SIEMENS

Data sheet

3RT2015-1HB42



power contactor, AC-3e/AC-3, 7 A, 3 kW / 400 V, 3-pole, 24 V DC, 0.7-1.25* Us, auxiliary contacts: 1 NC, screw terminal, size: S00, suitable for PLC outputs, not expandable with auxiliary switch

product brand name	SIRIUS
product designation	Coupling contactor
product designation	3RT2
General technical data	JITZ
size of contactor	S00
product extension	300
function module for communication	No
auxiliary switch	No
power loss [W] for rated value of the current	
at AC in hot operating state	0.6 W
at AC in hot operating state per pole	0.2 W
without load current share typical	2.8 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 protective separation between coil and main contacts according to EN 60947-1	400 V
shock resistance at rectangular impulse	
• 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	5 000 000
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

oporating voltage	
 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	18 A
• at AC-1	
— up to 690 V at ambient temperature 40 °C rated value	18 A
 — up to 690 V at ambient temperature 60 °C rated value 	16 A
• at AC-3	
— at 400 V rated value	7 A
— at 500 V rated value	6 A
— at 690 V rated value	4.9 A
• at AC-3e	
— at 400 V rated value	7 A
— at 500 V rated value	6 A
— at 690 V rated value	4.9 A
at AC-4 at 400 V rated value	6.5 A
at AC-5a up to 690 V rated value	15.8 A
 at AC-5b up to 400 V rated value at AC-6a 	5.8 A
	4 A
— up to 230 V for current peak value n=20 rated value	4 A 4 A
 — up to 400 V for current peak value n=20 rated value — up to 500 V for current peak value n=20 rated value 	3.8 A
— up to 500 V for current peak value n=20 rated value	3.6 A
• at AC-6a	5.0 A
- up to 230 V for current peak value n=30 rated value	2.7 A
— up to 400 V for current peak value n=30 rated value	2.7 A
— up to 500 V for current peak value n=30 rated value	2.5 A
— up to 690 V for current peak value n=30 rated value	2.4 A
minimum cross-section in main circuit at maximum AC-1 rated value	2.5 mm ²
operational current for approx. 200000 operating cycles at AC-4	
• at 400 V rated value	2.6 A
• at 690 V rated value	1.8 A
operational current	
• at 1 current path at DC-1	
— at 24 V rated value	15 A
— at 60 V rated value	15 A
— at 110 V rated value	1.5 A
— at 220 V rated value	0.6 A
— at 440 V rated value	0.42 A
— at 600 V rated value	0.42 A
 with 2 current paths in series at DC-1 	
— at 24 V rated value	15 A
— at 60 V rated value	15 A
— at 110 V rated value	8.4 A
— at 220 V rated value	1.2 A
— at 440 V rated value	0.6 A
— at 600 V rated value	0.5 A
with 3 current paths in series at DC-1	
— at 24 V rated value	15 A
— at 60 V rated value	15 A
— at 110 V rated value	15 A
— at 220 V rated value	15 A
— at 440 V rated value	0.9 A
— at 600 V rated value	0.7 A
at 1 current path at DC-3 at DC-5 — at 24 V rated value	15 A

	— at 60 V rated value	0.35 A			
	 with 2 current paths in series at DC-3 at DC-5 				
	— at 24 V rated value	15 A			
• with 3 current paths in series at DC-3 at DC-5 IA - at 24 V rated value 15 A - at 10 V rated value 15 A - at 40 V rated value 12 A - at 40 V rated value 0.14 A opporting power 0.14 A - at 20 V rated value 0.14 A opporting power 15 KW - at 20 V rated value 0.14 A - at 20 V rated value 0.14 A - at 20 V rated value 15 KW - at 20 V rated value 3 KW - at 600 V rated value 3 KW - at 600 V rated value 3 KW - at 600 V rated value 1.5 KW operating power for approx. 200000 operating cycles at AC- • at 600 V rated value n=20 rated value 1.5 KW • op to 200 V for current pack value n=20 rated value 2.5 KWA operating apparent power at AC-6a 1.5 KW • op to 200 V for current pack value n=20 rated value 3.5 KWA • op to 200 V for current pack value n=20 rated value 2.5 KVA operating apparent power at AC-6a 1.5 KW	— at 60 V rated value	3.5 A			
	— at 110 V rated value	0.25 A			
	 with 3 current paths in series at DC-3 at DC-5 				
	— at 24 V rated value	15 A			
	— at 60 V rated value				
	— at 110 V rated value	15 A			
	— at 220 V rated value				
operating power • at AC-3 - at 230 V rated value 1.5 kW - at 400 V rated value 3 kW - at 600 V rated value 3 kW - at 600 V rated value 3 kW - at 230 V rated value 4 kW - at 400 V rated value 1.5 kW - at 400 V rated value 3 kW - at 400 V rated value 3 kW - at 600 V rated value 3 kW - at 600 V rated value 3 kW - at 600 V rated value 1.5 kW operating power for approx. 200000 operating cycles at AC 4 kW operating power for approx. 200000 operating cycles at AC 1.15 kW opt 600 V for current peak value m20 rated value 1.15 kW opt 600 V for current peak value m20 rated value 2.1 kWA opt 600 V for current peak value m20 rated value 3.3 kVA opt 600 V for current peak value m20 rated value 1.8 kVA opt 600 V for current peak value m20 rated value 1.8 kVA opt 600 V for current peak value m20 rated value 2.8 kVA opt 600 V for current peak value m20 rated value 2.8 kVA opt 600 V for current peak value m20 rated	— at 440 V rated value				
et AC3 ext AC3 ext AC3 ext AC3 ext AC3 ext AC40V trated value the A00V trated value the A00V trated value the AC3 ext AC4 ext AC3 ext AC4 ext AC3 ext AC4 ext AC3 ext AC4 ext AC4	— at 600 V rated value	0.14 A			
	operating power				
	• at AC-3				
	— at 230 V rated value	1.5 kW			
	— at 400 V rated value	3 kW			
er at AC-3e - at 230 V rated value 15 KW - at 230 V rated value 3 KW - at 600 V rated value 3 KW - at 600 V rated value 3 KW - at 600 V rated value 4 KW operating power for approx. 200000 operating cycles at AC-4 4 KW operating power at AC-6a - up to 230 V for current peak value n=20 rated value 1.15 KW op to 230 V for current peak value n=20 rated value 2.7 KVA - up to 230 V for current peak value n=20 rated value 2.7 KVA - up to 230 V for current peak value n=20 rated value 2.7 KVA - up to 230 V for current peak value n=20 rated value 2.7 KVA - up to 230 V for current peak value n=20 rated value 2.7 KVA - up to 200 V for current peak value n=30 rated value 2.8 KVA op to 500 V for current peak value n=30 rated value 2.8 KVA - up to 500 V for current maximum 120 A; Use minimum cross-section acc. to AC-1 rated value - initied to 15 s witching at zero current maximum 62 A; Use minimum cross-section acc. to AC-1 rated value - initied to 15 s witching at zero current maximum 62 A; Use minimum cross-section acc. to AC-1 rated value - initied to 15 s witching at zero current maximum 2.4 V Use minimum cross-section acc. to AC-1 rated value - initied value - at AC-3 maximum - at AC-1 maximum	— at 500 V rated value	3 kW			
	— at 690 V rated value	4 kW			
	● at AC-3e				
		1.5 kW			
		3 kW			
operating power for approx. 200000 operating cycles at AC- at 400 V rated value 1.15 kW at 600 V rated value 1.15 kW operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value 1.5 kVA up to 500 V for current peak value n=20 rated value 2.7 kVA up to 500 V for current peak value n=20 rated value 3.8 kVA up to 500 V for current peak value n=20 rated value 4.3 kVA operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value 4.3 kVA operating apparent power at AC-6a up to 630 V for current peak value n=30 rated value 1.8 kVA up to 600 V for current peak value n=30 rated value 2.8 kVA operating apparent power at AC-6a up to 600 V for current peak value n=30 rated value 2.8 kVA opt to 600 V for current peak value n=30 rated value 2.8 kVA opt to 50 v for current peak value n=30 rated value 2.8 kVA initide to 1 s switching at zero current maximum initide to 1 s switching at zero current maximum initide to 10 s switching at zero current maximum initide to 30 s switching at zero current maximum initide to 60 s switching at zero current maximum at DC to 000 1/h 					
• at 680 V rated value 1.15 kW operating apparent power at AC-6a 1.5 kVA • up to 200 V for current peak value n=20 rated value 2.7 kVA • up to 500 V for current peak value n=20 rated value 3.3 kVA • up to 500 V for current peak value n=20 rated value 4.3 kVA • up to 500 V for current peak value n=20 rated value 4.3 kVA • up to 500 V for current peak value n=30 rated value 1.6 kVA • up to 500 V for current peak value n=30 rated value 1.8 kVA • up to 500 V for current peak value n=30 rated value 2.2 kVA • up to 500 V for current peak value n=30 rated value 2.2 kVA • up to 500 V for current peak value n=30 rated value 2.9 kVA • up to 500 V for current peak value n=30 rated value 2.9 kVA • up to 500 V for current maximum 120 A; Use minimum cross-section acc. to AC-1 rated value • up to 500 v for current maximum 86 A; Use minimum cross-section acc. to AC-1 rated value • limited to 1 s switching at zero current maximum 52 A; Use minimum cross-section acc. to AC-1 rated value • limited to 30 s switching at zero current maximum 52 A; Use minimum cross-section acc. to AC-1 rated value • limited to 30 s switching at zero current maximum 52 A; Use minimum cross-section acc. to AC-1 rated value					
operating apparent power at AC-6a • up to 230 V for current peak value n=20 rated value • up to 400 V for current peak value n=20 rated value • up to 500 V for current peak value n=20 rated value • up to 690 V for current peak value n=20 rated value • up to 500 V for current peak value n=20 rated value • up to 690 V for current peak value n=20 rated value • up to 520 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value 2.2 kVA short-time withstand current in cold operating state up to 40 °C • limited to 1 s switching at zero current maximum 10 red • limited to 10 s switching at zero current maximum • limited to 10 s switching at zero current maximum • limited to 10 s switching at zero current maximum • limited to 6 s switching at zero current maximum • at DC 10 000 1/h • at AC-1 maximum • at AC-2 maximum • at AC-3 maximum • at AC-3 maximum <	• at 400 V rated value	1.15 kW			
up to 230 V for current peak value n=20 rated value i.p to 400 V for current peak value n=20 rated value 2.7 kVA i.up to 500 V for current peak value n=20 rated value 3.3 kVA operating apparent power at AC-6a i.up to 500 V for current peak value n=30 rated value 1.8 kVA operating apparent power at AC-6a i.up to 500 V for current peak value n=30 rated value 1.8 kVA i.up to 500 V for current peak value n=30 rated value 1.8 kVA i.up to 500 V for current peak value n=30 rated value 2.8 kVA i.up to 500 V for current peak value n=30 rated value 2.9 kVA i.up to 500 V for current peak value n=30 rated value i.limited to 1 s switching at zero current maximum i.limited to 1 s switching at zero current maximum i.limited to 10 s switching at zero current maximum i.limited to 30 switching at zero current maximum i.limited to 40 °C i.toC 10 000 1/h operating frequency i.toC 10 000 1/h i.tAC-3 maximum i.tAC-4 maximum i.tAC-3 maximum i.tAC-4 maximum i.tAC-3 maximum i.t	• at 690 V rated value	1.15 kW			
• up to 400 V for current peak value n=20 rated value • up to 500 V for current peak value n=20 rated value • up to 500 V for current peak value n=20 rated value • up to 690 V for current peak value n=20 rated value • up to 230 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • 2,8 KVA • short-time withstand current in cold operating state up to 40 °C • limited to 15 s switching at zero current maximum • limited to 50 s switching at zero current maximum • limited to 30 s switching at zero current maximum • limited to 30 s switching at zero current maximum • at AC-1 maximum • at AC-1 maximum • at AC-1 maximum • at AC-1 maximum • at AC-3 maximum • at AC-	operating apparent power at AC-6a				
• up to 500 V for current peak value n=20 rated value • up to 690 V for current peak value n=20 rated value • up to 690 V for current peak value n=20 rated value • up to 200 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value 2.2 kVA • up to 500 V for current peak value n=30 rated value 2.2 kVA • up to 690 V for current peak value n=30 rated value 2.2 kVA • up to 690 V for current peak value n=30 rated value 2.9 kVA • up to 690 V for current peak value n=30 rated value 2.9 kVA • up to 690 V for current peak value n=30 rated value 2.9 kVA • up to 690 V for current peak value n=30 rated value 2.9 kVA • up to 690 V for current peak value n=30 rated value 2.9 kVA • up to 690 V for current peak value n=30 rated value 2.9 kVA • up to 690 V for current peak value n=30 rated value 2.9 kVA • up to 690 V for current peak value n=30 rated value 2.9 kVA • up to 690 V for current peak value n=30 rated value 2.9 kVA • up to 690 V for current peak value n=30 rated value 2.9 kVA • up to 690 V for current peak value n=30 rated value 120 A; Use minimum cross-section acc. to AC-1 rated value • limited to 10 s switching at zero current maximum 67 A; Use minimum cross-section acc. to AC-1 rated value • limited to 80 s switching at zero current maximum 52 A; Use minimum cross-section acc. to AC-1 rated value • at AC-1 maximum • at AC-1 maximum • at AC-1 maximum • at AC-3 maximum * at AC-4 m	 up to 230 V for current peak value n=20 rated value 	1.5 kVA			
• up to 690 V for current peak value n=20 rated value 4.3 kVA operating apparent power at AC-6a 1 kVA • up to 230 V for current peak value n=30 rated value 1 kVA • up to 500 V for current peak value n=30 rated value 2.2 kVA • up to 690 V for current peak value n=30 rated value 2.4 kVA • up to 690 V for current peak value n=30 rated value 2.4 kVA • up to 690 V for current peak value n=30 rated value 2.4 kVA • up to 690 V for current peak value n=30 rated value 2.4 kVA • up to 690 V for current peak value n=30 rated value 2.9 kVA short-time withstand current in cold operating state up to 40 °C	 up to 400 V for current peak value n=20 rated value 	2.7 kVA			
operating apparent power at AC-6a 1 kVA • up to 230 V for current peak value n=30 rated value 1 kVA • up to 500 V for current peak value n=30 rated value 1.8 kVA • up to 500 V for current peak value n=30 rated value 2.2 kVA short-time withstand current in cold operating state up to 40 °C 2.9 kVA short-time withstand current in cold operating state up to 40 °C 120 A; Use minimum cross-section acc. to AC-1 rated value • limited to 1 s switching at zero current maximum 120 A; Use minimum cross-section acc. to AC-1 rated value • limited to 1 s switching at zero current maximum 67 A; Use minimum cross-section acc. to AC-1 rated value • limited to 30 s switching at zero current maximum 52 A; Use minimum cross-section acc. to AC-1 rated value • limited to 10 s switching at zero current maximum 52 A; Use minimum cross-section acc. to AC-1 rated value • limited to 10 s switching at zero current maximum 52 A; Use minimum cross-section acc. to AC-1 rated value • at AC-1 maximum 10000 1/h • at AC-2 maximum 750 1/h • at AC-3 maximum 220 1/h • at AC-3 maximum 24 V <tr< td=""><td> up to 500 V for current peak value n=20 rated value </td><td>3.3 kVA</td></tr<>	 up to 500 V for current peak value n=20 rated value 	3.3 kVA			
• up to 230 V for current peak value n=30 rated value 1 kVA • up to 400 V for current peak value n=30 rated value 1.8 kVA • up to 500 V for current peak value n=30 rated value 2.2 kVA • up to 690 V for current peak value n=30 rated value 2.9 kVA short-time withstand current in cold operating state up to 40 °C 2.9 kVA • limited to 1 s switching at zero current maximum 120 A; Use minimum cross-section acc. to AC-1 rated value • limited to 1 s switching at zero current maximum 67 A; Use minimum cross-section acc. to AC-1 rated value • limited to 10 s switching at zero current maximum 67 A; Use minimum cross-section acc. to AC-1 rated value • limited to 10 s switching at zero current maximum 52 A; Use minimum cross-section acc. to AC-1 rated value • limited to 60 s switching fat zero current maximum 52 A; Use minimum cross-section acc. to AC-1 rated value • limited to 60 s switching frequency 00 00 1/h • at DC 10 000 1/h operating frequency 1000 1/h • at AC-3 maximum 750 1/h • at AC-3 maximum 250 1/h • at AC-3 maximum 250 1/h • at AC-4 maximum 250 1/h • at AC-3 maximum 250 1/h • at AC-4 maximum 250 1/h <td> up to 690 V for current peak value n=20 rated value </td> <td>4.3 kVA</td>	 up to 690 V for current peak value n=20 rated value 	4.3 kVA			
• up to 400 V for current peak value n=30 rated value1.8 kVA• up to 500 V for current peak value n=30 rated value2.2 kVA• up to 690 V for current peak value n=30 rated value2.9 kVAshort-time withstand current in cold operating state up to 40 °C2.9 kVA• limited to 1 s switching at zero current maximum120 A; Use minimum cross-section acc. to AC-1 rated value• limited to 1 s switching at zero current maximum67 A; Use minimum cross-section acc. to AC-1 rated value• limited to 10 s switching at zero current maximum52 A; Use minimum cross-section acc. to AC-1 rated value• limited to 10 s switching at zero current maximum52 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum52 A; Use minimum cross-section acc. to AC-1 rated value• limited to 10 s switching at zero current maximum52 A; Use minimum cross-section acc. to AC-1 rated value• limited to 10 s switching at zero current maximum52 A; Use minimum cross-section acc. to AC-1 rated value• at DC10 000 1/h• at AC-1 maximum100 00 1/h• at AC-2 maximum750 1/h• at AC-3 maximum750 1/h• at AC-3 maximum250 1/h• control supply voltage at DC0• rated value24 V• operating range factor control supply voltage rated value of magnet coil at DC0.7• initial value0.7• initial value1.25closing power of magnet coil at DC2.8 W	operating apparent power at AC-6a				
• up to 500 V for current peak value n=30 rated value 2.2 kVA up to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to 40 °C • limited to 1 s switching at zero current maximum * limited to 1 s switching at zero current maximum * limited to 1 s switching at zero current maximum * limited to 10 s switching at zero current maximum * limited to 10 s switching at zero current maximum * limited to 60 s switching at zero current maximum * limited to 60 s switching at zero current maximum * limited to 60 s switching at zero current maximum * limited to 60 s switching at zero current maximum * limited to 60 s switching at zero current maximum * limited to 60 s switching at zero current maximum * limited to 60 s switching at zero current maximum * limited to 60 s switching at zero current maximum * limited to 60 s switching at zero current maximum * limited to 60 s switching at zero current maximum * limited to 60 s switching at zero current maximum * limited to 60 s switching at zero current maximum * limited to 60 s switching at zero current maximum * limited to 60 s switching at zero current maximum * limited to 60 s switching at zero current maximum * limited to 60 s switching at zero current maximum * limited to 60 s switching at zero current maximum * limited to 60 s switching at zero current maximum * linited to 60 s switching at zero current maximum * linited to 60 s switching at zero current maximum * linited to 60 s switching at zero current maximum * linited to 60 s switching at zero current maximum * lo 000 1/h * at AC-1 maximum * at AC-3 maximum * at AC-3 maximum * at AC-3 maximum * at AC-4 maximum * at AC-	 up to 230 V for current peak value n=30 rated value 	1 kVA			
• up to 690 V for current peak value n=30 rated value 2.9 kVA short-time withstand current in cold operating state up to 40 °C 100 minute to 1 s switching at zero current maximum • limited to 1 s switching at zero current maximum 120 A; Use minimum cross-section acc. to AC-1 rated value • limited to 10 s switching at zero current maximum 67 A; Use minimum cross-section acc. to AC-1 rated value • limited to 30 s switching at zero current maximum 67 A; Use minimum cross-section acc. to AC-1 rated value • limited to 60 s switching at zero current maximum 52 A; Use minimum cross-section acc. to AC-1 rated value • limited to 60 s switching at zero current maximum 43 A; Use minimum cross-section acc. to AC-1 rated value • limited to 60 s switching at zero current maximum 43 A; Use minimum cross-section acc. to AC-1 rated value • limited to 60 s switching at zero current maximum 43 A; Use minimum cross-section acc. to AC-1 rated value • at AC-1 maximum 10 000 1/h • at AC-1 maximum 1 000 01/h • at AC-3 maximum 750 1/h • at AC-3 maximum 750 1/h • at AC-4 maximum 250 1/h • control supply voltage a	 up to 400 V for current peak value n=30 rated value 	1.8 kVA			
short-time withstand current in cold operating state up to 40 °C ilmited to 1 s switching at zero current maximum ilmited to 1 s switching at zero current maximum 120 A; Use minimum cross-section acc. to AC-1 rated value ilmited to 10 s switching at zero current maximum 67 A; Use minimum cross-section acc. to AC-1 rated value ilmited to 30 s switching at zero current maximum 67 A; Use minimum cross-section acc. to AC-1 rated value ilmited to 60 s switching at zero current maximum 52 A; Use minimum cross-section acc. to AC-1 rated value ilmited to 60 s switching at zero current maximum 43 A; Use minimum cross-section acc. to AC-1 rated value no-load switching frequency 10 000 1/h operating frequency 10 000 1/h i at AC-1 maximum 1 0000 1/h i at AC-3 maximum 1 000 1/h i at AC-3 maximum 1 000 1/h i at AC-3 maximum 1 000 1/h i at AC-3 maximum 250 1/h control circuit/ Control 1000 1/h type of voltage of the control supply voltage DC control supply voltage at DC 250 1/h e rated value 0.7 initial value 0.7 initial value 0.7 initial value 1.25	 up to 500 V for current peak value n=30 rated value 	2.2 kVA			
40 °C limited to 1s switching at zero current maximum limited to 5s switching at zero current maximum limited to 10 s switching at zero current maximum limited to 3s switching at zero current maximum limited to 3s switching at zero current maximum limited to 5s switching at zero current maximum limited to 5s switching at zero current maximum limited to 5s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum dimited to 60 s switching at zero current maximum dimited to 60 s switching at zero current maximum dimited to 60 s switching at zero current maximum dimited to 10 s switching at zero current maximum dimited to 60 s switching at zero current maximum dimited to 60 s switching at zero current maximum dimited to 60 s switching at zero current maximum dimited to 60 s switching at zero current maximum dimited to 60 s switching at zero current maximum dimited to 60 s switching at zero current maximum dimited to 60 s switching at zero current maximum di 000 1/h di 000 1/h di 000 1/h di AC-3 maximum foo 10 1/h di AC-3 maximum foo 1/h di AC-4 maximum foo 1/h di AC-4 maximum foo 1/h di AC-4 maximum foo 1/h di AC di a	 up to 690 V for current peak value n=30 rated value 	2.9 kVA			
• limited to 1 s switching at zero current maximum 120 A; Use minimum cross-section acc. to AC-1 rated value • limited to 5 s switching at zero current maximum 86 A; Use minimum cross-section acc. to AC-1 rated value • limited to 10 s switching at zero current maximum 67 A; Use minimum cross-section acc. to AC-1 rated value • limited to 30 s switching at zero current maximum 52 A; Use minimum cross-section acc. to AC-1 rated value • limited to 60 s switching at zero current maximum 43 A; Use minimum cross-section acc. to AC-1 rated value • at DC 10 000 1/h • at AC-1 maximum 1000 1/h • at AC-2 maximum 750 1/h • at AC-3 maximum 750 1/h • at AC-3 maximum 750 1/h • at AC-4 maximum 250 1/h Control circuit/ Control Upper of voltage of the control supply voltage • rated value 24 V • operating range factor control supply voltage rated value of magnet coil at DC 24 V • operating range factor control supply voltage rated value of magnet coil at DC 0.7 • initial value 0.7 1.25 • closing power of magnet coil at DC 2.8 W					
 limited to 5 s switching at zero current maximum 86 A; Use minimum cross-section acc. to AC-1 rated value limited to 10 s switching at zero current maximum 67 A; Use minimum cross-section acc. to AC-1 rated value limited to 60 s switching at zero current maximum 52 A; Use minimum cross-section acc. to AC-1 rated value limited to 60 s switching at zero current maximum 43 A; Use minimum cross-section acc. to AC-1 rated value at DC 10 000 1/h operating frequency at AC-1 maximum 1000 1/h at AC-2 maximum at AC-3 maximum 750 1/h at AC-3 maximum 250 1/h control supply voltage at DC rated value perating range factor control supply voltage rated value of magnet coil at DC initial value initial value 0.7 full-scale value 1.25 closing power of magnet coil at DC 		120 A: Use minimum cross-section acc. to AC-1 rated value			
• limited to 10 s switching at zero current maximum 67 Å; Use minimum cross-section acc. to AC-1 rated value • limited to 30 s switching at zero current maximum 52 Å; Use minimum cross-section acc. to AC-1 rated value • limited to 60 s switching at zero current maximum 43 Å; Use minimum cross-section acc. to AC-1 rated value • limited to 60 s switching at zero current maximum 43 Å; Use minimum cross-section acc. to AC-1 rated value no-load switching frequency 43 Å; Use minimum cross-section acc. to AC-1 rated value • at DC 10 000 1/h operating frequency 10 000 1/h • 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 U type of voltage of the control supply voltage DC • rated value 24 V operating range factor control supply voltage rated value of magnet coil at DC 0.7 • initial value 0.7 • initial value 1.25 closing power of magnet coil at DC 2.8 W	C C				
• limited to 30 s switching at zero current maximum 52 Å; Use minimum cross-section acc. to AC-1 rated value • limited to 60 s switching frequency 43 Å; Use minimum cross-section acc. to AC-1 rated value no-load switching frequency 10 000 1/h • at DC 10 000 1/h operating frequency 1 000 1/h • at AC-1 maximum 1 000 1/h • at AC-2 maximum 750 1/h • at AC-3 maximum 750 1/h • at AC-3 maximum 250 1/h • at AC-4 maximum 250 1/h Control circuit/ Control U type of voltage of the control supply voltage DC • rated value 24 V operating range factor control supply voltage rated value of magnet coil at DC 0.7 • initial value 0.7 • full-scale value 1.25 closing power of magnet coil at DC 2.8 W	-				
• limited to 60 s switching at zero current maximum 43 A; Use minimum cross-section acc. to AC-1 rated value no-load switching frequency 10 000 1/h • 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-3 maximum 750 1/h • at AC-3 maximum 750 1/h • at AC-4 maximum 250 1/h Control circuit/ Control UC 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 0.7 • initial value 0.7 • full-scale value 1.25 closing power of magnet coil at DC 2.8 W	C C				
no-load switching frequency 10 000 1/h operating frequency 1 000 1/h • at AC-1 maximum 1 000 1/h • at AC-1 maximum 1 000 1/h • at AC-2 maximum 750 1/h • at AC-3 maximum 750 1/h • at AC-3 maximum 750 1/h • at AC-3 maximum 750 1/h • at AC-4 maximum 250 1/h Control circuit/ Control 250 1/h type of voltage of the control supply voltage DC control supply voltage at DC 0C • rated value 24 V operating range factor control supply voltage rated value of magnet coil at DC 0.7 • initial value 0.7 • full-scale value 1.25 closing power of magnet coil at DC 2.8 W	-				
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operating frequency1 000 1/h• at AC-1 maximum1 000 1/h• at AC-2 maximum750 1/h• at AC-3 maximum750 1/h• at AC-3e maximum750 1/h• at AC-3e maximum250 1/h• at AC-4 maximum250 1/h• at AC-4 maximumDCControl circuit/ ControlDCcontrol supply voltage at DC24 V• rated value24 Voperating range factor control supply voltage rated value of magnet coll at DC0.7• initial value0.7• full-scale value1.25closing power of magnet coll at DC2.8 W		10 000 1/b			
• at AC-1 maximum1 000 1/h• at AC-2 maximum750 1/h• at AC-3 maximum750 1/h• at AC-3e maximum750 1/h• at AC-4 maximum250 1/h• at AC-4 maximum250 1/h• at AC-4 maximumDCControl circuit/ ControlDC• rated value24 V• rated value24 V• operating range factor control supply voltage rated value of magnet coil at DC0.7• initial value0.7• full-scale value1.25closing power of magnet coil at DC2.8 W					
• at AC-2 maximum750 1/h• at AC-3 maximum750 1/h• at AC-3 e maximum750 1/h• at AC-4 maximum250 1/h• at AC-4 maximum250 1/hControl circuit/ ControlDCtype of voltage of the control supply voltageDC• rated value24 V• rated value24 V• initial value0.7• initial value0.7• full-scale value1.25closing power of magnet coil at DC2.8 W		1 000 1/b			
• at AC-3 maximum750 1/h• at AC-3e maximum750 1/h• at AC-4 maximum250 1/hControl circuit/ ControlDCtype of voltage of the control supply voltageDC• rated value24 V• rated value24 Voperating range factor control supply voltage rated value of magnet coil at DC0.7• initial value0.7• full-scale value1.25closing power of magnet coil at DC2.8 W					
• at AC-3e maximum750 1/h• at AC-4 maximum250 1/hControl circuit/ ControlDCtype of voltage of the control supply voltageDC• rated value24 V• rated value0.7• initial value0.7• full-scale value1.25closing power of magnet coil at DC2.8 W					
• at AC-4 maximum 250 1/h Control circuit/ Control DC type of voltage of the control supply voltage DC control supply voltage at DC 24 V • rated value 24 V operating range factor control supply voltage rated value of magnet coil at DC 0.7 • initial value 0.7 • full-scale value 1.25 closing power of magnet coil at DC 2.8 W					
Control circuit/ Control type of voltage of the control supply voltage DC control supply voltage at DC 24 V • rated value 24 V operating range factor control supply voltage rated value of magnet coil at DC 0.7 • initial value 0.7 • full-scale value 1.25 closing power of magnet coil at DC 2.8 W					
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control supply voltage at DC 24 V • rated value 24 V operating range factor control supply voltage rated value of magnet coil at DC 0.7 • initial value 0.7 • full-scale value 1.25 closing power of magnet coil at DC 2.8 W					
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operating range factor control supply voltage rated value of magnet coil at DC 0.7 • initial value 0.7 • full-scale value 1.25 closing power of magnet coil at DC 2.8 W		24.1/			
magnet coil at DC 0.7 • initial value 0.7 • full-scale value 1.25 closing power of magnet coil at DC 2.8 W		24 V			
• initial value 0.7 • full-scale value 1.25 closing power of magnet coil at DC 2.8 W					
• full-scale value 1.25 closing power of magnet coil at DC 2.8 W	-	0.7			
closing power of magnet coil at DC 2.8 W					
	holding power of magnet coil at DC	2.8 W			

closing delay				
• at DC	25 130 ms			
opening delay				
• at DC	7 20 ms			
arcing time	10 15 ms			
control version of the switch operating mechanism	Standard A1 - A2			
Auxiliary circuit	4			
number of NC contacts for auxiliary contacts instantaneous contact	1			
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			
• at 690 V rated value	1 A			
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	40.4			
at 24 V rated value	10 A			
at 48 V rated value	2 A 2 A			
 at 60 V rated value at 110 V rated value 	2 A 1 A			
at 125 V rated value	0.9 A			
at 220 V rated value	0.3 A			
at 220 V rated value	0.1 A			
contact reliability of auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)			
JL/CSA ratings				
full-load current (FLA) for 3-phase AC motor				
• at 480 V rated value	4.8 A			
• at 600 V rated value	6.1 A			
yielded mechanical performance [hp]				
for single-phase AC motor				
— at 110/120 V rated value	0.25 hp			
— at 230 V rated value	0.75 hp			
• for 3-phase AC motor				
— at 200/208 V rated value	1.5 hp			
— at 220/230 V rated value	2 hp			
— at 460/480 V rated value	3 hp			
— at 575/600 V rated value	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)			
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 DIN rail according to DIN EN 60715			
side-by-side mounting	Yes			
height	58 mm			
	45 mm			
width	45 11111			
depth	73 mm			

 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 mm²), 2x (0.75 2.5 mm²)			
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)			
 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			
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				

SA CSA		<u>Confirmation</u>		KC	EHC
EMC	Functional Safety/Safety of Ma- chinery	Declaration of Conform	mity	Test Certificates	
RCM	<u>Type Examination Cer-</u> tificate	UK CA	CE EG-Konf.	<u>Special Test Certific-</u> <u>ate</u>	<u>Type Test Certific-</u> ates/Test Report
Marine / Shipping					
ABS	BUREAU VERITAS		Llovd's Register uis	PRS	RINA
Marine / Shipping	other		Railway	Dangerous Good	Environment
RMRS	<u>Confirmation</u>		<u>Vibration and Shock</u>	Transport Information	Environmental Con- firmations
Further information					
Siemens has decided to exit the Russian market (see here). https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business Siemens is working on the renewal of the current EAC certificates. Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus). Information on the packaging https://support.industry.siemens.com/cs/ww/en/view/109813875 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=3RT2015-1HB42 Cax online generator					

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2015-1HB42

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2015-1HB42

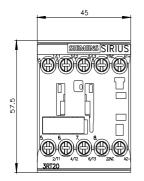
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2015-1HB42&lang=en

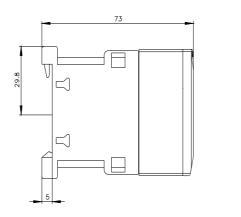
Characteristic: Tripping characteristics, I2t, Let-through current

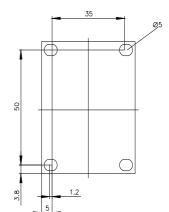
https://support.industry.siemens.com/cs/ww/en/ps/3RT2015-1HB42/char

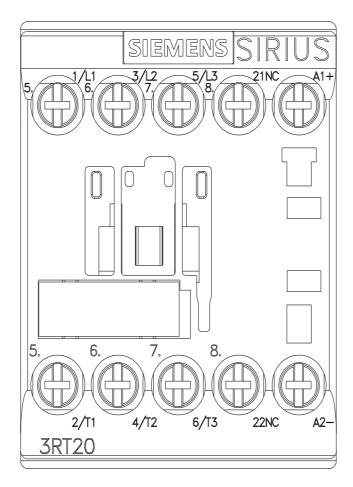
Further characteristics (e.g. electrical endurance, switching frequency)

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

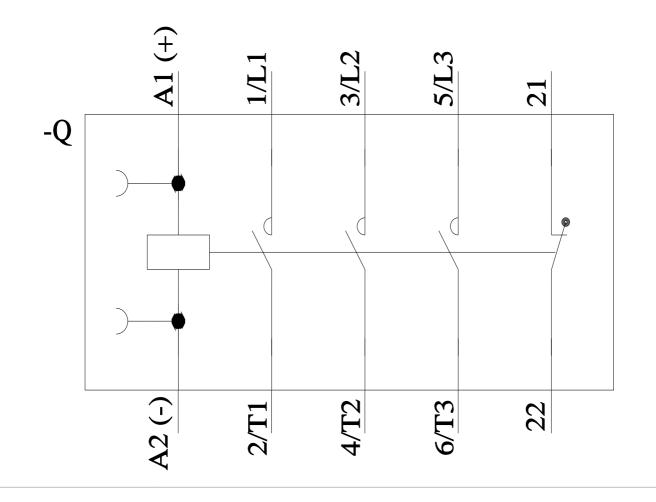








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2/10/2023 🖸