SIEMENS

Data sheet

3RT2017-1UB42-1AA0



Power contactor, AC-3 12 A, 5.5 kW / 400 V 1 NC, 24 V DC with varistor integrated, 3-pole, size S00, screw terminals Upright mounting position

Figure similar

product brand name	SIRIUS
product designation	Coupling 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
• per pole	1.2 W
power loss [W] for rated value of the current 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 acc. 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
reference code acc. to IEC 81346-2	Q
Substance Prohibitance (Date)	01.10.2009
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 acc. 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
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 °C rated value at AC-3 	20 A
— 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
•	9.9 A
at AC-5b up to 400 V rated value at AC-6a	9.9 A
• at AC-6a	7.0 4
— 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 6.7 A
 up to 690 V for current peak value n=20 rated value at AC-6a 	0.1 A
	4.8 A
— up to 230 V for current peak value n=30 rated value	
— 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 up to 690 V for current peak value n=30 rated 	4.8 A
value	7.0 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	A 8.0
— 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
-t 440 \ /t	20 A
 at 110 V rated value 	
— at 110 V rated value — at 220 V rated value	20 A
	20 A 1.3 A
— at 220 V rated value	
— at 220 V rated value— at 440 V rated value	1.3 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 power 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 value	6.2 kV·A
• up to 690 V for current peak value n=20 rated value	8 kV·A
operating apparent power 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 varistor
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

Auxiliary circuit	control version of the switch operating mechanism	Standard A1 - A2
Immissinatine No. contracts 1 Instinatine No. contracts 1 Instination No. contracts 1 Institute No. contracts No. contracts 1 Institute No. contracts No		
Operational current at AC-12 maximum	number of NC contacts for auxiliary contacts	1
operational current at AC-15 • at 230 V rated value		10 A
10 A	•	
• at 400 V rated value	•	10 Δ
• at 500 V rated value		
• at 690 V rated value		
Operational current at DC-12		
• at 24 V rated value		1/
at 48 V rated value	•	10 A
• at 80 V rated value • at 110 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 24 V rated value • at 80 V rated value • at 80 V rated value • at 80 V rated value • at 125 V rated value • at 230 V rated value • at 180 V rated value • at 230 V rated value • at 200 V rated value • at 576/600 V rated value • for short-circuit protection of the main circuit • with type of assignment 2 required • for short-circuit protection of the main circuit • with type of coordination 1 required • with type of coordination 1 required • for short-circuit protection of the main circuit • with type of sasignment 2 required • side-by-side mounting • side-by-side mounting • side-by-side mounting • with side-by-side mounting • with side-by-side mounting • with side-by-side mounting • with side-by-side mounting		
• at 110 V rated value		
• at 125 V rated value		
• at 220 V rated value		
• at 600 V rated value 0.15 A		
operational current at DC-13 • at 24 V rated value		
• at 24 V rated value 2 A • at 48 V rated value 2 A • at 10 V rated value 2 A • at 110 V rated value 1 A • at 125 V rated value 0.9 A • at 220 V rated value 0.9 A • at 220 V rated value 0.1 A • at 125 V rated value 0.1 A • at 600 V rated value 1 I faulty switching per 100 million (17 V, 1 mA) **UL/CSA ratings** **ULI-Oad current (FLA) for 3-phase AC motor 0.1 A • at 600 V rated value 1 I A • at 600 V rated value 1 I A • at 600 V rated value 1 I A • at 600 V rated value 1 I A **yielded mechanical performance [hp] 1 • for single-phase AC motor 0.5 hp • at 110/120 V rated value 2 hp • for 3-phase AC motor 0.5 hp • at 2200/230 V rated value 2 hp • for 3-phase AC motor 0.5 hp • at 200/208 V rated value 2 hp • for 3-phase AC motor 0.5 hp • at 600 V rated value 10 hp • for 640/480 V rated value 10 hp • at 240/480 V rated value 10 hp • for short-circuit protection of the main circuit 0.5 hp • for short-circuit protection of the main circuit 0.5 hp • for short-circuit protection of the main circuit 0.5 hp • for short-circuit protection of the auxiliary switch 10 hp • for short-circuit protection of the auxiliary switch 10 hp • for short-circuit protection 0 he auxiliary switch 10 hp • for short-circuit protection 0 he auxiliary switch 10 hp • for short-circuit protection 0 he auxiliary switch 10 hp • for short-circuit protection 0 he auxiliary switch 10 hp • for short-circuit protection 0 he auxiliary switch 10 hp • for short-circuit protection 0 he auxiliary switch 10 hp • for short-circuit protection 0 he auxiliary switch 10 hp • for short-circuit protection 0 he auxiliary switch 10 hp • for short-circuit protection 0 he auxiliary switch 10 hp • for short-circuit protection 0 he auxiliary switch 10 hp • for short-circuit protection 0 he auxiliary switch 10 hp • for short-circuit protection 0 he auxiliary switch 10 hp • for sho		0.15 A
• at 48 V rated value	operational current at DC-13	
e at 160 V rated value e at 110 V rated value 1 A 0.9 A 0.9 A 0.1	• at 24 V rated value	
e at 110 V rated value e at 125 V rated value e at 125 V rated value e at 125 V rated value 0.9 A e at 600 V rated value 0.1 A Contact reliability of auxiliary contacts UL/GSA ratings full-load current (FLA) for 3-phase AC motor e at 480 V rated value 11 A yielded mechanical performance (hp) e for single-phase AC motor — at 110/120 V rated value 11 A yielded mechanical performance (hp) e for 3-phase AC motor — at 230 V rated value e for 3-phase AC motor — at 200/208 V rated value 9 at 2600/208 V rated value 10 at 200/208 V rated value 11 A yielded mechanical performance (hp) e for 3-phase AC motor — at 200/208 V rated value 2 hp e for 3-phase AC motor — at 200/208 V rated value 3 hp at 200/208 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 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: 20A (690V,100kA), aM: 16A (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) required Installation/mounting/dimensions mounting position fastening method screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 Yes beight width depth required spacing e with side-by-side mounting	• at 48 V rated value	2 A
at 125 V rated value at 220 V rated value 20.3 A contact ratinability of auxiliary contacts UL/CSA ratings full-load current (FLA) for 3-phase AC motor at 4800 V rated value at 600 V rated value 11 A 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 11	• at 60 V rated value	2 A
at 220 V rated value at 600 V rated value 0.1 A 1 faulty switching per 100 million (17 V, 1 mA) UL/GSA 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 230 V rated value 3 hp at 220/230 V rated value 4 for 3-phase AC motor at 230/230 V rated value 5 for 3-phase AC motor at 200/208 V rated value 5 for 3-phase AC motor at 200/208 V rated value 7 5 hp at 460/480 V rated value 7 5 hp at 450/480 V rated value 7 5 hp 3 hp 4 6 for short-circuit protection of the main circuit with type of coordination 1 required with type of coordination 1 required for short-circuit protection of the main circuit ges 200 (690V, 100kA), aM: 20A (690V, 100kA), BS88: 35A (415V,80kA) ges 20A (690V, 100kA), aM: 16A (690V, 100kA), BS88: 20A (415V,80kA) ges 20A (690V, 100kA), aM: 16A (690V, 100kA), BS88: 20A (415V,80kA) ges 20A (690V, 100kA), am 16A (690V, 100kA), BS88: 20A (415V,80kA) ges 20A (690V, 100kA), am 16A (690V, 100kA), BS88: 20A (415V,80kA) ges 20A (690V, 100kA), am 16A (690V, 100kA), BS88: 20A (415V,80kA) ges 20A (690V, 100kA), am 16A (690V, 100kA), BS88: 20A (415V,80kA) ges 20A (690V, 100kA), am 16A (690V, 100kA), BS88: 20A (415V,80kA) ges 20A (690V, 100kA), am 16A (690V, 100kA), BS88: 20A (415V,80kA) ges 20A (690V, 100kA), am 16A (690V, 100kA), BS88: 20A (415V,80kA) ges 20A (690V, 100kA), am 16A (690V, 100kA), BS88: 20A (415V,80kA) ges 20A (690V, 100kA), am 16A (690V, 100kA), BS88: 20A (415V,80kA) ges 20A (690V, 100kA), am 16A (690V, 100kA), BS88: 20A (415V,80kA) ges 20A (690V, 100kA), am 16A (690V, 100kA), BS88: 20A (415V,80kA) ges 20A (690V,100kA), am 16A (690V,100kA), BS88: 20A (415V,80kA) ges 20A (690V,100kA), am 16A (690V,100kA), BS88: 20A (415V,80kA) ges 20A (690V,100kA), am 16A (690V,100kA), BS88: 20A (415V,80kA) ges 20A (690V,100kA), am 16A (690V,100kA), BS88: 20A (415V,80kA) ges 20A (690V,100kA), am 16A (690V,100kA), BS88: 20A (415V,80kA) ges 20A (690V,100kA), am 16A (690V,100k	• at 110 V rated value	1 A
e at 600 V rated value contact reliability of auxiliary contacts UL/CSA ratings full-load current (FLA) for 3-phase AC motor e at 480 V rated value e at 600 V rated value 11 A for single-phase AC motor - at 110/120 V rated value 2 hp e for 3-phase AC motor - at 230 V rated value 2 hp e for 3-phase AC motor - at 200/230 V rated value 3 hp - at 220/230 V rated value 3 hp - at 460/480 V rated value 3 hp - at 575/600 V rated value 9 to 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 required for short-circuit protection of the auxiliary switch required for short-circuit protection of the auxiliary switch required fastening method side-by-side mounting e with side-by-side mounting with side-by-side mounting with side-by-side mounting with side-by-side mounting e with side-by-side mounting ### 1 faulty switching per 100 million (17 V, 1 mA) 1 faulty switching per 100 million (17 V, 1 mA) 1 faulty switching per 100 million (17 V, 1 mA) 1 faulty switching per 100 million (17 V, 1 mA) 1 faulty switching per 100 million (17 V, 1 mA) 11 A	• at 125 V rated value	0.9 A
contact reliability of auxiliary contacts UL/CSA ratings full-load current (FLA) for 3-phase AC motor	• 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 yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value • for 3-phase AC motor — at 200 V rated value • for 3-phase AC motor — at 200/280 V rated value • for 3-phase AC motor — at 460/480 V rated value — at 4575/600 V rated value — at 575/600 V rated value — at 575/600 V rated value • 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 required required required position fastening method • side-by-side mounting • with side-by-side mounting	• 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 yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value • for 3-phase AC motor — at 200 V rated value • for 3-phase AC motor — at 200/280 V rated value • for 3-phase AC motor — at 460/480 V rated value — at 4575/600 V rated value — at 575/600 V rated value — at 575/600 V rated value • 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 required required required position fastening method • side-by-side mounting • with side-by-side mounting		
full-load current (FLA) for 3-phase AC motor at 480 V rated value 11 A yielded mechanical performance [hp] of or single-phase AC motor —at 110/120 V rated value 2 hp of 3-phase AC motor —at 220/208 V rated value 3 hp at 220/230 V rated value 3 hp at 480/480 V rated value 3 hp at 480/480 V rated value 3 hp at 220/230 V rated value 3 hp contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link of or 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 required required Installation/ mounting/ dimensions mounting position standing, on horizontal mounting surface screw and snap-on mounting unit according to DIN EN 60715 Yes height with with vith side-by-side mounting with side-by-side mounting		
at 480 V rated value at 600 V rated value yielded mechanical performance [hp] of or single-phase AC motor — at 110/120 V rated value of or 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 460/480 V rated value at 575/600 V rated value both contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link of or short-circuit protection of the main circuit with type of assignment 2 required of or short-circuit protection of the auxiliary switch required installation/ mounting/ dimensions mounting position fastening method side-by-side mounting of short-circuit protection standing, on horizontal mounting surface screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 standing, on horizontal mounting surface screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 ves height width 45 mm required with side-by-side mounting of with side-by-side mounting		
* 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 — 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 450/480 V rated value — at 575/600 V rated value — at 575/600 V rated value — at 575/600 V rated value — at 690/480 V rated value — at 575/600 V rated value — at 575/600 V rated value — at 575/600 V rated value — with type of auxiliary contacts according to UL Short-circuit protection design of the fuse link — with type of coordination 1 required — with type of assignment 2 required shokA) — with type of assignment 2 required for short-circuit protection of the auxiliary switch required required Installation/ mounting/ dimensions mounting position fastening method • side-by-side mounting • with side-by-side mounting		11 A
yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 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 • at 220/230 V rated value — at 275/600 V rated value — at 575/600 V rated value — at 575/600 V rated value — ontact 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 required Installation/ mounting/ dimensions mounting position fastening method • side-by-side mounting • with side-by-side mounting		
• 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 — at 575/600 V rated value — at 575/600 V rated value — tonact 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) 9 for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method • side-by-side mounting • with side-by-side mounting		
- at 110/120 V rated value - at 230 V rated value 9 for 3-phase AC motor - 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 Short-circuit protection design of the fuse link 9 for short-circuit protection of the main circuit - with type of coordination 1 required 9G: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) - with type of assignment 2 required 9G: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V,80kA) 9 for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 9 side-by-side mounting 45 mm depth 73 mm required spacing 9 with side-by-side mounting		
- at 230 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 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 required • for short-circuit protection of the auxiliary switch required — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • standing, on horizontal mounting surface • standing, on horizontal mounting surface • screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 • side-by-side mounting • with side-by-side mounting • with side-by-side mounting • with side-by-side mounting	3 1	0.5 hp
for 3-phase AC motor — 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 - 7.5 hp - 10 hp - A600 / Q600 - Short-circuit protection - with type of coordination 1 required - with type of coordination 1 required - 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: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V,80kA) - gG: 10 A (500 V, 1 kA) - gG: 10 A (500 V, 1 kA) - standing, on horizontal mounting surface - standing, on horizontal mounting surface - screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 - yes - height - with side-by-side mounting - with side-by-side mounting - with side-by-side mounting		- 11p
- 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 600 V rated value - at 60	•	3 hn
- 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 required Installation/ mounting/ dimensions mounting position • side-by-side mounting • with side-by-side mounting		
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 required Installation/ mounting/ dimensions mounting position fastening method • side-by-side mounting • with side-by-side mounting		
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 required Installation/ mounting/ dimensions mounting position fastening method • side-by-side mounting width depth required spacing • with side-by-side mounting		·
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) • for short-circuit protection of the auxiliary switch required gG: 10 A (500 V, 1 kA) Installation/ mounting/ dimensions standing, on horizontal mounting surface 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		A600 / Q600
for short-circuit protection of the main circuit — with type of coordination 1 required — with type of assignment 2 required — with type of coordination 1 required — 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 coordination 1 required — with type of coordination 1 required — with type of coordination 1 required — with type of assignment 2 required — with type of coordination 1 required — with type of assignment 2 required — standard (690V,100kA), aM: 16A (690V,100kA), aM	Short-circuit protection	
 with type of coordination 1 required with type of assignment 2 required for short-circuit protection of the auxiliary switch required mounting position standing, on horizontal mounting surface screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 side-by-side mounting be side-by-side mounting width with side-by-side mounting with side-by-side mounting with side-by-side mounting 	design of the fuse link	
— with type of assignment 2 required of or short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position standing, on horizontal mounting surface fastening method of side-by-side mounting height width depth required spacing with side-by-side mounting gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA) gG: 10 A (500 V, 1 kA) gG: 10 A (500 V, 1 kA) required spacing standing, on horizontal mounting surface screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 Yes height 73 mm	 for short-circuit protection of the main circuit 	
for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position standing, on horizontal mounting surface fastening method	 — with type of coordination 1 required 	gG: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA)
required Installation/ mounting/ dimensions mounting position fastening method • side-by-side mounting height width depth required spacing • with side-by-side mounting width width-by-side mounting • with side-by-side mounting • with side-by-side mounting	— with type of assignment 2 required	
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		gG: 10 A (500 V, 1 kA)
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	Installation/ mounting/ dimensions	
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	mounting position	standing, on horizontal mounting surface
 side-by-side mounting height width depth required spacing with side-by-side mounting Yes 58 mm 45 mm 73 mm required spacing with side-by-side mounting 		screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715
height 58 mm width 45 mm depth 73 mm required spacing ● with side-by-side mounting	• side-by-side mounting	
width 45 mm depth 73 mm required spacing • with side-by-side mounting		
depth 73 mm required spacing ● with side-by-side mounting		45 mm
required spacing • with side-by-side mounting		
• with side-by-side mounting	· ·	
		10 mm

ada	40
— upwards	10 mm
— downwards	10 mm
— at the side	0 mm
for grounded partsforwards	10 mm
	10 mm 10 mm
— upwards — at the side	6 mm
— downwards	10 mm
for live parts	IO IIIIII
— forwards	10 mm
— upwards	10 mm
— downwards	10 mm
— at the side	6 mm
Connections/ Terminals	
type of electrical connection	
for main current circuit	screw-type terminals
for auxiliary and control circuit	screw-type terminals
at contactor for auxiliary contacts	Screw-type terminals
of magnet coil	Screw-type terminals Screw-type terminals
type of connectable conductor cross-sections	Solon type terminate
• for main contacts	
— solid	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²
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 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 mm²
finely stranded with 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
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
Safety related data	
B10 value with high demand rate acc. to SN 31920	1 000 000
proportion of dangerous failures	1 000 000
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
T1 value for proof test interval or service life acc. to	20 y
IEC 61508	
protection class IP on the front acc. to IEC 60529	IP20
touch protection on the front acc. to IEC 60529	finger-safe, for vertical contact from the front
suitability for use	Vee
safety-related switching on agfety related switching OFF	Yes
safety-related switching OFF Contificates (appropriate)	Yes
Certificates/ approvals	
General Product Approval	





Confirmation







EMC

Functional Safety/Safety of Machinery

Declaration of Conformity

Test Certificates



Type Examination Certificate



UK Declaration of Conformity Special Test Certificate

Type Test Certificates/Test Report

Marine / Shipping













Marine / Shipping

other

Confirmation



Transport Information

Dangerous Good

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=3RT2017-1UB42-1AA0

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2017-1UB42-1AA0

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

 $\underline{\text{https://support.industry.siemens.com/cs/ww/en/ps/3RT2017-1UB42-1AA0}}$

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

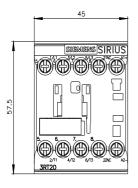
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2017-1UB42-1AA0&lang=en

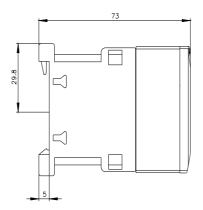
Characteristic: Tripping characteristics, I²t, Let-through current

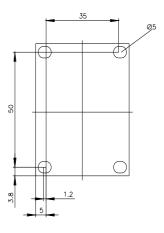
https://support.industry.siemens.com/cs/ww/en/ps/3RT2017-1UB42-1AA0/char

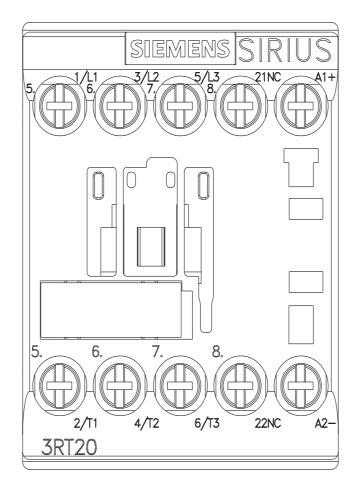
Further characteristics (e.g. electrical endurance, switching frequency)

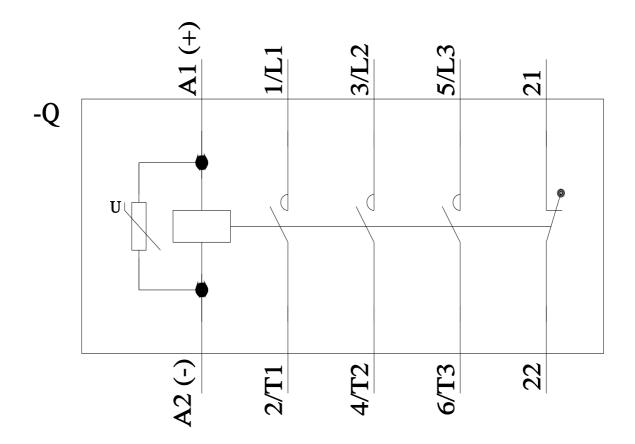
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2017-1UB42-1AA0&objecttype=14&gridview=view1











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