=view1



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