SIEMENS

Data sheet

3RT2016-1BB42



power contactor, AC-3e/AC-3, 9 A, 4 kW / 400 V, 3-pole, 24 V DC, auxiliary contacts: 1 NC, screw terminal, size: S00

product brand name SIRUS product brand data Power contactor size of contactor \$000 product stension No • function module for communication No • auxiliary switch Yes power loss [V] for rated value of the current 0.9 W • at AC in hot operating state 0.9 W • at AC in hot operating state per pole 0.3 W • without load current share typical 4 W insultation voltage 680 V • of main circuit with degree of pollution 3 rated value 680 V • of auxiliary circuit rated value 680 V • of auxiliary circuit rated value 6 kV • of contactor with sine pulse 6.7g / 5 ms, 6.6g / 10 ms • at DC 10.5g / 5 ms, 6.6g / 10 ms mechanical service life (operating cycles) 5 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical </th <th></th> <th></th>		
product type designation 3RT2 General technical data S00 size of contactor S00 product extension No • darkalmy switch Yes power loss [W] for rated value of the current 0.9 W • at AC in hot operating state 0.9 W • at AC in hot operating state per pole 0.3 W • without load current share typical 4 W insultation voltage 600 V • of main circuit with degree of pollution 3 rated value 600 V • of auxiliary circuit value 600 V • of auxiliary circuit rated value 600 V • of auxiliary circuit rated value 61 KV • of auxiliary switch 90 V stack contacts according to EN 00947-1 400 V • at DC 6.7g / 5 ms, 6.8g / 10 ms • at DC 10.5g / 5 ms, 6.8g / 10 ms • of contactor typical 30 000 000 • of contactor with added auxiliary switch blok kypical	product brand name	SIRIUS
General technical data S00 size of contactor S00 product extension No • auxiliary switch Yes power loss [W] for rated value of the current 0.9 W • at AC in hot operating state 0.9 W • at AC in hot operating state 0.9 W • of main circuit with degree of pollution 3 rated value 680 V • of main circuit with degree of pollution 3 rated value 690 V • of auxiliary circuit with degree of pollution 3 rated value 64V • of main circuit rated value 64V • of auxiliary circuit with degree of pollution 3 rated value 64V • of auxiliary circuit rated value 61V • of auxiliary circuit rated value 61V • of contactor typical 30 00 V • at DC 10,5g / 5 ms, 6,6g / 10 ms mechanical service life (operating cycles) 30 000 000 • of the contactor with added acternnically optimized 30 000 000 • of the contactor with added acternnically optimized 10 000 000 • of the contactor with added acternnically optimized 10 000 000 • of the contactor with added acternnically optimized <t< th=""><th>product designation</th><th>Power contactor</th></t<>	product designation	Power contactor
size of contactor \$00 product extension • function module for communication No • auxilary switch Yes power loss [W] for rated value of the current 0.9 W • at AC in hot operating state per pole 0.3 W • without load current share typical 4 W Insulation voltage 690 V • of main circuit with degree of pollution 3 rated value 690 V • of auxiliary circuit with degree of pollution 3 rated value 690 V • of main circuit with degree of pollution 3 rated value 690 V • of main circuit rated value 64V • at DC 6,7g / 5 ms, 4,2g / 10 ms shock resistance with sine pulse 10,5g / 5 ms, 6,6g / 10 ms • at DC 10,5g / 5 ms, 6,6g / 10 ms mechanical service life (operating cycles) 5000 000 • of the contactor with added electronically optimized 300 00000 <	product type designation	3RT2
product extension No • function module for communication No • auxiliary switch Yes power loss [W] for rated value of the current 0.9 W • at AC in hot operating state 0.9 W • at AC in hot operating state per pole 0.3 W • without load current share typical 4 W Insulation voltage 690 V • of main circuit with degree of pollution 3 rated value 690 V • of analizing vicruit with degree of pollution 3 rated value 690 V • of analizing vicruit rated value 6 kV • of main circuit rated value 6 kV • of main circuit rated value 6 kV • of main contacts according to EN 00947-1 5 kock resistance at rectangular impulse • at DC 6.7g / 5 ms, 4.2g / 10 ms • at DC 10.5g / 5 ms, 6.6g / 10 ms mechanical service life (operating cycles) 30 000 000 • of the contactor with added electronically optimized 30 000 000 auxiliary switch block typical 10 00 000 reference code according to EE 81346-2 Q Q Substance Prohibitance (Date) 10/01/2009 Ambient conditions 2000 m mathient thomesture -55 +60 °C relative humidity at 55 °C according to EEC 60068-2:30 95 % <th>General technical data</th> <th></th>	General technical data	
• function module for communication No • auxillary switch Yes power loss [W] for rated value of the current - • at AC in hot operating state 0.9 W • at AC in hot operating state per pole 0.3 W • without load current share typical 4 W insultation voitage 690 V • of main circuit with degree of pollution 3 rated value 690 V • of main circuit with degree of pollution 3 rated value 690 V • of main circuit ated value 6 kV • of main circuit rated value 6 kV • of main circuit rated value 6 kV • of auxiliary circuit rated value 6 kV • at DC 6.7g / 5 ms, 4.2g / 10 ms shock resistance with sine pulse 9 00 000 • at DC 10.5g / 5 ms, 6.6g / 10 ms mechanical service life (operating ywitch block typical 10 000 000 • of the contactor which added auxiliary switch block typical 10 000 000 • of the contactor which	size of contactor	S00
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power loss [W] for rated value of the current 0.9 W • at AC in hot operating state per pole 0.3 W • without load current share typical 4 W insulation voltage 690 V • of main circuit with degree of pollution 3 rated value 690 V • of auxiliary circuit with degree of pollution 3 rated value 690 V • of auxiliary circuit with degree of pollution 3 rated value 690 V • of auxiliary circuit rated value 64 V • of main circuit with degree of pollution 5 rated value 64 V • of auxiliary circuit rated value 64 V • al DC 6.7g / 5 ms, 4.2g / 10 ms shock resistance with sine pulse 6.7g / 5 ms, 4.2g / 10 ms • al DC 10.5g / 5 ms, 6.6g / 10 ms • al DC 10.5g / 5 ms, 6.6g / 10 ms • al DC 10.00 000 • of the contactor with added auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch b	 function module for communication 	No
• at AC in hot operating state 0.9 W • at AC in hot operating state per pole 0.3 W • without load current share typical 4 W insultation voltage 690 V • of main circuit with degree of pollution 3 rated value 690 V • of auxiliary circuit with degree of pollution 3 rated value 690 V • of main circuit rated value 680 V • of main circuit rated value 6 kV • of auxiliary circuit rated value 6 kV • at DC 6.7g / 5 ms, 4.2g / 10 ms shock resistance with sine pulse at DC • at DC 10.5g / 5 ms, 6.6g / 10 ms • of the contactor with added electronically optimized 30 000 000 • of the contactor with added electronically optimized 10 000 000 • of the contactor with added electronically optimized 10 000 000	auxiliary switch	Yes
• at AC in hot operating state per pole 0.3 W • without load current share typical 4 W insulation voltage 6 M • of main circuit with degree of pollution 3 rated value 690 V • surge voltage resistance 690 V • of main circuit with degree of pollution 3 rated value 690 V • of auxiliary circuit rated value 6 kV • at DC 6.7g / 5 ms, 4.2g / 10 ms * at DC 10.5g / 5 ms, 6.6g / 10 ms • at DC 10.5g / 5 ms, 6.6g / 10 ms • at DC 10.000 000 • of contactor typical 30 000 000 • of the contactor with added electronically optimized auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 reference code according to IEC 81346-2	power loss [W] for rated value of the current	
• without load current share typical 4 W insulation voltage 600 V • 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 690 V • of main circuit rated value 6 kV • of auxiliary circuit rated value 6 kV • at DC 6.7g / 5 ms, 4.2g / 10 ms • at DC 10.5g / 5 ms, 6.6g / 10 ms • of contactor typical 30 000 000 • of the contactor with added electronically optimized auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical 10 001/2009 Ambient conditions 2 000 m installation altitude at height above sea level maximum 2 000 m • during storage -55 +60 °C • during storage -55 +60 °C • during storage -55 +60 °C •	 at AC in hot operating state 	0.9 W
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• 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 68 V • of main circuit rated value 6 kV maximum permissible voltage for protective separation between coil and main contacts according to EN 60847-1 400 V shock resistance at rectangular impulse 6,7 / 5 ms, 4,2g / 10 ms • at DC 6,7 / 5 ms, 4,2g / 10 ms shock resistance with sine pulse 6,000 000 • at DC 10.5g / 5 ms, 6,6g / 10 ms mechanical service life (operating cycles) 30 000 000 • of the contactor with added electronically optimized auxiliary switch block typical 10 000 000 • 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 -25 +60 °C • during operation -25 +60 °C • during storage -55 +60 °C •	 without load current share typical 	4 W
• of auxiliary circuit with degree of pollution 3 rated value 690 V surge voltage resistance 6 kV • of main circuit rated value 6 kV • of auxiliary circuit rated value 6 kV • of auxiliary circuit rated value 6 kV • of auxiliary circuit rated value 6 kV maximum permissible voltage for protective separation between 400 V coil and main contacts according to EN 60947-1 400 V shock resistance at rectangular impulse 6,7g / 5 ms, 4,2g / 10 ms • at DC 6,7g / 5 ms, 6,6g / 10 ms mechanical service life (operating cycles) 000000 • of contactor typical 30 000 000 • of the contactor with added electronically optimized auxiliary switch block typical 10 000 000 • 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 2000 m installation altitude at height above sea level maximum 2 000 m ambient temperature -25 +60 °C • during storage -55 +60 °C • during storage -55 +60 °C <t< th=""><th>insulation voltage</th><th></th></t<>	insulation voltage	
surge voltage resistance 6 • of main circuit rated value 6 kV • of auxiliary circuit rated value 6 kV maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1 400 V shock resistance at rectangular impulse 6,7g / 5 ms, 4,2g / 10 ms • at DC 6,7g / 5 ms, 6,6g / 10 ms mechanical service life (operating cycles) 30 000 000 • of the contactor with added electronically optimized auxiliary switch block typical 30 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 10/12009 Ambient conditions -25 +60 °C • during operation -25 +60 °C • during storage -55 +80 °C relative humidity at 55 °C according to IEC 60068-2-30 95 % Main circuit Main circuit	 of main circuit with degree of pollution 3 rated value 	690 V
• of main circuit rated value 6 kV • of auxiliary circuit rated value 6 kV maximum permissible voltage for protective separation between coll and main contacts according to EN 60947-1 400 V shock resistance at rectangular impulse 6,7g / 5 ms, 4,2g / 10 ms • at DC 6,7g / 5 ms, 6,6g / 10 ms shock resistance with sine pulse 6,000 000 • at DC 10,5g / 5 ms, 6,6g / 10 ms mechanical service life (operating cycles) 30 000 000 • of the contactor typical 5 000 000 • of the contactor with added electronically optimized auxiliary switch block typical 10 000 000 • 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 2 000 m ambient temperature -25 +60 °C • during operation -25 +60 °C • during storage -55 +80 °C relative humidity minum 10 % 95 % 95 %	 of auxiliary circuit with degree of pollution 3 rated value 	690 V
• of auxiliary circuit rated value 6 kV maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1 400 V shock resistance at rectangular impulse 400 V • at DC 6,7g / 5 ms, 4,2g / 10 ms shock resistance with sine pulse - • at DC 10,5g / 5 ms, 6,6g / 10 ms mechanical service life (operating cycles) - • of contactor typical 30 000 000 • of the contactor with added electronically optimized auxiliary switch block typical 10 000 000 • 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 Amblent conditions 2 000 m installation altitude at height above sea level maximum 2 000 m ambient temperature -25 +60 °C • during operation -25 +80 °C relative humidity minimum 10 % 95 % 95 %	surge voltage resistance	
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• at DC 6,7g / 5 ms, 4,2g / 10 ms shock resistance with sine pulse 10,5g / 5 ms, 6,6g / 10 ms • at DC 10,5g / 5 ms, 6,6g / 10 ms mechanical service life (operating cycles) 30 000 000 • of contactor typical 30 000 000 • of the contactor with added electronically optimized auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 • 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 2 000 m installation altitude at height above sea level maximum 2 000 m ambient temperature -25 +60 °C • during operation -25 +80 °C relative humidity minimum 10 % relative humidity at 55 °C according to IEC 60068-2-30 95 % Main circuit 40 min circuit		400 V
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• at DC10,5g / 5 ms, 6,6g / 10 msmechanical service life (operating cycles)30 000 000• of contactor typical30 000 000• of the contactor with added electronically optimized auxiliary switch block typical5 000 000• of the contactor with added auxiliary switch block typical10 000 000• of the contactor with added auxiliary switch block typical10 000 000reference code according to IEC 81346-2QSubstance Prohibitance (Date)10/01/2009Ambient conditions2 000 minstallation altitude at height above sea level maximum2 000 mambient temperature • during operation • during storage-25 +60 °C• during storage-55 +80 °Crelative humidity minimum10 %relative humidity at 55 °C according to IEC 60068-2-30 maximum95 %	• at DC	6,7g / 5 ms, 4,2g / 10 ms
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auxiliary switch block typical 10 000 000 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 10/01/2009 Ambient conditions 2 000 m installation altitude at height above sea level maximum 2 000 m ambient temperature -25 +60 °C • during operation -25 +60 °C • during storage -55 +80 °C relative humidity minimum 10 % Main circuit 95 %	 of contactor typical 	30 000 000
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Ambient conditions installation altitude at height above sea level maximum 2 000 m ambient temperature -25 +60 °C • 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	reference code according to IEC 81346-2	Q
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ambient temperature -25 +60 °C • 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	Ambient conditions	
 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 g5 % Main circuit 	installation altitude at height above sea level maximum	2 000 m
• during storage -55 +80 °C relative humidity minimum 10 % relative humidity at 55 °C according to IEC 60068-2-30 maximum 95 % Main circuit	ambient temperature	
relative humidity minimum 10 % relative humidity at 55 °C according to IEC 60068-2-30 95 % Main circuit 95 %	during operation	-25 +60 °C
relative humidity at 55 °C according to IEC 60068-2-30 95 % maximum 95 % Main circuit 95 %	during storage	-55 +80 °C
maximum Main circuit	relative humidity minimum	10 %
		95 %
number of poles for main current circuit 3	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	22 A
value	
• 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	20 A
value	
• at AC-3	
— at 400 V rated value	9 A
— at 500 V rated value	7.7 A
— at 690 V rated value	6.7 A
• at AC-3e	
— at 400 V rated value	9 A
— at 500 V rated value	7.7 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	7.4 A
• at AC-6a	5.0.4
— up to 230 V for current peak value n=20 rated value	5.3 A
— up to 400 V for current peak value n=20 rated value	5.3 A
— up to 500 V for current peak value n=20 rated value	5.3 A 5 A
 up to 690 V for current peak value n=20 rated value at AC-6a 	54
 at AC-ba — up to 230 V for current peak value n=30 rated value 	3.5 A
— up to 400 V for current peak value n=30 rated value	3.5 A
— up to 500 V for current peak value n=30 rated value	3.6 A
— up to 690 V for current peak value n=30 rated value	3.3 A
minimum cross-section in main circuit at maximum AC-1 rated	4 mm ²
value	
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 60 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 60 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 60 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 60 V rated value	0.5 A				
— at 110 V rated value	0.15 A				
 with 2 current paths in series at DC-3 at DC-5 					
— at 24 V rated value	20 A				
— at 60 V rated value	5 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 60 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	2.2 kW				
— at 400 V rated value	4 kW				
— at 500 V rated value	4 kW				
— at 690 V rated value	5.5 kW				
• at AC-3e					
— at 230 V rated value	2.2 kW				
— at 400 V rated value	4 kW				
— at 500 V rated value	4 kW				
— at 690 V rated value	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 kVA				
 up to 400 V for current peak value n=20 rated value 	3.6 kVA				
 up to 500 V for current peak value n=20 rated value 	4.6 kVA				
 up to 690 V for current peak value n=20 rated value 	5.9 kVA				
operating apparent power at AC-6a					
 up to 230 V for current peak value n=30 rated value 	1.3 kVA				
 up to 400 V for current peak value n=30 rated value 	2.4 kVA				
 up to 500 V for current peak value n=30 rated value 	3.1 kVA				
 up to 690 V for current peak value n=30 rated value 	4 kVA				
short-time withstand current in cold operating state up to					
40 °C					
• limited to 1 s switching at zero current maximum	155 A; Use minimum cross-section acc. to AC-1 rated value				
 limited to 5 s switching at zero current maximum 	111 A; Use minimum cross-section acc. to AC-1 rated value				
Imited to 10 s switching at zero current maximum	86 A; Use minimum cross-section acc. to AC-1 rated value				
Imited to 30 s switching at zero current maximum	66 A; Use minimum cross-section acc. to AC-1 rated value				
Imited to 60 s switching at zero current maximum	55 A; Use minimum cross-section acc. to AC-1 rated value				
no-load switching frequency	40.000.4#				
• 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					
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				

closing power of magnet coil at DC	4 W
holding power of magnet coil at DC	4 W
closing delay	
• at DC	30 100 ms
opening delay	
• at DC	7 13 ms
arcing time	10 15 ms
control version of the switch operating mechanism	Standard A1 - A2
Auxiliary circuit	
number of NC contacts for auxiliary contacts instantaneous	1
contact	
operational current at AC-12 maximum	10 A
operational current at AC-15	
at 230 V rated value	10 A
• at 400 V rated value	3 A
at 500 V rated value	2 A
	1 A
at 690 V rated value	
operational current at DC-12	
at 24 V rated value	10 A
• at 48 V rated value	6 A
• at 60 V rated value	6 A
• at 110 V rated value	3 A
• at 125 V rated value	2 A
• at 220 V rated value	1 A
• at 600 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 60 V rated value	2 A
at 110 V rated value	1A
at 125 V rated value	0.9 A
at 220 V rated value	0.3 A
at 220 V rated value at 600 V rated value	0.1 A
	1 faulty switching per 100 million (17 V, 1 mA)
contact reliability of auxiliary contacts UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	7.0.4
• at 480 V rated value	7.6 A
at 600 V rated value	9 A
yielded mechanical performance [hp]	
 for single-phase AC motor 	
— at 110/120 V rated value	0.33 hp
— at 230 V rated value	1 hp
 for 3-phase AC motor 	
— at 200/208 V rated value	2 hp
— at 220/230 V rated value	3 hp
— at 460/480 V rated value	5 hp
— at 575/600 V rated value	7.5 hp
contact rating of auxiliary contacts according to UL	A600 / Q600
Short-circuit protection	
design of the fuse link	
 for short-circuit protection of the main circuit 	
— with type of coordination 1 required	gG: 35A (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	
	+/ 100° rotation passible on vortical mounting surfaces are he filted forward and
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 DIN rail according to DIN EN 60715
side-by-side mounting	Yes
height	58 mm
	45 mm
width	

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				
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			
type of connectable conductor cross-sections 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 mm ²), 2x (0,75 2,5 mm ²), 2x 4 mm ²			
 finely stranded with core end processing 	2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²)			
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			
connectable conductor cross-section for auxiliary contacts				
solid or stranded	0.5 4 mm²			
 finely stranded with core end processing 	0.5 2.5 mm ²			
type of connectable conductor cross-sections				
for auxiliary contacts				
— 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 mm ²), 2x (0.75 2.5 mm ²)			
 for 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				
product function				
 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 a			
protection class IP on the front according to IEC 60529	IP20			
protoction clace in on the none according to ince could				
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front			
· · · · · · · · · · · · · · · · · · ·	finger-safe, for vertical contact from the front			
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front Yes			
touch protection on the front according to IEC 60529 suitability for use				

		<u>Confirmation</u>		KC	EHC
EMC	Functional Safety/Safety of Ma- chinery	Declaration of Conform	nity	Test Certificates	
RCM	Type Examination Cer- tificate	UK CA	CE EG-Konf.	Type Test Certific- ates/Test Report	Special Test Certific- ate
Marine / Shipping					
ABS	BUREAU VERITAS		Lloyd's Register us	PRS	RINA
Marine / Shipping	other		Railway	Dangerous Good	Environment
	<u>Confirmation</u>	UDE VDE	<u>Vibration and Shock</u>	Transport Information	Environmental Con- firmations
Further information					
https://press.siemens.c Siemens is working of Please contact your lo EAC relevant market (Information on the pa https://support.industry Information- and Dow https://www.siemens.c Industry Mall (Online	y.siemens.com/cs/ww/en/vi wnloadcenter (Catalogs, E com/ic10	e/siemens-wind-down-russ rent EAC certificates. tatus of validity of the EAC EAEU member states Russ ew/109813875 Brochures,)	c certification if you intend sia or Belarus).	d to import or offer to supp	bly these products to an

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT2016-1BB42

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2016-1BB42

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2016-1BB4

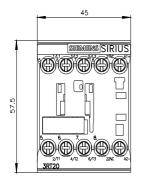
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2016-1BB42&lang=en

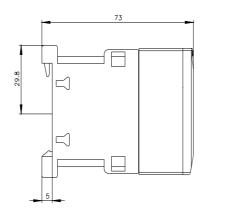
Characteristic: Tripping characteristics, I2t, Let-through current

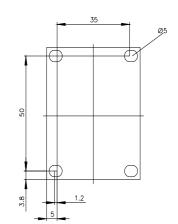
https://support.industry.siemens.com/cs/ww/en/ps/3RT2016-1BB42/char

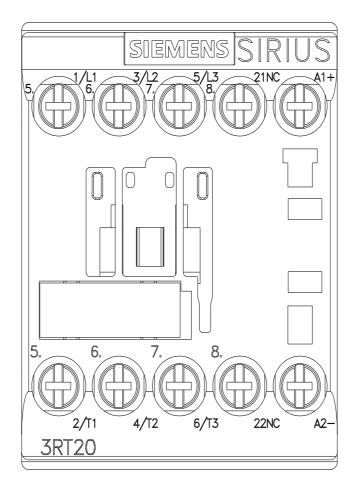
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siem ens.com/bilddb/index.aspx?view= arch&mlfb

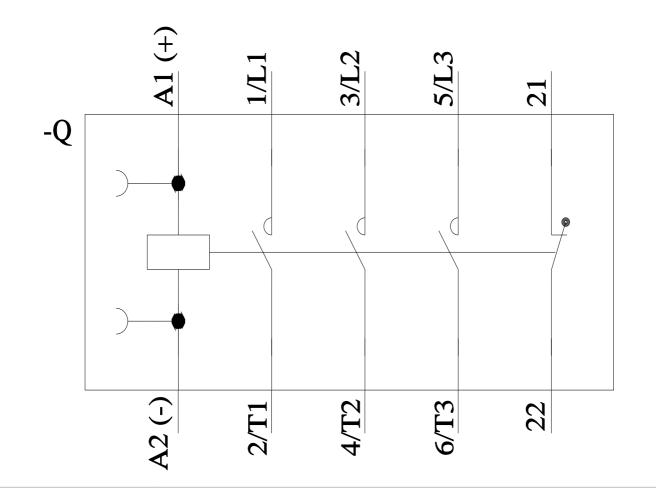








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